```
Gly Gly Phe Ser Ala Ser Val Val Tyr Pro Leu Asn Val Leu Arg Thr
            100                 105                 110
Arg Leu Gln Ala Gln Gly Thr Val Leu His Pro Thr Thr Tyr Thr Gly
        115                 120                 125
Ile Thr Asp Val Ala Pro Lys Thr Leu Leu Asn Arg Arg Pro Pro Gly
    130                 135                 140
Leu Leu Gln Gly Pro
145
```

<210> 26393
<211> 333
<212> PRT
<213> A.fumigatus

<400> 26393

```
Thr Arg His Arg Pro Asp Thr His Ile Pro Thr Ile Leu Phe Asp Ile
1               5                   10                  15
Asp Glu Val Phe Thr Ile Pro Pro Ser Lys Val Tyr Ser Thr Ser Met
            20                  25                  30
Glu Gln Thr Ala Gly Glu Asp Gln Gly Val Val Leu Cys Gly Leu Val
        35                  40                  45
Arg Tyr Gly Ser Ile Ser Val Gly Asp Glu Leu Leu Val Gly Pro Leu
    50                  55                  60
Arg Ala Thr Pro Gln Ala Glu Pro Glu Asn Phe Leu Ser Ala Pro Arg
65                  70                  75                  80
Ser Gln Ser Ser Arg Ser Arg Pro Pro Ser Glu Glu Phe Ser Thr Ser
                85                  90                  95
Phe Ser Gln Gly Phe Leu Ser Gly Lys Ala Thr Phe Pro Ala Gln Ala
            100                 105                 110
Ile Trp Gln Arg Val Arg Val Val Ser Val Arg Asn Leu Arg Leu Pro
        115                 120                 125
Val Arg Thr Leu Ile Gln Asp Gln Val Gly Thr Ile Gly Ile Glu Leu
    130                 135                 140
Leu Ser Thr Gln Asn Glu His Thr Pro Arg Leu Gly Lys Val Arg Lys
145                 150                 155                 160
Gly Ala Val Leu Ala Asp Phe Gly Pro Ser Gly Ser Pro Ala Lys Pro
                165                 170                 175
Ser Leu Phe His Thr Gly Phe Val Ala Ser Phe Pro Ala Ser Glu Phe
            180                 185                 190
Thr Ser Met Ser Pro Pro Leu Leu Leu Gly Gly Asn Ala Ile Ala Tyr
        195                 200                 205
Val Ser Asn Ile Arg Ala Thr Val Lys Ala Thr Cys Val Thr Leu Ala
    210                 215                 220
Glu Asp Glu Ile Ile Ser Ser Pro Pro Ser Pro Thr Glu Pro Asp Phe
225                 230                 235                 240
Phe Ser Phe Asp Ser Asp Ala Val Asp Arg Val Lys Glu His Val Ser
                245                 250                 255
Glu Val Thr Asn Val Val Asn Ser Ala Lys Asn Ala Ser His Gly Asp
            260                 265                 270
Val Lys Ile Ser Phe Ser Phe Val Thr Ser Val Glu Trp Val Glu Ser
        275                 280                 285
Gly Ser Arg Val Leu Val Ile Pro Gly Ser Ser Thr Val Leu Ser Ser
    290                 295                 300
Thr Gln Gly Ser Ala Pro Pro Phe Gly Leu Gly Gly Phe Val Gly Arg
305                 310                 315                 320
Val Cys Asn Val Met Ser Ser Glu Leu Gln Glu Ser Arg
```

325 330

<210> 26394
<211> 135
<212> PRT
<213> A.fumigatus

<400> 26394
Glu Pro Leu Lys Leu Pro Leu Met Ser Ser Gly Ser Ala Phe Gln Pro
1 5 10 15
Pro Ile Glu Ile Pro Thr Arg Lys Ser Ser Ala Gly Met Ala Asp Arg
20 25 30
Leu His Thr Ser Ser Ser Val Met Asp Gly Ser Gln Leu Gln Gly Glu
35 40 45
Gly Pro Gln Thr Asn Met Asp Ser Ser Arg Arg His Thr Arg Asn Arg
50 55 60
Ser Ser Phe Asp Gly Thr Lys Tyr Arg Asp Gly Lys Trp Ser Gln Glu
65 70 75 80
Tyr Glu Lys Ile Leu Met Gly Pro Tyr Asp Tyr Met Gln Gln His Pro
85 90 95
Gly Lys Asp Ile Arg Arg Gln Leu Ile Thr Ala Phe Asn Val Trp Leu
100 105 110
Gln Val Arg Pro Glu Ser Leu Ser Ile Ile Thr Lys Val Val Gly Met
115 120 125
Leu His Thr Ala Ser Leu Leu
130 135

<210> 26395
<211> 265
<212> PRT
<213> A.fumigatus

<400> 26395
Phe Thr Phe Pro Ala Arg Val Asp Asp Val Glu Asp Asn Ser Ile Leu
1 5 10 15
Arg Arg Gly Ile Pro Val Ala His Asn Ile Phe Gly Thr Ala Gln Thr
20 25 30
Ile Asn Ser Ala Asn Tyr Val Tyr Phe Leu Ala Leu Gln Glu Val Gln
35 40 45
Lys Leu Asn Asn Pro Thr Ala Ile Asp Ile Phe Val Gln Glu Leu Leu
50 55 60
Ser Leu His Arg Gly Gln Gly Met Asp Leu Phe Trp Arg Asp Thr Leu
65 70 75 80
Thr Cys Pro Thr Glu Glu Asp Tyr Leu Asp Met Val Gly Asn Lys Thr
85 90 95
Gly Gly Leu Phe Arg Leu Ala Ile Lys Leu Met Gln Ala Glu Ser Thr
100 105 110
Thr Gly Ile Asp Cys Val Ser Leu Val Asn Val Met Gly Leu Ile Phe
115 120 125
Gln Ile Cys Asp Asp Tyr Leu Asn Leu Ser Asn Lys Thr Tyr Thr Gln
130 135 140
Asn Lys Gly Leu Cys Glu Asp Leu Thr Glu Gly Lys Phe Ser Phe Pro
145 150 155 160
Ile Ile His Ser Ile Arg Ser Asn Pro Arg Asn His Gln Leu Ile Ser
165 170 175
Ile Leu Lys Gln Arg Thr Lys Asp Glu Glu Val Lys Leu Tyr Ala Ile

```
            180                 185                 190
Ser Tyr Met Glu Ser Thr Gly Ser Phe Ala Tyr Thr Arg Lys Val Val
        195                 200                 205
Arg Glu Phe Arg Asp Lys Ala Leu Ser Leu Ile Asp Glu Ile Asp Ala
    210                 215                 220
Gln Cys Asp Gly Lys Gln Ala Glu Gly Gln Lys Asp Gly Ala Met Val
225                 230                 235                 240
Arg Ala Ile Leu Asp Lys Ile Thr Glu Ser Thr Leu Arg Asp Asp Asn
                245                 250                 255
Gly Ala Asp Asp Ala Gly Gly Gly Lys
            260                 265
```

<210> 26396
<211> 116
<212> PRT
<213> A.fumigatus

<400> 26396

```
Gly Gly Glu Asp Ile Lys Arg Leu Ser Ser Gly Leu Arg Leu Pro Ser
1               5                   10                  15
Ser Thr Lys Ser Leu Asn Ser Ser Thr Leu Val Ala Leu Thr Phe Phe
            20                  25                  30
Pro Leu Ser Val Leu Arg Thr Ile Leu Leu Ile Leu Phe Gln Ile Ser
        35                  40                  45
Met Tyr Gln Lys Ser Leu Leu Phe Ser Leu Leu Ala Ser Ser Ala Leu
    50                  55                  60
Ala Ala Gln Phe Pro Ile Pro Asp Ser Lys Gly Ser Val Thr Phe Asp
65                  70                  75                  80
Glu Pro Tyr Glu Ile Ala Ala Gly Glu Thr Tyr Asp Gly Gly Tyr Lys
                85                  90                  95
Thr Tyr Gly Arg Gly Val Ser Cys Thr Val Phe Thr Thr Gly Leu Glu
            100                 105                 110
Gly Ala Ala Pro
        115
```

<210> 26397
<211> 139
<212> PRT
<213> A.fumigatus

<400> 26397

```
Thr Gly Pro Val Arg Gln Ser Leu Thr Ser Val Asp Tyr Tyr Thr Trp
1               5                   10                  15
Thr Arg Asp Ala Ala Leu Val Thr Lys Val Leu Val Asp Leu Phe Arg
            20                  25                  30
Asn Gly Asn Leu Gly Leu Gln Lys Val Ile Thr Glu Tyr Val Asn Ser
        35                  40                  45
Gln Ala Tyr Leu Gln Thr Val Ser Asn Pro Ser Gly Gly Leu Ala Ser
    50                  55                  60
Gly Gly Leu Ala Glu Pro Lys Tyr Asn Val Asp Met Thr Ala Phe Thr
65                  70                  75                  80
Gly Ala Trp Gly Arg Pro Gln Arg Asp Gly Pro Ala Leu Arg Ala Thr
                85                  90                  95
Ala Leu Ile Asp Phe Gly Asn Trp Leu Ile Val Cys Ser Pro Tyr Glu
            100                 105                 110
Pro Gln Glu Ala Leu Leu Thr Ser Thr Gly Gln Arg Leu Val Phe Thr
```

```
        115                 120                 125
Thr Gly Leu Glu Gly Cys Ala Thr Ser Glu Phe
    130                 135

<210> 26398
<211> 165
<212> PRT
<213> A.fumigatus

<400> 26398
Glu Cys Tyr Glu Asp Ser Pro Ala Glu His Thr Lys Asn Ser Leu Thr
1               5                  10                  15
Gly Asn Thr Phe Glu Thr His Asp Asp Asp Gly Asp Lys Thr Trp Ala
            20                  25                  30
Val Asn Ile Tyr Lys Lys Arg Asp His Thr Pro Lys Leu Pro Leu Ala
        35                  40                  45
Ser Gly Phe Arg Thr Ile Asn Leu Ile Pro Ser Pro Ser Ser Ser Phe
    50                  55                  60
Arg Leu Leu Leu Cys Leu Gln Thr Val Cys Asn Arg Ala Met Pro Arg
65                  70                  75                  80
Leu Ser Tyr Ala Leu Cys Ala Leu Ser Leu Gly His Ala Ala Ile Ala
                85                  90                  95
Ala Pro Gln Leu Ser Ala Arg Ala Thr Gly Ser Leu Asp Ser Trp Leu
            100                 105                 110
Gly Thr Glu Thr Thr Val Ala Leu Asn Gly Ile Leu Ala Asn Ile Gly
        115                 120                 125
Ala Asp Gly Ala Tyr Ala Lys Ser Ala Lys Pro Gly Ile Ile Ile Ala
    130                 135                 140
Ser Pro Ser Thr Ser Glu Pro Asp Cys Glu Asn Leu Pro Glu Leu Ala
145                 150                 155                 160
Leu Ser Gly Ser His
                165

<210> 26399
<211> 105
<212> PRT
<213> A.fumigatus

<400> 26399
Arg His Pro Asn Thr Leu Glu Asp Gly Thr Thr Ser Gly Ala Leu Thr
1               5                  10                  15
Arg Tyr Phe Ile Ser Ser Thr Leu Pro Pro Ala Ser Asp Ile Ser Val
            20                  25                  30
His Phe His Ser Ser Pro Tyr Thr Ile Ser Ser Leu Phe Asn Gln His
        35                  40                  45
Phe Met Met Ala Thr Asp Ile Ala Thr Arg Glu Leu Arg Lys Pro Val
    50                  55                  60
Asp Val Ala Glu Tyr Leu Phe Arg Arg Leu His Glu Val Gly Ile Arg
65                  70                  75                  80
Ser Val His Gly Val Pro Gly Glu Arg Ser Ser Ser Pro Arg Gly Gly
                85                  90                  95
Arg Ile Arg Gly Ser Gly Asn Ser Met
            100                 105

<210> 26400
<211> 79
```

<212> PRT
<213> A.fumigatus

<400> 26400
Phe Ser Gly Ile Phe Gly Tyr Ile Asn Tyr Leu Val Glu Arg Asp Arg
1 5 10 15
Lys Tyr Ile Ile Asp Thr Leu Leu Asn Gly Met Gly Phe Pro Pro Phe
20 25 30
Ala Leu Ile Ala Ile Leu Gln Tyr Glu Met Gln Asp Ser Pro Asp Leu
35 40 45
Asn Thr Ala Val Thr Thr Arg Gln Ala Leu Arg Trp Thr Val Thr Lys
50 55 60
Arg Met Lys Phe Ala Pro Ser Arg Lys Leu Val Arg Ser Arg Asn
65 70 75

<210> 26401
<211> 80
<212> PRT
<213> A.fumigatus

<400> 26401
Asn Ala Gly Leu Ser Arg Leu Glu Tyr Arg Gly Tyr Asp Ser Ala Gly
1 5 10 15
Phe Ala Val Asp Gly Asp Lys Lys Asn Glu Val Cys Ala Phe Lys Glu
20 25 30
Val Gly Lys Val Ala Lys Leu Lys Glu Leu Ile Glu Glu Ser Lys Pro
35 40 45
Asp Met Thr Lys Thr Phe Glu Ser His Ala Gly Ile Ala His Thr Arg
50 55 60
Trp Ala Thr His Gly Thr Pro Ser Arg Gln Asn Cys His Pro His Arg
65 70 75 80

<210> 26402
<211> 257
<212> PRT
<213> A.fumigatus

<400> 26402
Val His Gln Trp Ser Gln Gln Val Ile Trp His Ser Thr Gly Asn Tyr
1 5 10 15
Asn Ser Asp Thr Phe Thr Glu Leu Thr His Ile Leu Ser Asp Arg Ser
20 25 30
Asp Pro Asn Trp Glu Phe Ala Val Val His Asn Gly Ile Ile Thr Asn
35 40 45
Tyr Lys Glu Leu Lys Ala Leu Leu Glu Ser Lys Gly Phe Arg Phe Glu
50 55 60
Thr Glu Thr Asp Thr Glu Cys Ile Ala Lys Leu Ala Lys Tyr Leu Tyr
65 70 75 80
Asp Gln Gln Pro Asp Ile Glu Phe Thr Val Leu Ala Lys Ala Val Val
85 90 95
Lys Glu Leu Ala Gly Ala Phe Gly Leu Leu Ile Lys Ser Val His Tyr
100 105 110
Pro His Glu Val Ile Ala Ala Arg Lys Gly Ser Pro Leu Val Ile Gly
115 120 125
Val Arg Thr Ser Lys Lys Met Lys Val Asp Phe Val Asp Val Glu Tyr
130 135 140

```
Ser Glu Asp Gly Pro Leu Pro Ala Glu Gln Ala Ser Gln Asn Val Ala
145                 150                 155                 160
Ile Lys Lys Ser Ala Thr Gly Leu Leu Ala Pro Pro Asp Lys Ser Leu
                165                 170                 175
Leu His Arg Ser Gln Ser Arg Ala Phe Leu Ser Asp Asp Gly Ile Pro
            180                 185                 190
Gln Pro Ala Glu Phe Phe Leu Ser Ser Asp Pro Ser Ala Ile Val Glu
        195                 200                 205
His Thr Lys Lys Val Leu Tyr Leu Glu Asp Asp Asp Ile Ala His Val
    210                 215                 220
His Glu Gly Gln Leu Asn Ile His Arg Leu Thr Lys Asp Asp Gly Thr
225                 230                 235                 240
Ser Asn Val Arg Ala Ile Gln Thr Ile Glu Leu Glu Leu Gln Glu Ile
                245                 250                 255
Met
```

<210> 26403
<211> 95
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (91)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26403

```
Gly Lys Phe Asp His Phe Met Gln Lys Glu Ile Phe Glu Gln Pro Glu
1               5                   10                  15
Ser Val Val Asn Thr Met Arg Gly Arg Leu Asp Val Ala Asn Lys Gln
            20                  25                  30
Val Thr Leu Gly Gly Leu Arg Gln Tyr Ile Ser Thr Ile Arg Arg Cys
        35                  40                  45
Arg Arg Ile Ile Phe Ile Ala Cys Gly Asn Ser Tyr His Ser Cys Met
    50                  55                  60
Gly Val Arg Gly Val Phe Glu Glu Leu Thr Glu Ile Pro Ile Ser Val
65                  70                  75                  80
Glu Leu Ala Ser Asp Phe Leu Gly Arg Ala Xaa Arg Trp Phe Ser
                85                  90                  95
```

<210> 26404
<211> 98
<212> PRT
<213> A.fumigatus

<400> 26404

```
Thr Phe Thr Ile Val Ser Ala Phe His Leu Tyr Ala Thr Gln Asp Thr
1               5                   10                  15
Leu Glu Lys Arg Ala Met Gln Asn Pro Met Thr Phe Asp Glu Gly Thr
            20                  25                  30
Lys Cys Leu Lys Ser Phe Arg Asp Gly Met Val Arg Tyr Tyr Gln Glu
        35                  40                  45
Leu Gly Asp Leu Leu Thr Leu Asp Ser Phe Lys Val Val Phe Asp Pro
    50                  55                  60
Gly Thr Tyr Thr Thr Thr Thr Phe Lys Asn Met Asn Gly Phe Thr Gly
```

65 70 75 80
Trp Pro Leu Thr Arg Val Glu Ala Gln Thr Asn Ser Arg Phe Leu Pro
85 90 95
Ala Lys

<210> 26405
<211> 478
<212> PRT
<213> A.fumigatus

<400> 26405
Cys Gly Ala Ala Pro Ser Ser Pro Val Val Lys Thr Gly Glu Met Ser
1 5 10 15
Lys Pro Thr Ser Asn Leu Pro Pro Phe Ala Ser Ser Ser Thr Glu Gln
20 25 30
Ser Ala Ala Val Thr Glu Leu Ala Pro Leu Ile Gln Glu Leu Lys Ala
35 40 45
Ile Cys Asp Asn Cys Asp Lys Gln Thr Phe Ala Ser Gln Gln Phe Leu
50 55 60
Thr Ala Thr Glu Ser Leu Leu Arg Leu Arg His Thr Phe Leu Asp Asn
65 70 75 80
Asp Arg Pro Arg Glu Ala Gln Glu Ala Phe Arg His Leu Asn Gly Phe
85 90 95
Glu Thr Leu Leu Gln Leu Val Lys Lys Leu Ser His Leu Tyr Glu Pro
100 105 110
Thr Glu Leu Ser Ala Glu Glu Arg Arg Ser Leu Leu Thr Leu Tyr Lys
115 120 125
Asp Ala Leu Ala Val Leu Ala Glu Ser Leu Lys Gly Asn Phe Gly Asn
130 135 140
Arg Arg Tyr Phe Ala Arg Arg Ile Ser Gly Gly Gly Thr Ala Ala Leu
145 150 155 160
Gln Glu Ala Leu Asp Ile Ile Val Pro Lys Leu Ser Ser Ala Gln Gly
165 170 175
Asp Thr Glu Gln Phe Tyr Gly Gly Ile Leu Ala Ala Ala Leu Cys Gln
180 185 190
Glu Ala Val Ala Asp Ile Phe Thr Thr Leu Asn Ala Lys Phe Gln Pro
195 200 205
Val Gln Glu Leu Leu Gln Gln Asp Val Lys Ala Glu Val Asp Arg Arg
210 215 220
Met Gly Ser Ser Glu Thr Val Glu Val Pro Glu Leu Leu Gly Pro Phe
225 230 235 240
Leu Lys Gly Trp Leu Lys Gln Ser Gly Ser Ser Pro Ser Asp Tyr Arg
245 250 255
Val Gln Arg Leu Val Leu Pro Ala Cys Leu Cys Gln Leu Ala His Gln
260 265 270
Ser Gln Arg Asn Leu Thr Ala Leu His Ala Thr Gly Ile Leu Ser Ser
275 280 285
Ile Leu Pro Ile Leu Leu Gly Ser Asp Arg Leu Glu Ser Glu Arg Ile
290 295 300
Ile Tyr Gln Asp Met Ala Gln Leu Leu Cys Ala Gln Gly Leu Thr Ser
305 310 315 320
Leu Glu Asp Ala Ala Thr Leu Tyr Arg Gln Ala His Gly Cys Ala Arg
325 330 335
Ile Leu Arg Phe Leu Val Asp Val Leu Lys Cys Ser Lys Glu Pro Pro
340 345 350

```
Leu Ile Gln Phe Asp Leu Ser Leu His Gly Tyr Ser Ser Leu Glu Phe
        355                 360                 365
Ser Thr Leu Gly Arg Pro Phe Pro Pro Val Thr Ser Ser Gly Tyr Thr
    370                 375                 380
Ile Ala Val Trp Ala Arg Phe Asp Arg Phe Asp Pro Ser Thr His Thr
385                 390                 395                 400
Thr Ile Phe Gly Ala Phe Asp Ala Ser Gln Ser Cys Phe Leu Leu Val
                405                 410                 415
Tyr Leu Glu Arg Asp Thr Arg Asn Phe Ile Leu Gln Thr Ser Ile Arg
            420                 425                 430
Gly Thr Arg Pro Ser Val Arg Phe Lys Ser Met Ala Phe Glu Pro Asn
        435                 440                 445
Arg Trp Tyr His Ile Cys Val Val His Lys Lys Pro Arg Pro Pro Ser
    450                 455                 460
His Ser Arg Ala Ser Leu Phe Ile Asp Gly Glu Phe Val Glu
465                 470                 475

<210> 26406
<211> 119
<212> PRT
<213> A.fumigatus

<400> 26406
Asn Ser His Leu Gly Glu Ser Leu Leu Leu Ile Ser Pro Leu Gly Ala
1               5                   10                  15
Ile Lys Val Ile Lys Gly Gln Gly Met Pro Ser Tyr Arg His His Asp
            20                  25                  30
Phe Gly Asn Leu Tyr Ile Gln Phe Asp Val Lys Phe Pro Glu Lys Asp
        35                  40                  45
Gln Leu Gln Asn Leu Gly Leu Leu Glu Arg Val Leu Pro Pro Arg Met
    50                  55                  60
Glu Gln Pro Gln Pro Pro Ala Asp Ser Met Val Glu Asp Phe Glu Leu
65                  70                  75                  80
Glu Asp Ile Asp Ala Ser Glu Gly Ser Gln Arg Arg Ala His Gly Ala
                85                  90                  95
Ala Thr Ala Met Asp Glu Asp Asp Asp Asp Val Pro Pro Gly Ala Glu
            100                 105                 110
Arg Val Gln Cys Ala Ser Gln
        115

<210> 26407
<211> 198
<212> PRT
<213> A.fumigatus

<400> 26407
Glu Glu Phe Leu Gly Ser Val Ser Met Cys Gly Pro Phe Gly Ile Phe
1               5                   10                  15
Pro Gly Val Leu Leu Lys Ile Pro Cys Glu Pro Asp Ser Arg Lys Leu
            20                  25                  30
Thr Val Gly Lys Leu Ser Asp Asp Ile Ile Pro Ala Ile Lys Asn Ile
        35                  40                  45
Ser Lys Lys His Gly Val Val Thr Ser Arg Ser Ile Phe Leu His Trp
    50                  55                  60
Phe Tyr Ile Ile Ile Asp Ala Leu Lys Ser Leu Leu Ala Gly His Cys
65                  70                  75                  80
```

```
Gln Gly Gln Ile Pro Arg Met Glu Ser Ile Arg Cys Glu Val Gln Lys
                85                  90                  95
Leu Lys Thr Arg Ser Gln Ser Cys Phe Thr Arg Gln Gly Ala Arg Asp
            100                 105                 110
Gly Gly Tyr Pro Thr Lys Tyr Asn Met Tyr Leu Tyr Leu Ile Asp Arg
        115                 120                 125
Ala Ser Gln Pro Ile Leu His Ala Leu Cys His Val Phe Leu Ile Glu
    130                 135                 140
Asp Gln His Tyr Ser Asn His Pro Asp Phe Ser Ser Leu Ser Pro Leu
145                 150                 155                 160
Ser Tyr Ser Ala Asn Ser Met Ser Arg Asn Gly Arg Val Tyr Gly Ala
                165                 170                 175
Ala Ala Ser Thr Cys Ile Arg Ser Gly Ile Arg Ser Ala Val Arg Ile
            180                 185                 190
Asp Ser Leu Phe Val Ser
        195

<210> 26408
<211> 61
<212> PRT
<213> A.fumigatus

<400> 26408
Arg Pro Asn Val Asp Leu Glu Leu Phe Pro Ser Lys Val Ile Lys Asn
1               5                   10                  15
Lys Arg Val Tyr Lys Leu Asn Tyr Lys Leu Arg Val Thr Phe Gly Ala
            20                  25                  30
Arg Glu Gly Val Leu Lys Phe Glu Ala Val Ser Gln Gly Gln Thr Val
        35                  40                  45
Gly Gln Thr Ser Ile Asn Phe Ser Ala Ala Lys Tyr Tyr
    50                  55                  60

<210> 26409
<211> 90
<212> PRT
<213> A.fumigatus

<400> 26409
Asn Gln Trp Arg Asn Ile Asp Leu Glu Val Thr Thr Pro Cys Phe Leu
1               5                   10                  15
Glu Ile Phe Leu Ile Ala Gly Ile Met Ser Ser Glu Ser Leu Pro Thr
            20                  25                  30
Val Asn Phe Leu Leu Ser Gly Ser Gln Gly Ile Leu Ser Lys Thr Pro
        35                  40                  45
Gly Asn Ile Pro Lys Gly Pro His Ile Asp Thr Leu Pro Arg Asn Ser
    50                  55                  60
Ser Tyr Val Ala Val Lys Ile Leu Lys Ala Lys Ala Ser Ile Ser Glu
65                  70                  75                  80
Gly Pro Ile Glu Leu Ser Met Leu Met Ser
                85                  90

<210> 26410
<211> 91
<212> PRT
<213> A.fumigatus
```

<400> 26410
Leu Ser Arg Ser Ala Cys Pro Ser Ser Pro Val Gly Leu Arg Gln Cys
1 5 10 15
Ala Pro Glu Leu Glu Leu Glu Phe Gly Phe Ser Ala Leu Met Asp Ile
20 25 30
Asn Asn Arg Gly Leu Thr Ser Ala Asn Ser Asn Ala Arg His Leu Met
35 40 45
Asn Gly Phe Cys Tyr Val Leu Val Cys Leu Ala Phe Ser Thr Gly Thr
50 55 60
Val Ala Tyr Cys Gly Asn Gly Glu Tyr Thr Arg Ser Phe Arg Asp Ala
65 70 75 80
Ser Glu Ile Ser Cys Thr Gly Gly Gly Leu Pro
85 90

<210> 26411
<211> 426
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (53)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26411
Gly Trp Ala Asn Trp Ile Arg Asn Arg Thr Val Ser Ala Leu Gln Gly
1 5 10 15
Ala Lys Val Asp Ile Pro Leu Arg Leu Ser Gly Asp Arg Pro Trp Pro
20 25 30
Phe Thr Thr Arg Asn Leu Asp Asp Asp Ser Pro Ala Met Lys Lys Thr
35 40 45
Phe Trp Gln Glu Xaa Ser Val Cys Gln Val Thr Gln Lys Gly His Tyr
50 55 60
Asn Leu Ile Gly Val Thr Asp Ser Ser Cys Pro Gly Ser Val Asp Gln
65 70 75 80
Ala Ala Arg Asp Phe Glu Val Ser Trp Ile Pro Arg Pro His Ile Ala
85 90 95
Ala Val Asp Gly Ser Pro Val Val Ile Gly Ser Pro Ile Glu Lys Arg
100 105 110
Asp Val Cys Gln Gly Glu Asp Asp Ser Val Glu Leu Arg Leu Thr Gly
115 120 125
Asn Pro Pro Tyr Thr Ile Gln Cys Glu Gln Gln Arg Lys Met Gly Arg
130 135 140
Gly Thr Ser Ser Ile Arg Thr Arg Ser Leu Lys Thr Ala Leu His Val
145 150 155 160
Thr Ser Met Glu Met Asp Thr Ser Glu Ala Gly Leu Tyr Thr Tyr Lys
165 170 175
Phe Lys Glu Val Gly Asp Ser Leu Tyr Asp Tyr Asp Pro Arg Ser Glu
180 185 190
Pro Val Leu Val Thr Gln Arg Val Asn Pro Leu Pro Ser Ala Arg Phe
195 200 205
Asn Ser Pro Gly His Ile Tyr Gly Phe Cys Lys Glu Asp Val Ser Gly
210 215 220
Glu Glu Ser Ile Pro Val Thr Leu Glu Gly Val Ala Pro Phe Phe Leu
225 230 235 240
Glu Ile Ile Ile Lys His His Ser Asn Ala Lys Pro Glu Val Val Ser

```
                245                 250                 255
Ile Pro Asn Ile Ser Ser Asn Arg Tyr Asn Leu Pro Ile Pro Arg Arg
            260                 265                 270
Tyr Leu Asn Leu Gly Gln His Val Val Ser Ile His Lys Val Arg Asp
        275                 280                 285
Ala Arg Gly Cys Gln Arg Thr Phe Glu Asn Asp Ala Ser Thr Val Arg
    290                 295                 300
Val Ala Val Ser Asp Val Pro Thr Ile Ile Pro Leu Glu Ser Lys Ile
305                 310                 315                 320
Asp Tyr Cys Val Gly Glu Arg Leu Ser Phe Ser Leu Ser Gly His Ala
                325                 330                 335
Pro Phe Asp Val Phe Tyr Thr Phe Asp Gly Val Ser Arg Lys Ala Thr
            340                 345                 350
Ser Arg Thr Thr Asn Phe Arg Arg Ile Ala Glu Arg Pro Gly Ile Phe
        355                 360                 365
Thr Ile Thr Ala Val Ser Asp Gly Ala Ser Gly Lys Cys Lys Ala His
    370                 375                 380
Lys Asn Ile Thr Lys Thr Ile His Glu Met Pro Ser Val Arg Ile Ser
385                 390                 395                 400
Arg Gly Gln Thr Ser Val Val Asp Ile His Glu Gly Gly Glu Ala Glu
                405                 410                 415
Leu Gln Phe Glu Phe Trp Gly Thr Leu Ser
            420                 425
```

<210> 26412
<211> 471
<212> PRT
<213> A.fumigatus

<400> 26412

```
Gly Gly Asn Cys Ala Asp Ser Gly Leu Leu Val Arg Glu Asp Ala Ser
1               5                   10                  15
Phe Leu Met Ala Ala Ser Leu Lys Thr Arg Gly Arg Arg Arg Val Ile
            20                  25                  30
Asp Ser Phe Ala Arg Gly Asp Ile Trp Ala Ser Arg Pro Pro Val Glu
        35                  40                  45
Gly Val Ile Asp Asn Leu Asp Asp Phe Phe Pro Asp Ile Asp Leu Asp
    50                  55                  60
Ala Pro Tyr Leu Asp Gly Gln Gly Val Ser Pro Pro Ser Ser Pro Ala
65                  70                  75                  80
Asn Arg Ala Pro Pro Glu Asn Asp Leu His Lys Lys Glu Asn Gln Pro
                85                  90                  95
Ser Ser Ser Tyr Thr Gly Glu Met Asn Ala Asn Ala Gly Asp Thr Leu
            100                 105                 110
Gly Ser Asn Glu Pro Thr Leu Lys Pro Gln Gly Gly Asp Val Val Ala
        115                 120                 125
Arg Arg Asn Ile Asn Arg Ser Gly Gly Gly Leu Thr Arg Gly Lys Ser
    130                 135                 140
Ile Arg Glu Val Ala Lys Gly Ala Asn Gln Ala Ser Arg Ser Arg Ser
145                 150                 155                 160
Ile His Thr Gly Asn Gln Lys Ser Gly Glu Ile Leu Arg Arg Lys Ser
                165                 170                 175
Thr Lys Met Phe Gly Ala Lys Ile Met Gln Ile Lys Pro Lys Pro Gly
            180                 185                 190
Ser Arg Leu Ser Gln Leu Asp Pro Ile Pro Gln Asn Asn Thr Pro Ser
        195                 200                 205
```

```
Gly Val Pro Gln Arg Gln Pro Thr Phe Arg Ile Ile Arg Gly Gln Leu
    210                 215                 220
Ile Gly Lys Gly Thr Tyr Gly Arg Val Tyr Leu Gly Ile Asn Ala Asp
225                 230                 235                 240
Asn Gly Glu Val Leu Ala Val Lys Gln Val Glu Ile Asn Pro Arg Leu
                245                 250                 255
Ala Gly Gln Asp Thr Asp Arg Val Lys Glu Met Val Ala Ala Met Asp
            260                 265                 270
Gln Glu Ile Asp Thr Met Gln His Leu Glu His Pro Asn Ile Val Gln
        275                 280                 285
Tyr Leu Gly Cys Glu Arg Gly Glu Phe Ser Ile Ser Ile Tyr Leu Glu
    290                 295                 300
Tyr Ile Ser Gly Gly Ser Ile Gly Ser Cys Leu Arg Lys His Gly Lys
305                 310                 315                 320
Phe Glu Glu Ser Val Val Lys Ser Leu Thr Arg Gln Thr Leu Ser Gly
                325                 330                 335
Leu Ala Tyr Leu His Asp Gln Gly Ile Leu His Arg Asp Leu Lys Ala
            340                 345                 350
Asp Asn Ile Leu Leu Asp Leu Asp Gly Thr Cys Lys Ile Ser Asp Phe
        355                 360                 365
Gly Ile Ser Lys Lys Thr Asp Asp Ile Tyr Gly Asn Asp Ser Ser Asn
    370                 375                 380
Ser Met Gln Gly Ser Val Phe Trp Met Ala Pro Glu Val Ile Gln Ser
385                 390                 395                 400
Gln Gly Gln Gly Tyr Ser Ala Lys Val Asp Ile Trp Ser Leu Gly Cys
                405                 410                 415
Val Val Leu Glu Met Phe Ala Gly Arg Arg Pro Trp Ser Lys Glu Glu
            420                 425                 430
Ala Ile Gly Ala Ile Phe Lys Leu Gly Ser Leu Ser Gln Ala Pro Pro
        435                 440                 445
Ile Pro Asp Asp Val Ser Met Thr Ile Ser Pro Ala Ala Leu Ala Phe
    450                 455                 460
Met Tyr Asp Cys Phe Thr Val
465                 470
```

<210> 26413
<211> 366
<212> PRT
<213> A.fumigatus

<400> 26413

```
Phe Thr Ile Ser Ser Ile Ser Ser Ser Leu Arg Arg Asp Cys Phe Leu
1               5                   10                  15
Trp Pro Leu Thr Ile Val Leu Ser Ala Leu Arg Phe Met Leu Trp Val
            20                  25                  30
Ser Phe Asp His Leu Leu Tyr Lys Thr Gly Pro Ala Thr Asp Thr Val
        35                  40                  45
His Phe Leu Gly Phe Val Phe Phe Val Ser Ser Leu Gln Lys Gly His
    50                  55                  60
Tyr Arg Phe Gln Phe Thr Gln Phe Ala Trp Thr His Met Ala Leu Tyr
65                  70                  75                  80
Leu Ile Val Val Gln Ala His Phe Val Met Asn Asn Val Phe Glu Gly
                85                  90                  95
Met Ile Trp Phe Phe Leu Pro Ala Ser Leu Val Ile Thr Asn Asp Ile
            100                 105                 110
Phe Ala Tyr Val Cys Gly Ile Thr Phe Gly Arg Thr Gln Leu Ile Gln
```

```
        115                 120                 125
Leu Ser Pro Lys Lys Thr Val Glu Gly Phe Leu Gly Ala Trp Ile Cys
    130                 135                 140
Thr Ile Ile Phe Gly Tyr Phe Met Thr Asn Ile Leu Met Arg Tyr Lys
145                 150                 155                 160
Tyr Phe Ile Cys Pro Val Asn Asp Leu Gly Ser Asn Val Leu Thr Gly
                165                 170                 175
Leu Gln Cys Asn Pro Asn Pro Val Phe Val Pro Gln Pro Tyr Ser Leu
            180                 185                 190
Pro Glu Trp Thr Gly Leu Ser Lys Thr Phe Tyr Val Glu Pro Met Gln
        195                 200                 205
Phe His Ile Leu Val Phe Ala Thr Phe Ala Ser Leu Ile Ala Pro Phe
    210                 215                 220
Gly Gly Phe Phe Ala Ser Gly Leu Lys Arg Thr Phe Lys Ile Lys Asp
225                 230                 235                 240
Phe Gly Glu Ser Ile Pro Gly His Gly Gly Ile Thr Asp Arg Met Asp
                245                 250                 255
Cys Gln Phe Ile Met Gly Phe Phe Ser Tyr Met Tyr Tyr His Ser Phe
            260                 265                 270
Ile Ala Val Tyr Lys Ala Ser Val Gly Asp Ile Ile Glu Ala Ala Ile
        275                 280                 285
Asn Gly Leu Thr Val Glu Glu Gln Phe Glu Val Val Arg Gly Leu Gly
    290                 295                 300
Lys Tyr Leu Tyr Asn Gln Gly Thr Val Ser Glu Thr Val Cys Ser Ile
305                 310                 315                 320
Asp Phe Phe Phe Phe Phe Phe Phe Trp His Glu Arg Thr Thr Cys Ser
                325                 330                 335
Gln Ile Ile Gln Ile Leu Asp Cys Leu Asn Gly Glu Leu Lys Arg Arg
            340                 345                 350
Glu Met Ile Ala Met Thr Ser Pro Phe Pro Ala Arg Gly Pro
        355                 360                 365

<210> 26414
<211> 154
<212> PRT
<213> A.fumigatus

<400> 26414
Ser Gly Arg Arg Gly Ala His Gln Gly Ser Arg Asn Gln Leu Asn His
1               5                   10                  15
Leu Ala Ile Gly Arg Leu Ile Tyr Ser Ala Arg Asn Arg Asn Ser Leu
            20                  25                  30
Asn Val Pro Asn Met Arg Glu Lys Lys Gln Thr Phe Ile Thr Arg Thr
        35                  40                  45
Ile Trp Thr Phe Val Met Ile Phe Leu Phe Phe Ile Ala Met Phe Ser
    50                  55                  60
Gly His Ile Tyr Ile Ile Gly Ile Val Thr Ala Val Gln Ile Ile Ser
65                  70                  75                  80
Phe Lys Glu Val Ile Ala Ile Ala Asn Val Pro Ser Arg Glu Lys Asn
                85                  90                  95
Ile Arg Phe Thr Lys Ser Leu Asn Trp Tyr Phe Leu Ala Thr Thr Met
            100                 105                 110
Tyr Phe Leu Tyr Gly Glu Ser Val Ile Tyr Tyr Phe Lys His Ile Leu
        115                 120                 125
Leu Val Glu Lys Gly Leu Leu Pro Leu Ala Thr His His Arg Phe Ile
    130                 135                 140
```

```
Ser Phe Thr Leu Tyr Val Met Gly Lys Phe
145                 150

<210> 26415
<211> 483
<212> PRT
<213> A.fumigatus

<400> 26415
Gly Glu Ser Leu Leu Tyr Ala Ile Met Ser Ser Ser Met Arg Ser Ser
1               5                   10                  15
Arg Gln Arg Ile Ser Ser Leu Ser Arg Pro Ile Arg Thr Ser Arg Thr
            20                  25                  30
Arg Val Gln Ser Tyr Leu Glu Asp Ser Ser Ser Asp Asp Arg Leu Asp
        35                  40                  45
Glu Asp Thr Asp Ser Asp Gln Glu Arg Ser Arg Arg Met Ser Leu Ser
    50                  55                  60
Leu Arg Pro Arg Ser Ser Asn Arg Ala Pro Val Ser Tyr Arg Glu Glu
65                  70                  75                  80
Ser Thr Asp Asp Asp Phe Glu Arg Ser Ser Asn Glu Asp His Ser Ala
                85                  90                  95
Val Ala Pro Val Glu Ala Pro Thr Arg Tyr Thr Tyr Pro Phe Pro Gln
            100                 105                 110
Ser Ala Gly Asn Gly Thr Ser Ser Arg Pro Lys Arg Asn Arg Thr Val
        115                 120                 125
Lys Thr Arg Ser Gln Thr Ser Lys Ser Lys Arg Pro Pro Ala Lys Asn
    130                 135                 140
Arg Leu Glu Leu Gly Arg Pro Leu Asn Lys Arg Pro Lys Val Gln Ala
145                 150                 155                 160
Asp Asp Met Leu Pro Ile Gly Ser Gly Val Ile Pro Pro Trp His Thr
                165                 170                 175
Leu Pro Tyr His Ile Leu Phe Asp Ile Phe Phe Arg Ala Ser Phe Pro
            180                 185                 190
Leu Met Asp Glu Lys Thr Thr Thr Arg Asn Ser Ser Thr Gln Trp Leu
        195                 200                 205
Val Ser Val Ala Leu Leu Cys Arg Ala Phe His Glu Pro Ala Leu Ser
    210                 215                 220
Ala Leu Tyr His Ser Pro Pro Leu Ile Pro Ile Lys Cys His Ala Leu
225                 230                 235                 240
Leu Asn Leu Leu Cys Gln Pro Gln Glu Thr Leu Ser Thr Asn Tyr Arg
                245                 250                 255
Asn Lys Ile Gln Glu Leu His Ile Asp Val Glu Thr Leu Leu Leu His
            260                 265                 270
Lys Ser Gly Pro Thr Leu Gly Tyr Phe Asp Leu Pro Lys Leu Ile Glu
        275                 280                 285
Lys Thr Pro Gln Val Lys Lys Val Arg Leu Tyr His Lys Asp Asp Phe
    290                 295                 300
Ile Val Gly Leu Ala Pro Trp Gln Ile Gln Arg Ser Lys Trp Val Tyr
305                 310                 315                 320
Pro Glu Ser Leu Phe Glu Ser Ile Asn Thr Ser Leu Ile His Leu Arg
                325                 330                 335
Ser Trp Asp Trp Asn Ser Arg Phe Met Glu Ala Lys Gln Leu Ile Pro
            340                 345                 350
Phe Leu Leu Gly Lys His His Asp Gln Ala Phe Arg Gly Leu Arg Glu
        355                 360                 365
Leu Arg Leu Leu His Val Ala Ser Glu Asp Ile Asp His Asp Gly Ser
```

```
    370                 375                 380
Ala Glu Pro Ser Asn Glu Arg Glu Val Ile Leu Ala Thr Ala Ile Lys
385                 390                 395                 400
Glu Leu Pro Tyr Leu Arg Arg Leu Glu Phe Ser Glu Cys Ser Ile Val
                405                 410                 415
Asn Glu His Leu Leu Leu Asn Met Pro Ser Ala Leu Thr Ser Leu Thr
            420                 425                 430
Ile Asn Asn Cys Asp Glu Val Thr Thr Ser Asn Leu Ser Ala Phe Leu
        435                 440                 445
Ala Ala His Gly Gln His Leu Arg Glu Leu Asn Leu Asn His Asn Arg
    450                 455                 460
His Leu Ser Met Ser Phe Val Val Gly Phe His His Gly Leu Gly His
465                 470                 475                 480
Pro Ser Ser
```

<210> 26416
<211> 265
<212> PRT
<213> A.fumigatus

```
<400> 26416
Asn Trp Thr Ile Ser Tyr Val Asn Arg Ser Glu Thr Ser Arg Leu Gln
1               5                   10                  15
Gly Ser Gln Ser Glu Ala Asp Gly Asn Asp Ser Ala Ala Asp Gly Ala
            20                  25                  30
Arg Glu Thr Ala Gly Ser Val Ala Gln Asp Val Gly Ser Arg Arg Ser
        35                  40                  45
Arg Gly Ala Ala Gly Arg Gly Arg Gly Leu Ala Gly Gly Thr Gly Gly
    50                  55                  60
Thr Arg Ala Arg Arg Ala Arg Arg Ala Gly Arg Ala Ser Ser Gly Ala
65                  70                  75                  80
Arg Arg Gly Ala Gly Asp Gly Ala Ala Arg Gly Thr Gly Arg Arg Gly
                85                  90                  95
Gly Val Pro Glu Ala Gly Ala Val Val Gly Ala Ala Gly Ser Phe Ala
            100                 105                 110
Asp Gly Glu Gly Gly Leu Ser Arg Val Ser Gly Ser Gly Ser Glu Thr
        115                 120                 125
Arg Ser Leu Ala Ala Asp His Gly Arg Gly Arg Gly Ala Ser Gly Gly
    130                 135                 140
Gly Arg Gly Gly Gly Gly Arg Arg Arg Ser Arg Ala Gly Glu Val Lys
145                 150                 155                 160
Glu Arg Gly Gly Ala Gln Ser Ala Ala Asp Asp Thr Glu Ala Gly Val
                165                 170                 175
Gly Gly His Arg Val Gly Ile Leu Glu Asp Val Pro Pro Gly Val Gly
            180                 185                 190
Leu Ala Glu Gln Gly Ala Ser His Leu Val Pro Val Gly Leu Gly Val
        195                 200                 205
Gly Gln Val Gly Asp Gly Glu Ile Leu Gly Leu Ala Ala Asp Gly Pro
    210                 215                 220
Ala Ser Leu Gly Asn Pro Asp Leu Leu Ala Leu Gly Asn Ser Leu Gly
225                 230                 235                 240
Leu Gly His Arg Phe Ile Glu Glu Ser Leu Gly Ile Gly Asp Gly Val
                245                 250                 255
Phe Thr Thr Gly Arg Lys Ala Arg Ser
            260                 265
```

<210> 26417
<211> 253
<212> PRT
<213> A.fumigatus

<400> 26417
Leu Gly Leu Thr Ala Arg Leu Pro Pro Arg Gly Glu Asp Ser Ile Ser
1 5 10 15
Asp Ala Lys Ala Leu Phe Asp Glu Ser Val Ala Lys Thr Gln Ala Val
20 25 30
Ala Lys Gly Lys Glu Val Trp Ile Thr Glu Thr Gly Trp Pro Val Ser
35 40 45
Gly Lys Thr Glu Asn Leu Ala Val Ala Asn Leu Ala Asn Ala Lys Thr
50 55 60
Tyr Trp Asp Glu Val Gly Cys Pro Leu Phe Gly Lys Thr Asn Thr Trp
65 70 75 80
Trp Tyr Ile Leu Gln Asp Ala Asp Pro Val Thr Pro Asn Pro Ser Phe
85 90 95
Gly Ile Val Gly Ser Thr Leu Ser Thr Thr Pro Leu Phe Asp Leu Ser
100 105 110
Cys Ser Ala Ser Ser Ser Ser Ser Ala Ala Ala Ser Ser Thr Ala Gly
115 120 125
Pro Ser Ala Ser Ser Val Ile Gly Gly Lys Ala Ser Gly Phe Thr Thr
130 135 140
Ala Ala Ala Asn Ser Ala Lys Pro Thr Phe Thr Val Gly Lys Gly Pro
145 150 155 160
Gly Gly Ser Tyr Asn Gly Thr Gly Phe Trp Asn Ser Thr Ser Ser Ala
165 170 175
Arg Pro Ser Ser Ser Ala Ile Ser Gly Ser Ser Ser Gly Ser Ala Ala
180 185 190
Gly Ser Ser Gly Ser Ser Gly Ser Ser Gly Ser Gly Ala Ser Gly Ala
195 200 205
Ser Gly Gln Ser Ser Ser Ser Thr Gly Ser Ser Ser Ala Pro Ser Thr
210 215 220
Ser Asn Ile Leu Ser Asn Ala Ala Ser Gly Leu Ser Gly Ser Ile Cys
225 230 235 240
Gly Ala Val Val Ala Val Cys Leu Ala Leu Ala Ala Leu
245 250

<210> 26418
<211> 83
<212> PRT
<213> A.fumigatus

<400> 26418
Tyr Arg Asp Ala Leu Leu Ser Pro Thr Leu Thr Ala Leu Pro Phe Val
1 5 10 15
Ser Pro Arg Thr His Ser Leu Arg Ile Leu Ile Trp Ala Lys Ala Ser
20 25 30
Arg Arg Gly Gly Ile Pro Ala Leu Thr Leu Thr Thr Asn Thr Pro Glu
35 40 45
Pro Gln Leu Thr Asp Pro Leu Pro Thr Glu Thr Met Ala His Tyr Pro
50 55 60
Gln His Ile Ser Ala Arg Ala Gly Gly Gly Tyr Lys Tyr Tyr Ser Ile
65 70 75 80

Asn His Phe

<210> 26419
<211> 112
<212> PRT
<213> A.fumigatus

<400> 26419
Asp Lys Val Thr Cys Leu Gly Phe Glu Ser Leu Leu Thr Glu Ile Pro
1 5 10 15
Asn Pro Leu Glu Ile Gly Tyr Asp Phe Trp His Thr Ala Pro Leu Pro
20 25 30
Arg Phe Asn Val Pro Ser Val Arg Val Ser Asp Gly Pro Asn Gly Val
35 40 45
Arg Gly Thr Lys Phe Phe Asp Gly Val Arg Ala Ala Cys Leu Pro Cys
50 55 60
Gly Thr Gly Leu Ala Ala Thr Trp Asp Gln Ser Leu Leu Tyr Asp Ala
65 70 75 80
Gly Val Leu Ile Gly Gln Glu Cys Leu Ala Lys Gly Ala His Cys Trp
85 90 95
Leu Val Pro Gln Cys Val Ser Asn Gly Arg Pro Leu Gly Ala Lys Gly
100 105 110

<210> 26420
<211> 76
<212> PRT
<213> A.fumigatus

<400> 26420
Val Arg Phe Ile Arg Tyr Cys His Leu Glu Glu Gln Ala Val Gly Met
1 5 10 15
Arg Ala His Ala Gly Glu Lys Ala Val Ala Pro Ser Val Asn Ser Asn
20 25 30
Asn Asp Glu Ser Asn Met Arg Thr Pro Glu Gln Gln Pro Glu Glu Lys
35 40 45
Asn Leu Glu Glu Pro Thr Phe Asp Thr Gly Ala Leu Ala Trp Leu Gln
50 55 60
Val Leu Gly Ser Phe Phe Leu Phe Phe Asn Ser Trp
65 70 75

<210> 26421
<211> 381
<212> PRT
<213> A.fumigatus

<400> 26421
Ser Leu Arg Arg Leu Arg Gly Val Ile Asn Thr Trp Gly Ala Phe Gln
1 5 10 15
Thr Phe Tyr Glu Gln Asn Leu Leu Ser Asn Val Ser Ser Ser Ser Ile
20 25 30
Ala Trp Ile Gly Ser Leu Gln Ser Phe Leu Leu Met Leu Phe Gly Val
35 40 45
Val Thr Gly Pro Leu Phe Asp Ala Gly Tyr Phe Arg Ala Leu Val Ile
50 55 60
Phe Gly Thr Phe Val Leu Pro Phe Gly Leu Met Met Ala Asn Ile Ser

```
65                  70                  75                  80
Ser Gln Tyr Trp His Leu Ile Leu Gly Gln Arg Ile Cys Ile Gly Leu
                85                  90                  95
Ala Ala Gly Cys Leu Phe Val Pro Ser Val Ala Ile Leu Pro Gln Tyr
            100                 105                 110
Phe Lys Gln Lys Arg Gly Leu Ala Asn Gly Leu Ala Ala Ser Gly Ser
        115                 120                 125
Ser Ile Gly Gly Val Val Tyr Pro Ile Met Phe Asn Lys Leu Gln Asp
    130                 135                 140
Gln Ile Gly Phe Ala Trp Ala Thr Arg Ala Leu Gly Phe Val Ala Phe
145                 150                 155                 160
Gly Thr Cys Cys Val Ser Leu Ser Leu Met Arg Met Arg Phe Leu Pro
                165                 170                 175
Thr Glu Lys Arg Lys Leu Val Gln Leu Ser Ala Phe Lys Asp Pro Ala
            180                 185                 190
Phe Val Met Phe Ala Val Ala Met Phe Leu Gly Phe Leu Gly Phe Tyr
        195                 200                 205
Asn Phe Leu Phe Tyr Val Gln Ser Tyr Ala Ile Asp Thr Gly Ile Val
    210                 215                 220
Asp Ala Asn Leu Gly Phe Tyr Leu Leu Ser Met Leu Asn Ala Gly Ser
225                 230                 235                 240
Thr Val Gly Arg Ile Phe Pro Asn Phe Val Ala Asp His Thr Gly Pro
                245                 250                 255
Leu Asn Met Leu Thr Pro Ala Val Thr Val Thr Ala Val Leu Ala Phe
            260                 265                 270
Ala Trp Ile Gly Val His Asn Val Pro Gly Ile Ile Val Leu Ser Val
        275                 280                 285
Leu Tyr Gly Leu Phe Ser Gly Gly Phe Val Ser Leu Pro Pro Val Val
    290                 295                 300
Met Val Thr Leu Thr Lys Asp Ile Arg Asp Leu Gly Thr Arg Leu Gly
305                 310                 315                 320
Met Ile Phe Ala Thr Thr Ser Ile Gly Leu Leu Ile Gly Thr Pro Ile
                325                 330                 335
Gly Gly Ala Ile Leu Ser Asn Thr His Asn Tyr Leu Gly Val Gln Leu
            340                 345                 350
Phe Thr Ala Cys Cys Ile Ile Thr Ala Ala Ala Ile Phe Ala Ala Leu
        355                 360                 365
Arg Phe Ser Arg Thr Gly Pro Arg Leu Leu Val Arg Ala
    370                 375                 380

<210> 26422
<211> 75
<212> PRT
<213> A.fumigatus

<400> 26422
Leu Ser Gly Gly Ala Trp Pro Pro Cys Gly Arg Arg Pro Ala Ser Ser
1               5                   10                  15
Phe Ala Trp Val Thr Pro Ile Phe Glu Leu Tyr Cys Val Ala Ser Pro
            20                  25                  30
Asn Ala Asn Arg Asn Ala Leu Ala Gln Ser Ala Ser Lys Val Val Gln
        35                  40                  45
Trp Val Gln Arg Glu Glu Glu Arg Leu Phe Ile Ile Gly Gly Ala Val
    50                  55                  60
Gly His Ser Gln Glu Gly Pro Leu Ala Gly Tyr
65                  70                  75
```

<210> 26423
<211> 82
<212> PRT
<213> A.fumigatus

<400> 26423
Val Leu Phe Leu Asp Gln Arg Gly Thr Gly Met Ser Ser Thr Ile Thr
1 5 10 15
Ala Arg Thr Leu Ala Leu Gln Gly Asn Ala Val Lys Gln Ala Glu Tyr
20 25 30
Leu Lys Gln Phe Arg Ala Asp Asn Ile Val Arg Asp Cys Glu Ala Ile
35 40 45
Arg Arg Cys Leu Thr Thr Asp Tyr Pro Glu Asp Gln Arg Lys Trp Ser
50 55 60
Ile Ile Gly Gln Ser Phe Gly Gly Phe Cys Ala Val Thr Tyr Leu Ser
65 70 75 80
Met Leu

<210> 26424
<211> 103
<212> PRT
<213> A.fumigatus

<400> 26424
Ile Tyr Lys Asp Met Phe Glu Ser Tyr Thr Glu Leu Gln Gln Val Lys
1 5 10 15
Asp Val Ala Asn Ile Leu Ala Thr Thr Ala Glu Trp Pro Gln Leu Tyr
20 25 30
Asp Glu Ala Arg Leu Ala Asp Asn Glu Val Pro Val Tyr Ala Ala Thr
35 40 45
Tyr Val Glu Asp Met Tyr Val His Phe Asp Leu Ala Ser Lys Thr Ala
50 55 60
Ala Lys Ile Lys Gly Ile Lys Gln Phe Ile Thr Asn Val Met Tyr His
65 70 75 80
Asn Ala Ile Arg Ser Lys Ala Asp Glu Val Met Gln Gln Leu Phe Ala
85 90 95
Leu Arg Asp Asp Thr Ile Asp
100

<210> 26425
<211> 124
<212> PRT
<213> A.fumigatus

<400> 26425
Ser Phe Asp Pro Arg Leu Val Lys Thr Val Tyr Gln His Arg Ser Gly
1 5 10 15
Leu Cys Arg Leu Leu Arg Ser Ile Pro Met Ser Gly Gln Arg Asn Val
20 25 30
Pro Met Phe Asp Thr Pro Ser Asp Leu Pro Cys Trp Arg Leu Pro His
35 40 45
Leu Pro Ser Ser Leu Arg His Lys Gly Leu Pro Ala Ala Val Cys Leu
50 55 60
Arg Glu Ile Tyr Gln Pro Ala Leu Tyr Tyr Ala Pro Ala Leu Ala Cys

```
65                  70                  75                  80
Ser Gly Ser Leu Val Val Thr Asn Tyr His Thr Pro Phe Asp Ile Val
                85                  90                  95
Asn Val Tyr Thr Val Leu Cys Glu Ile Leu Gln Lys Val Pro Ala Leu
            100                 105                 110
Ala Lys Cys Val Lys Phe His Asn Ala Ala His Tyr
        115                 120
```

<210> 26426
<211> 102
<212> PRT
<213> A.fumigatus

<400> 26426

```
Val Thr Ser Leu Ser Pro Cys Leu Ile Leu Gln Ser Lys Ser Ile Phe
1               5                   10                  15
Ser Ala Lys Val Ala Phe Thr Met Tyr Gly Val Thr Gly Glu Val Thr
            20                  25                  30
Glu Glu Val Lys His Ala Val Ser Ser Ile Gln Lys Asn Ser Arg Ile
        35                  40                  45
Thr Ile Trp Ile His Ile Ser Gly Gly Gly Thr Lys Leu Gly Glu Thr
    50                  55                  60
Lys Arg Ile Asp Ser Gly Pro Asp Asp Glu Asp Ser Pro Leu Phe Lys
65                  70                  75                  80
Ile Lys Lys Glu Ala Asp Asn Phe Tyr Gln Glu Leu Lys Asp Gly Lys
                85                  90                  95
Leu Lys Tyr Arg Arg Leu
            100
```

<210> 26427
<211> 340
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (333),(337),(338)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26427

```
Arg His Ala Lys Ser Leu Ile Glu Ser Phe Ser Arg Glu Leu Thr Ser
1               5                   10                  15
Asn Leu Phe Gly Asn Pro His Ser Leu Ser Thr Ser Ser Gln Leu Ser
            20                  25                  30
Thr Gln Arg Val Asp Asp Val Arg Leu Arg Ala Leu Arg Phe Phe Lys
        35                  40                  45
Ala Asp Pro Glu Glu Phe Asp Leu Val Phe Val Ala Asn Ala Thr Ala
    50                  55                  60
Ala Ile Lys Leu Val Ala Asp Gly Met Arg Asp Ser Thr Arg Gln Gly
65                  70                  75                  80
Phe Trp Tyr Gly Tyr His Val Asp Ala His Thr Ser Leu Val Gly Val
                85                  90                  95
Arg Glu Leu Ala Glu Lys Gly Gly Arg Cys Phe Thr Ser Asp Asp Glu
            100                 105                 110
Val Glu Asp Trp Ile Ser Arg Leu Cys Asp Val Arg Ser Glu Ser Leu
        115                 120                 125
```

```
Lys Leu Phe Ala Tyr Pro Ala Gln Ser Asn Met Asn Gly Arg Arg Leu
    130                 135                 140
Pro Phe Ser Trp Cys Lys Lys Ile Arg Asp Gln Gly Glu Thr Thr Gly
145                 150                 155                 160
Gly Asn Val Tyr Thr Leu Leu Asp Ala Ala Ser Leu Val Ser Thr Ser
                165                 170                 175
Pro Leu Asp Leu Ser Asp Ala Ser Ala Ala Pro Asp Phe Thr Val Leu
            180                 185                 190
Ser Phe Tyr Lys Ile Phe Gly Phe Pro Asp Leu Gly Ala Leu Ile Val
        195                 200                 205
Arg Lys Ser Ala Gly Gln Ile Phe Glu His Arg Arg Tyr Phe Gly Gly
    210                 215                 220
Gly Thr Val Asp Met Val Leu Thr Arg Gly Leu Gln Trp His Ala Lys
225                 230                 235                 240
Lys Gln Ser Ser Ile His Asp Arg Leu Glu Asp Gly Thr Leu Pro Phe
                245                 250                 255
His Asn Ile Ile Ala Leu Asp Ser Ala Phe Ala Thr His Glu Arg Leu
            260                 265                 270
Phe Gly Ser Met Gln Asn Ile Ser Ser His Thr Arg Phe Leu Ala Lys
        275                 280                 285
Arg Leu Tyr Asp Arg Leu Asn Ala Leu Arg His Phe Asn Gly Gln Arg
    290                 295                 300
Val Cys Glu Leu Tyr Lys Ser Pro Arg Ser Asp Tyr Val Phe Thr Thr
305                 310                 315                 320
Gly Leu Glu Gly Pro Lys Val Thr Leu Phe Gln Lys Xaa Phe Ser Thr
                325                 330                 335
Xaa Xaa Pro Pro
            340
```

<210> 26428
<211> 246
<212> PRT
<213> A.fumigatus

<400> 26428

```
Lys Leu Lys Leu Met Leu Gly Gln Leu Leu Leu Asn Ile Ser Arg Leu
1               5                   10                  15
Gly Pro His Gly Asp Gln Ile Arg Asp Gln Glu Val Tyr Leu Ile Gly
            20                  25                  30
Ile Tyr Gly Ser Arg Leu His Ile Leu Arg Ala Phe Phe Leu Gly Gln
        35                  40                  45
Lys Thr Ser His Leu Trp Ser Gly Arg His Asn Arg Ser Ser Ser Asp
    50                  55                  60
Ala Asp Val Ile Asp Pro Asn Pro Ser Thr Val Tyr Asp Arg Phe Tyr
65                  70                  75                  80
Thr Gly Lys Asn Leu Glu Arg Leu Arg Gln Gln Val Glu Trp Leu Ser
                85                  90                  95
Ala Lys Asn Leu Asp Asn Asn Pro Asn Pro Arg His Phe Arg Val Leu
            100                 105                 110
Gly Ser Arg Glu Phe Asp Leu Trp Cys Lys Gln Asp Phe Arg Ala Ala
        115                 120                 125
Val Lys Met Ile Val Ala Leu Phe Ile Tyr Met Met Ser Gly Gln Ala
    130                 135                 140
Arg Cys Gly Val Leu Gln Lys Val Phe Gln Asn Tyr Pro Ile Asp Glu
145                 150                 155                 160
Glu Ser Asp Asp Glu Leu Glu Glu Val His Asp Thr Arg Lys Arg Val
```

```
                165                 170                 175
Ala Ile Glu Glu Glu Lys Leu Ala Lys Lys Glu Lys Glu Leu Glu Glu
            180                 185                 190
Thr Glu Arg Lys Lys Arg Glu Glu Glu Gln Lys Met Ser Lys Ser Lys
        195                 200                 205
Gly Lys Arg Arg Ser Tyr Ile His Gly Arg Phe Gln Gly Phe Lys Gly
    210                 215                 220
Trp Arg Lys Pro Cys Glu Asp Phe Ala Trp Gln Lys Glu Thr Asp Ser
225                 230                 235                 240
Ser Leu Asp Asp Asp Leu
                245
```

<210> 26429
<211> 198
<212> PRT
<213> A.fumigatus

<400> 26429

```
Glu Pro Leu Gly Pro Val Asn Gln Leu Val Arg Tyr His Glu Pro Ala
1               5                   10                  15
Phe Pro Leu Met Phe Ser Glu Leu Leu Thr Leu Leu Glu Val Leu Thr
            20                  25                  30
Val Leu Thr Gln Arg Gln Ala Ser Gly Thr Leu Ser Gly Thr Ile Ser
        35                  40                  45
Val Asp Gly Arg Pro Val Asp Glu Ser Phe Lys Arg Asn Ile Gly Tyr
    50                  55                  60
Cys Pro Gln Met Asp Val His Asp Glu Thr Ser Thr Ile Arg Glu Ala
65                  70                  75                  80
Leu Glu Phe Ser Ala Leu Leu Arg Gln Pro Val Ser Val Arg Lys Glu
                85                  90                  95
Asp Lys Leu Ser Tyr Val Asp Thr Val Leu His Thr Leu Glu Leu Val
            100                 105                 110
Asp Phe Gln Asn Ala Ile Ile Gly Ser Leu Asp Ile Glu Lys Lys Arg
        115                 120                 125
Arg Val Thr Ile Gly Val Glu Leu Cys Ala Lys Pro Glu Leu Leu Leu
    130                 135                 140
Phe Leu Asp Glu Pro Thr Ser Gly Leu Gly Ser Gln Gly Ala Ser Ser
145                 150                 155                 160
Ile Val Ser Leu Leu Arg Arg Leu Ala Asp Gln Gly Leu Ala Ile Leu
                165                 170                 175
Cys Thr Ile His Gln Ala Asn Gln Glu Gln Phe Glu Gln Val Ser Leu
            180                 185                 190
Asn Glu Pro Trp Arg Leu
        195
```

<210> 26430
<211> 215
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (196)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26430

```
Phe Asp Lys Val Leu Ala Leu Ser Pro Gly Gly Arg Thr Tyr Tyr Phe
1               5                  10                  15
Gly Glu Ile Gly Arg Ser Gly Cys Cys Ile Phe Asp Tyr Phe Lys Lys
            20                  25                  30
Tyr Gly Asp Gln Pro Lys Lys Ile Thr Asn Ala Ala Asp Tyr Leu Ile
        35                  40                  45
Glu Val Val Val Gly Gly Met Arg Asp Thr Asp His Glu Val Asp Trp
    50                  55                  60
Ala Asp Ile Trp Asn Arg Ser Ala Glu Ala Asp Ala Leu Gln Lys Glu
65                  70                  75                  80
Ile Ser Asn Ile His Arg Ala Arg Ser Gln Asn Thr Glu Ser Cys Asp
                85                  90                  95
Ser Thr Lys Gln Thr His Ser Met Pro Pro Leu Tyr Cys Gln Ile Gly
            100                 105                 110
Leu Leu Thr Gln Arg Thr Leu Arg Gln Tyr Trp Arg Ser Pro Glu Tyr
        115                 120                 125
Pro Tyr Ser Arg Leu Tyr Ala Ser Phe Phe His Ala Leu Ile Asn Gly
    130                 135                 140
Leu Thr Tyr Leu Gln Thr Gly Asn Ser Ser Thr Asp Leu Gln Ser Lys
145                 150                 155                 160
Ala Phe Ser Cys Phe Leu Val Leu Met Leu Val Pro Glu Phe Ile Asn
                165                 170                 175
Ala Ile Ser Met Arg Phe Ile Leu Lys Arg Asp Ile Leu Glu Tyr Ser
            180                 185                 190
Gly Lys Asp Xaa Trp Cys Val Phe Leu Gly Cys Val Leu His Gly Ala
        195                 200                 205
His Asn Leu Gln Asn Asn Val
    210                 215

<210> 26431
<211> 201
<212> PRT
<213> A.fumigatus

<400> 26431
Ala Gln Ser His Arg Glu Leu Glu Glu Leu Val Lys Met Leu Ser Ala
1               5                  10                  15
Asp Asn Gln His Thr Lys Ala Ala Ala Leu Ala Val Phe Gln Asp Glu
            20                  25                  30
Ala Lys Leu Ala Tyr Gln Ala Leu Arg Ser His Thr Pro Thr Gln Ala
        35                  40                  45
His Lys Leu Leu Ala Met Ala Ile Ala Gly Ala Ala Lys Gly Asp Thr
    50                  55                  60
Asp Ser Asp Trp Glu Glu Thr Cys Ala Glu Ile Ala Lys Glu Leu Thr
65                  70                  75                  80
Asp Pro Tyr Ala Arg Ala Ile Leu Ala Leu Val Ser Lys Gly Asp Trp
                85                  90                  95
Lys Ser Val Ile His Glu Ser Thr Leu Pro Leu Arg Tyr Arg Ile Glu
            100                 105                 110
Val Ala Leu Arg Trp Leu Pro Asp Ala Glu Leu Ser Gly Tyr Leu Lys
        115                 120                 125
Glu Thr Ile Ala Glu Val Ile Arg Gln Gly Asp Ile Glu Gly Ile Val
    130                 135                 140
Leu Thr Gly Leu Gly His Ser Ala Leu Asp Leu Phe Gln Ser Tyr Ile
145                 150                 155                 160
Asn Lys Phe Asn Asp Val Gln Thr Pro Val Leu Ala Met Ser His Thr
```

```
                165                 170                 175
Val Pro Arg Phe Ile Arg Thr Gly Trp Gly Gln Gly Ser Ile Met Lys
            180                 185                 190
Asn Gly Val Arg Pro Ile Ala Gly Arg
        195                 200
```

<210> 26432
<211> 205
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (65),(78)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26432

```
Cys Ser Asp Ala Gly Ser Ser His Glu Pro His Ser Pro Thr Leu His
1               5                   10                  15
Gln Asp Trp Leu Gly Pro Gly Leu Asp Tyr Glu Glu Trp Arg Glu Thr
            20                  25                  30
Tyr Arg Trp Gln Met Asn Ser Trp Lys Leu Gln Leu Glu Arg Ala Arg
        35                  40                  45
Phe Asp Val Gly Ser Arg Lys Phe Ala Val Thr Trp Asp Gly Ala Lys
    50                  55                  60
Xaa Val Glu Pro Pro Arg Gln Gln Val Ser Leu Thr Cys Xaa Tyr Cys
65                  70                  75                  80
Thr Arg His Leu Thr Gln His Asp Ala Ser Ser Gln Phe Ser Pro Ser
                85                  90                  95
Ala Ser Gly Glu Gly Val His Gln Thr Ala Gly Asn Pro Leu Gly Thr
            100                 105                 110
Ala Val Met Ser Gly Met Val Cys Ala Arg Cys Gly Arg Pro Met Pro
        115                 120                 125
Arg Cys Gly Val Cys Thr Leu Trp Met Gly Ser Pro Asp Pro Met Ser
    130                 135                 140
Arg Ala Cys Ile Ala Ala Asp Ala Gly Gln Glu Gln Arg Lys Pro Thr
145                 150                 155                 160
Glu Ala Asp Ile Met Arg Arg Phe Ile Val Phe Cys Ile Asn Cys Asn
                165                 170                 175
His Gly Phe His Ala His His Ala Arg Glu Trp Phe Ala Lys His Lys
            180                 185                 190
Val Cys Pro Val Ala Glu Cys Ser Cys Ile Cys Asp Arg
        195                 200                 205
```

<210> 26433
<211> 107
<212> PRT
<213> A.fumigatus

<400> 26433

```
Leu Ala Ala Gly Arg Phe Ser Val Val Gln Pro Tyr Thr Tyr Arg Ile
1               5                   10                  15
His Lys Cys Leu Thr Thr Ser Ser Pro Thr Gly Asp Ala Thr Leu Thr
            20                  25                  30
Glu Pro Lys Asn Gly Phe Asn Ser Thr Gln Leu Ala Ser Leu Phe Thr
        35                  40                  45
```

```
Lys Arg Ser Val Arg Ala Thr Ser Thr Ala Val Ser Pro Ser Thr Leu
    50                  55                  60
Ala Thr Ser Met Leu Met Ala Met Ser Thr Arg Pro Arg Ala Ala Ala
65                  70                  75                  80
Pro Ser Leu Ser Gly Ser Thr Ile Ala Arg Val Ile Ile Ser Ser Ile
                85                  90                  95
Thr Ser Ala Ala Thr Ile Ser Thr Leu Ala Phe
            100                 105

<210> 26434
<211> 93
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26434
Thr Leu Asn Pro Xaa Gly Asn Pro Val Leu Tyr Gly Thr Pro Gly Ala
1               5                   10                  15
Asp Thr Tyr Met Thr Pro Gly Leu Ile Thr Leu Asp Met Asn Thr Leu
            20                  25                  30
Glu Trp Thr Asn Ala Ser Thr Thr Asp Met Asp Thr Phe Gly Thr Ile
        35                  40                  45
Gly Asp Gly Tyr Met Ser Leu Ile Glu Ser Val Gly Asp Gln Gly Leu
    50                  55                  60
Ile Val Ala Phe Gly Gly Tyr Thr Tyr Pro Val Gly Glu Lys Ile Ser
65                  70                  75                  80
Phe Leu Ala Ala Arg Gln Asn Glu Thr Thr His Arg Val
                85                  90

<210> 26435
<211> 129
<212> PRT
<213> A.fumigatus

<400> 26435
Val Val Arg Ile Leu Leu Ser Ile Thr Cys Ser Arg Thr Ser Tyr Val
1               5                   10                  15
Phe Gly Gly Met Gly Gln Thr Thr Ala Glu Ser Asp Gly Asp Val Tyr
            20                  25                  30
Val Leu Ser Leu Pro Ser Phe Gln Trp Ile Arg Val Tyr Arg Asp Asn
        35                  40                  45
Thr Ile Arg Tyr Lys His Lys Cys Gln Leu Val Gln Lys His Thr Met
    50                  55                  60
Leu Val Ile Gly Gly Ile Ile Pro Ile Asp Gly Met Glu Tyr Tyr Pro
65                  70                  75                  80
Gln Ser Arg Asn Cys Asp Thr Ala Thr Phe Ala Asn Gly Ile Gly Ile
                85                  90                  95
Phe Asp Leu Gln Thr Leu Ser Trp Arg Thr Asn Tyr Asn Ala Thr Asp
            100                 105                 110
Val Val Gly Tyr Ala Val Pro Ser Gln Ile Ser Asp Val Ile Gly Gly
        115                 120                 125
Gly
```

<210> 26436
<211> 75
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (13),(22)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26436
Ala Phe Asp Lys Ile Pro Ser Phe Asp Leu Cys Ala Xaa Thr Ala Thr
1 5 10 15
Leu Arg Asn Asp Val Xaa Ala Ala Gly Phe Leu Ala Pro Ser Leu Pro
20 25 30
Cys Phe Cys Gly Leu Asp Asp Asn Ser Cys Asp Lys Ile Thr Ile Ser
35 40 45
Arg Leu Phe Leu Thr Glu Lys Gly Ile Glu Arg Glu Glu Ile Phe Ala
50 55 60
Pro Arg Lys Asn Gln Gly Ile Arg Arg Val Lys
65 70 75

<210> 26437
<211> 98
<212> PRT
<213> A.fumigatus

<400> 26437
Arg Lys Cys His Leu Ser Lys Asp Arg Val Tyr Gly Leu Pro Ala Glu
1 5 10 15
Leu Arg Phe Arg Val Val Ile Thr Gly Leu Gly Ala Lys Asp Asn Gly
20 25 30
Val Ser Phe Asn Ala Ala Ile Leu Pro Leu Gly Val Leu Asn Val Phe
35 40 45
Gln Ile Leu Gly Leu Gln Ile Ile Tyr Val Gly Ala Phe Arg Arg Arg
50 55 60
Glu Lys Gly Ser Ser Cys Gln Lys Arg Cys Lys Ala Leu Gly Gln Arg
65 70 75 80
Pro Cys His His Ser Ala Gly Arg Glu Asn Glu Tyr Ile Ala Asn Phe
85 90 95
Ile Gly

<210> 26438
<211> 151
<212> PRT
<213> A.fumigatus

<400> 26438
Asp Ser Val Gly Gln Leu Phe Arg Val Asn Gln Asn Asn Thr His Thr
1 5 10 15
Ser Ile Thr Arg Leu Ser Leu Thr Leu Thr Lys Asp Ser Ser Phe Arg
20 25 30
Lys Thr Gly Gln Leu Leu Ser Val Arg Ala Gln Leu Asn Leu Tyr Ser

```
        35                  40                  45
Glu Leu Thr Asp Ser Leu Pro Asp Leu Phe Trp Asp Ser Arg His Glu
    50                  55                  60
Leu Gly Leu Glu Gly Tyr Tyr Glu Gln Val Gly Arg Ala Leu Asp Val
65                  70                  75                  80
Gly Ile Arg Ile Lys Leu Leu Asn Glu Lys Met Asp Tyr Ala Gln Glu
                85                  90                  95
Ile Ala Ser Val Leu Arg Glu Arg Leu Ser Glu Thr His Gly Leu Arg
            100                 105                 110
Leu Glu Trp Ile Ile Ile Leu Leu Ile Ala Val Glu Val Gly Phe Glu
        115                 120                 125
Val Leu Arg Leu Trp Lys Glu Arg Ala His Glu Leu Glu Ala Lys Ala
    130                 135                 140
Glu Leu Ser Ser Glu Pro Ser
145                 150
```

<210> 26439
<211> 119
<212> PRT
<213> A.fumigatus

<400> 26439

```
Asn Asn Ser Arg Leu Cys Ser Glu Ser Gly Gly Asn Arg His Val Val
1               5                   10                  15
Phe Thr Pro Ser Ser Cys Thr Ala Leu Gln Ser Phe Asp Val Asn Met
            20                  25                  30
Leu Gln Ser Ile Pro Gly Pro Gln His Ile Leu Lys Ala Leu Thr Gly
        35                  40                  45
Ser Leu Gly Leu Ser Thr Ile Tyr Glu Pro Asp His Glu Ala Ser Gln
    50                  55                  60
Asn Ser Phe Gln Cys Ser Lys Pro Glu Leu Ser Cys His Ala Gln Tyr
65                  70                  75                  80
His Gly Gln Asp Thr Cys Cys Phe Asn Tyr Pro Gly Gly Gln Met Leu
                85                  90                  95
Gln Thr Gln Phe Trp Asp Ala Asp Pro Ala Val Gly Pro Val Asp Ser
            100                 105                 110
Trp Thr Ile His Gly Leu Trp
        115
```

<210> 26440
<211> 209
<212> PRT
<213> A.fumigatus

<400> 26440

```
Lys Ala Val Thr Ala Tyr Ala Val Ala Glu Gln Phe Asp Ile Arg Lys
1               5                   10                  15
Val Arg Asp Ile Leu Gln Glu Lys Gly Phe Glu Pro Asp Pro Phe Gln
            20                  25                  30
Thr Gly Leu Phe Pro Gln Val Val His Ile Gln Val Pro Ile Asp Ser
        35                  40                  45
Ile Arg Arg Val Ser Asn Leu Thr Thr Thr Asp Leu Ser Ser Asp Glu
    50                  55                  60
Val Gly Asp Val Phe Val Phe Pro Ser Gly Thr Val Val Ala Trp Ser
65                  70                  75                  80
Leu Pro Glu Gly Phe Thr Ser Phe Leu Ala Thr Arg Thr Leu Leu Pro
```

```
                85                  90                  95
Ala Ala Glu Gly Ala His Ile Asp Asn Leu Glu Thr Glu Asp Leu Glu
            100                 105                 110
Tyr Ile Glu Asp Pro Gln Arg Glu Asn Ser Ser Ile Lys Gly Asp Thr
        115                 120                 125
Ile Ile Leu Gly Thr Lys Ser Gly Asn Asp Asp Pro Glu Ser Lys Leu
    130                 135                 140
Gly Arg Gln Ser Val Asp Thr Val Leu Thr Lys Val Ala Phe Ser Ser
145                 150                 155                 160
Gly Leu Ala Arg Ser Thr Lys Leu Ala Val Leu Glu Thr Leu Leu Ala
                165                 170                 175
Asn Tyr Phe Glu Ser Thr Arg Thr Ile Pro Thr Leu Leu Ser Gln Gly
            180                 185                 190
Ser Arg Leu Pro Ser Gln Lys Ile His Pro Phe Ala Arg Pro Ala Asn
        195                 200                 205
Cys
```

<210> 26441
<211> 167
<212> PRT
<213> A.fumigatus

<400> 26441

```
Ala Val Thr Pro Ser Thr Met Ala Arg Thr Leu Ala Ala Ser Thr Ile
1               5                   10                  15
Pro Glu Gly Arg Cys Ser Arg Arg Asn Phe Gly Met Arg Ile Leu Arg
            20                  25                  30
Ser Gly Gln Ser Thr Pro Gly Leu Phe Met Asp Ser Gly Glu Leu Tyr
        35                  40                  45
Val Val Leu Pro Lys Leu Leu Leu Ser Gln Thr Cys Ile Val Leu Asn
    50                  55                  60
Lys Thr Leu Ile Thr Gly His Pro Pro Arg Pro Asp Phe Cys Asp Gly
65                  70                  75                  80
Gly Phe Asp Gln Tyr Cys Asp Ser Lys Arg Arg Tyr Ser Asn Ile Ser
                85                  90                  95
Leu Ile Leu Val Asp Ser Gly Arg Ala Asp Leu Leu Glu Tyr Met Ser
            100                 105                 110
Asp Phe Trp Lys Asp Phe Arg Gly Asp Asp Glu Asp Leu Trp Glu His
        115                 120                 125
Glu Trp Asn Lys His Gly Thr Cys Ile Ser Thr Leu Glu Thr Thr Cys
    130                 135                 140
Tyr Ala Asp Tyr Tyr Pro Gln Gln Glu Val Val Asp Tyr Phe Asn Lys
145                 150                 155                 160
Thr Val Glu Ile Phe Gln Lys
                165
```

<210> 26442
<211> 92
<212> PRT
<213> A.fumigatus

<400> 26442

```
Thr Asp His Cys Thr Gly Ile Met Gln Ile Ala Ala Leu Ala Ala Thr
1               5                   10                  15
Phe Ala Leu Ala Leu Val Pro Ser Val Ser Ala Trp Arg Val Phe Phe
```

```
            20                  25                  30
Tyr Gln Leu Lys Glu Gly Glu Gly Pro Ser Ile Thr Asn Ala Gly Pro
        35                  40                  45
Gly Asn Pro Gly Phe Arg Cys His Pro Asn Val Asp Pro Leu Asn Gln
    50                  55                  60
Asn Ile Ser Ser Met Arg Tyr Tyr Ser Asp Asn Pro Glu Gly Thr Ile
65                  70                  75                  80
Arg Cys Cys Leu Thr Val Phe His Ser Pro Gly Cys
                85                  90
```

<210> 26443
<211> 73
<212> PRT
<213> A.fumigatus

<400> 26443

```
Leu Ala Ser Gly Phe Cys Tyr Arg Leu Val Gly Ile Thr Phe Asp Met
1               5                   10                  15
Asp Thr Thr Leu Lys Trp His Trp Asp Thr Val Gln Phe Val Leu Asn
            20                  25                  30
Cys Gly Glu Arg Thr Cys Arg Arg Ile Leu Tyr Lys Ala Ser Pro Ile
        35                  40                  45
Pro Leu Lys Val Asp Ile His Lys Pro Ala Gln Pro Arg Gln Glu Tyr
    50                  55                  60
Ser Asp Arg Asn Lys Leu Ile Thr Arg
65                  70
```

<210> 26444
<211> 143
<212> PRT
<213> A.fumigatus

<400> 26444

```
Gly Thr Thr Arg Thr Ile Arg Arg Val Leu Ser Ala Ala Val Leu Gln
1               5                   10                  15
Tyr Ser Thr Val Pro Ala Ala Lys Ala Thr Leu Asp Ile Arg Pro Val
            20                  25                  30
Gly Thr Ser Ser Pro Tyr Phe Ala Glu Ile Gly His Glu Leu Tyr Val
        35                  40                  45
Ile Ser Phe Leu Thr Glu Leu Phe Leu Thr Leu His Ser Ala Ser Val
    50                  55                  60
Leu Leu Ile Ile Cys Pro Leu Tyr Asp Tyr Gly Ser Thr Ile Pro Ser
65                  70                  75                  80
Gln Tyr Ile Phe Pro Phe Leu Ser Ser Phe Ser Ser Pro Pro Met Phe
                85                  90                  95
Phe Pro Pro Leu Leu Ser Leu Pro Leu Ser Pro Phe Ser Ile Phe Phe
            100                 105                 110
Leu Leu Ser Ser Pro Asn His Ser Ser Phe Ser Leu Ile Pro Ile Ile
        115                 120                 125
Leu Leu Ser Phe Leu Ile Leu His Phe Phe Phe Leu Leu Pro Leu
    130                 135                 140
```

<210> 26445
<211> 84
<212> PRT
<213> A.fumigatus

<400> 26445
Thr Ala Leu Ser Asn Phe Glu Leu Thr His Ala Ser Ala Thr Phe Asn
1 5 10 15
Glu Lys Leu Leu Leu Gly Gln Gly Leu Ser Ile Thr Pro Leu Asp Glu
20 25 30
Gly Ala Gly Asn Gly Ser Ile Gly Pro Lys Ser Leu Tyr Glu Val Val
35 40 45
Arg Gln Ile Asp Asn Gln Lys Asp Phe Gln Asp Tyr Ile Leu Ser Tyr
50 55 60
Glu Tyr Asn Pro Gly Ala Val Thr Ser Glu Glu Val Gln Tyr Gln Arg
65 70 75 80
His Pro Val Arg

<210> 26446
<211> 199
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (14),(50)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26446
Gly Ser Cys Leu Ala Leu Phe Lys Asp Gly Ala Ser Gly Xaa Asp Asn
1 5 10 15
Arg Gln Gly Thr Tyr Gly Ser Ser Tyr Asn Asp Leu Asn Gly Phe His
20 25 30
Gly Arg Met Ala Asp His Gly Leu Gln Leu Ala Val Ser Leu Gln Gln
35 40 45
Met Xaa Asp Asp Leu His Glu Leu Ala Thr Asn Ile Glu Lys Gly Arg
50 55 60
Lys Gln Trp Lys Gln Thr Gly Leu Ser Ala Glu Lys Arg Val Thr Glu
65 70 75 80
Ala Glu Ala Ala Ala Glu Lys Ala Lys Ala Lys Tyr Glu Ser Leu Ala
85 90 95
Glu Gln Tyr Asp Arg Val Lys Thr Gly Asp Lys Gln Gly Gly Lys Phe
100 105 110
Gly Leu Lys Gly His Lys Ser Ala Ala Gln His Glu Glu Glu Leu Leu
115 120 125
Arg Lys Val Gln Asn Ala Asp Gly Asp Tyr Ala Ala Lys Val Thr Ala
130 135 140
Ala Gln Ala Ala Arg Arg Glu Leu Ile Ser Thr His Arg Pro Gln Ala
145 150 155 160
Val Gln Asn Ile Gln Lys Leu Ile Ala Glu Cys Asp Ser Gly Leu Thr
165 170 175
Leu Gln Leu Gln Lys Phe Gly Met Met Ser Leu Arg Pro Asp Ile Glu
180 185 190
Pro Leu Cys Arg Thr Leu Ser
195

<210> 26447
<211> 224
<212> PRT

<213> A.fumigatus

<400> 26447
Leu Arg Arg Arg Phe Ser Thr Ser Val Ile Arg Tyr Val Asn Leu Tyr
1 5 10 15
Arg Ser Leu Leu Ser Ala Cys Ser Phe Arg Val Arg His Trp Glu Val
20 25 30
Arg Pro Thr Pro Val Ala Pro Ala Ser Gln Pro Ser Thr Gln Asn Lys
35 40 45
Arg Gln Ser Ile Met Phe Pro Ser Ser Phe Ser Gln Gln His Leu Pro
50 55 60
Val Ser Gln Pro Ser Thr Gln Pro Ser Gly Pro Ala Ala Thr Pro Ser
65 70 75 80
Pro Pro Pro Ala Pro Ala Gln Ser Thr Gln Pro Ser Ser Phe Gln Pro
85 90 95
His Pro Asp Ser Phe Ser Ser Pro Pro Pro Phe Gln Pro Pro Tyr Pro
100 105 110
Thr Ser Ser Gly Leu Pro Ala Pro Asp Gln His Asn Val Asn Thr Leu
115 120 125
Pro Met Ala Ala Pro Ala Asn Pro Leu Pro Pro Pro Gly Asn Asn Phe
130 135 140
Gln Gln Asn Leu Pro Pro Leu Arg Pro Val Phe Gly Val Ser Leu Glu
145 150 155 160
Asp Leu Tyr Ala Arg Asp Gly Thr Ala Val Pro Met Ile Val Tyr Gln
165 170 175
Cys Leu Gln Ala Ile Glu Leu Phe Gly Leu Asp Val Glu Gly Ile Tyr
180 185 190
Arg Leu Ser Gly Ser Ala Asn His Ile Asn His Met Lys Ser Leu Phe
195 200 205
Asp Asn Gly Met Cys Asn His Ser Leu Thr Arg Phe Ser Ser Asn Arg
210 215 220

<210> 26448
<211> 69
<212> PRT
<213> A.fumigatus

<400> 26448
Pro Leu Trp Met Ala Asp Ser Ser Gln Val Asp Phe Thr Asn Pro Glu
1 5 10 15
Asn Phe Tyr His Asp Val Asn Ser Val Ala Gly Leu Leu Lys Gln Phe
20 25 30
Phe Arg Glu Leu Pro Asp Pro Leu Phe Thr Ser Arg Tyr Tyr Ser Asp
35 40 45
Phe Ile Asn Ala Ala Arg Lys Tyr Ile Asp Ser Asn Pro Gly Cys His
50 55 60
Met Thr Arg Ala Glu
65

<210> 26449
<211> 68
<212> PRT
<213> A.fumigatus

<400> 26449
Leu Thr Arg Ile Ser Val Gly Ile Asp Asp Asp Ile Gln Arg Arg Asp

```
1               5                   10                  15
Ser Leu His Ala Leu Val Asn Asn Leu Pro Asp Ala His Tyr Ala Thr
            20                  25                  30
Leu Arg Ala Leu Ile Leu Val Ser Asn Ser Gly Ile Ala Pro Ser Phe
        35                  40                  45
Tyr Leu Pro Arg Ser Asn Leu Leu Asp Ser Ser Thr Ser Thr Lys Ser
    50                  55                  60
Lys Asn Ile Thr
65
```

<210> 26450
<211> 152
<212> PRT
<213> A.fumigatus

<400> 26450

```
Pro Pro Arg Ser Leu Arg Leu Ser Pro Leu Pro Val Glu Ile His Gln
1               5                   10                  15
Pro Leu Leu Ile Leu Pro Ala Glu Ser Cys Gln Val Ile Ile Pro Gly
            20                  25                  30
Ala Asp Leu Val Val Val Ile Ala Val Ala Arg Lys Val Lys Pro Ala
        35                  40                  45
Leu Glu Ile Leu Val His Ala Arg Leu Phe Leu Glu Pro Pro Leu Gly
    50                  55                  60
Ala Val Glu Gly Gly Gly Val Asp Gly Ala Asp Val Cys Gly Ala Leu
65                  70                  75                  80
Val Asp Leu Ala Asp Gly Gly Phe Gly Ile Val Val Val Ser Ile Ala
                85                  90                  95
Lys Val Arg Gly Arg Ala Phe Leu Gly Ala Phe Val Val Asp Ser Glu
            100                 105                 110
Asp Val Gly Phe Arg Gly Phe Gly Gly Ser Arg Ala Ala Ala Ser Gly
        115                 120                 125
Gly Leu Gly Ala Phe Gly Asp Glu Gly Gly Glu Leu Gly Gly Glu Gly
    130                 135                 140
Glu Gly Arg Gly Arg Gly Gly Gly
145                 150
```

<210> 26451
<211> 96
<212> PRT
<213> A.fumigatus

<400> 26451

```
Pro Cys Arg Thr Ser Ile Ser Val Ser Ser Val Ser Ile His Pro Thr
1               5                   10                  15
Phe Ala Ala Pro Cys Cys Ile Gly Val Leu Thr His Ala Tyr Asn Pro
            20                  25                  30
Cys Ile Ala Ser Val Ser Gly Val Gly Thr Ala Phe Leu Asn Gln Leu
        35                  40                  45
Ala Arg Leu Pro Asn Ala Pro Lys Leu Ile Leu Leu Ala Arg Ser Thr
    50                  55                  60
Gln Thr Leu Leu Ala Pro Thr Pro Ala Tyr Ser Pro Ala Ile Pro Ala
65                  70                  75                  80
Gly Asp Trp Asn Ala Ala Ala Glu Thr Pro Ser Leu Thr Lys Ser Gly
                85                  90                  95
```

<210> 26452
<211> 221
<212> PRT
<213> A.fumigatus

<400> 26452
Asn Ile His His Leu Thr Val Thr Ile Arg Ala His Lys Met Ser Asn
1 5 10 15
Thr Asn Pro Ser Leu Tyr Gly Leu Pro Arg His Ser Gln Lys Ala Ser
20 25 30
Ala Gln Ser Thr Ala Pro Ser Ala Ser Thr Leu Ala Phe Thr Thr Gln
35 40 45
Leu Ser Ser Leu Ile Thr Lys Gly Thr Glu Ser Ser Thr Arg Gly Arg
50 55 60
Pro Arg Pro Ser Lys Ser Ser Lys Ser Asp Ile Phe Ala Val His Asn
65 70 75 80
Lys Gly Ala Gln Lys Arg Ala Ala Ala Asp Leu Arg Asp Ala Asp Asp
85 90 95
Asp Asp Ala Glu Thr Ser Val Arg Gln Ile His Lys Arg Thr Ala Asp
100 105 110
Ile Gly Ala Val Asp Ser Ala Thr Leu His Arg Ser Lys Arg Arg Leu
115 120 125
Glu Glu Lys Ala Arg Met Tyr Glu Asp Leu Lys Ser Gly Leu Tyr Leu
130 135 140
Ala Gly Asp Ser Asp Asp Asp Asp Glu Ile Ser Ser Arg Asp Asp Tyr
145 150 155 160
Leu Ala Arg Leu Arg Arg Lys Asp Lys Glu Gly Leu Val Asp Phe Asp
165 170 175
Arg Lys Trp Ala Glu Thr Gln Arg Ala Arg Gly Ser Asp Asp Ser Ala
180 185 190
Ser Asp Ser Asp Gly Gly Asp Val Glu Ala Asp Asp Asn Ala Ser Ile
195 200 205
Val Ser Tyr Glu Asp Glu Leu Gly Arg Thr Arg Arg Gly
210 215 220

<210> 26453
<211> 272
<212> PRT
<213> A.fumigatus

<400> 26453
Gln Lys Gln Leu Phe Asn Arg Gly Val Ala Gly Gln Arg Leu Ser Glu
1 5 10 15
Trp Cys Leu Arg His Thr Arg Leu Ser Asn Gln His Arg Gln Ser Cys
20 25 30
Leu Leu Arg Arg Val Gln Thr Phe Thr Ala Leu Pro Ser Gln Lys Ile
35 40 45
Arg Ser Glu Thr Ser Ile Ile Ser Gln Ser Pro Phe Glu His Thr Lys
50 55 60
Cys Gln Ile Gln Ile His Pro Phe Thr Ala Ser Pro Asp Ile Ala Lys
65 70 75 80
Lys Pro Pro Leu Asn Gln Pro Pro Pro Leu Pro Leu Pro Ser Pro Ser
85 90 95
Pro Pro Ser Ser Pro Pro Ser Ser Pro Lys Ala Pro Ser Pro Pro Leu
100 105 110
Ala Ala Ala Leu Asp Pro Pro Asn Pro Leu Asn Pro Thr Ser Ser Leu

```
        115                 120                 125
Ser Thr Thr Lys Ala Pro Arg Asn Ala Arg Pro Arg Thr Phe Ala Met
    130                 135                 140
Leu Thr Thr Thr Met Pro Lys Pro Pro Ser Ala Arg Ser Thr Ser Ala
145                 150                 155                 160
Pro Gln Thr Ser Ala Pro Ser Thr Pro Pro Pro Ser Thr Ala Pro Ser
                165                 170                 175
Gly Gly Ser Arg Lys Arg Arg Ala Cys Thr Arg Ile Ser Arg Ala Gly
            180                 185                 190
Phe Thr Leu Arg Ala Thr Ala Met Thr Thr Thr Arg Ser Ala Pro Gly
        195                 200                 205
Met Ile Thr Trp His Asp Ser Ala Gly Arg Ile Arg Arg Gly Trp Trp
    210                 215                 220
Ile Ser Thr Gly Ser Gly Leu Arg Arg Ser Glu Arg Gly Gly Gln Met
225                 230                 235                 240
Ile Arg Leu Leu Ile Leu Thr Gly Glu Met Ser Arg Pro Thr Ile Met
                245                 250                 255
Arg Arg Ser Ser Arg Met Lys Thr Ser Trp Gly Gly Pro Gly Ala Gly
            260                 265                 270
```

<210> 26454
<211> 99
<212> PRT
<213> A.fumigatus

<400> 26454

```
Leu Ala Ser Phe Gly Lys Leu Gln Leu Ile Cys Leu Leu Val Thr Ala
1               5                   10                  15
Gly Val Arg Glu Asn Val Glu Gln Leu Leu Asn Tyr Ser Gln Asn Glu
            20                  25                  30
Lys Lys Arg Asn Phe Leu Glu Thr Val Glu Leu Gln Ile Gly Leu Lys
        35                  40                  45
Asn Tyr Asp Pro Gln Arg Asp Lys Arg Phe Ser Gly Thr Ile Lys Leu
    50                  55                  60
Pro Thr Val Pro Arg Pro Asn Met Thr Ile Trp Tyr Val Asn Phe Ala
65                  70                  75                  80
Asp Arg Pro Ile Leu Arg Trp Asn Val Leu Met Arg Ile Ile Gly Arg
                85                  90                  95
Arg Met Arg
```

<210> 26455
<211> 81
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (2)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26455

```
Thr Xaa Arg Ser Arg Pro Cys Gln Thr Thr Thr His Gln Cys Met Phe
1               5                   10                  15
Ala Asp Glu Leu Lys Lys Leu Thr Gln Asn Gln Lys Leu Leu Gln Lys
            20                  25                  30
```

```
Leu Leu Arg Asn Phe Asn Ala Phe Leu Gly Ser Asp Thr Leu Leu Gln
        35                  40                  45
Gln Tyr Pro Pro Ser Pro Gly Phe Gly Ser Cys Pro Arg Val Leu Ile
    50                  55                  60
Phe Arg Pro Arg Gln Asn Pro Asn Ala Arg Asp Tyr Pro Leu Thr Lys
65                  70                  75                  80
Asn
```

<210> 26456
<211> 94
<212> PRT
<213> A.fumigatus

<400> 26456

```
Lys Arg Cys Ser Phe Gln Pro Arg Trp Leu Lys Thr Arg His Tyr Gly
1               5                   10                  15
Leu Ser Pro Gln Ser Glu Val Ser Asn Leu Ala Tyr Arg Ile Ser Gln
            20                  25                  30
Asp Leu Tyr Arg Thr Phe Ala Pro Ile Lys Gln Thr Thr Ser Thr Met
        35                  40                  45
Ala Phe Cys Ser Leu Glu Leu Ala Gly Arg Leu Leu Asp Gln Arg Leu
    50                  55                  60
Glu Pro Val Glu Gln Gly Ser Asp Tyr Glu Gln Trp Arg Thr Ser Arg
65                  70                  75                  80
Glu Glu Val Met Gly Gly Ser Pro Ala Val Phe Ser Ser Leu
                85                  90
```

<210> 26457
<211> 198
<212> PRT
<213> A.fumigatus

<400> 26457

```
Val Val Asn Ser Ser Gly Ala Thr Asp Gly Ser Leu His Ser Pro Gln
1               5                   10                  15
Arg Gly Asp Leu Pro Thr Tyr Phe Leu Gln Thr Ile Pro Lys Lys Tyr
            20                  25                  30
Leu Ser Phe Phe Arg Met Ala Gln Pro Lys Asn His Ile Ile Tyr Ala
        35                  40                  45
Pro Ser Glu Glu Thr Pro Arg Gly Val Lys Ser Val Phe Leu Ala Gly
    50                  55                  60
Thr Thr Ser Lys Val Asp Pro Gly Asp Trp Arg Glu Thr Leu Ser Thr
65                  70                  75                  80
Ser Leu Ser Asp Leu Pro Val Thr Ile Tyr Ser Pro Tyr Arg Pro Asp
                85                  90                  95
Trp Asp Ser Ser Trp Arg Glu Asp Ile Asp Phe Ala Pro Tyr Arg Glu
            100                 105                 110
Gln Val Glu Trp Glu Leu Asp Lys Leu Asp Lys Ser Asp Thr Val Val
        115                 120                 125
Ile Tyr Phe His Pro Ala Thr Gln Ala Pro Ile Ser Leu Leu Glu Leu
    130                 135                 140
Gly Leu Cys Ala Arg Val Pro Gly Lys Ala Leu Val Val Cys Pro Glu
145                 150                 155                 160
Gly Tyr Trp Lys Arg Gly Asn Val Gln Ile Val Cys Glu Lys Tyr Gly
                165                 170                 175
```

Val Glu Met Val Asp Asn Val Asp Ala Leu Arg Asp Ala Ile Val Glu
180 185 190
Arg Leu Ser Val Arg Ser
195

<210> 26458
<211> 541
<212> PRT
<213> A.fumigatus

<400> 26458
Pro Ile Val Ala Ile Leu His Thr Leu Tyr Gly Ile Tyr His Leu Cys
1 5 10 15
Arg Ser Pro Val Thr Arg Pro Ala Gly Ser Gln Ala Ser Tyr Met Val
20 25 30
Phe Ala Ala Thr Leu Asp Leu Gly Leu Val Pro Tyr Tyr Val Phe Ser
35 40 45
Ala Tyr Ile Ala Tyr Lys Gln Ile Thr Asn Asn Ala Tyr His Trp Ser
50 55 60
Thr Leu Leu Ser Ala Glu Thr Gly Ile Thr Asp Lys Ile Ala His Ser
65 70 75 80
Thr Phe Ile Leu Ser Ile Val Asn Gly Ser Phe His Leu Thr Ser Leu
85 90 95
Cys Ile Ser Val Trp Leu Ala Leu Ile Phe Arg Gln Ile Ser Gln Leu
100 105 110
Pro Pro Asp Leu Asn Pro Leu Glu Asp Asn Leu Thr Ala Arg Pro His
115 120 125
Lys Arg Asn Lys Ser Glu Ile Ser Glu Lys His Arg Ser Leu Ser Thr
130 135 140
Val Ala Ser Ala Thr Ser Ala Glu Glu Pro Leu Ile Gly Pro Ala Arg
145 150 155 160
Gln Val Pro Phe Met His Thr Arg Asn Gln Ser Ser Glu Asp Gly Ser
165 170 175
Ser Arg Phe Ser Val Ile Asn Glu Lys Arg Arg Ser Gln Gln Ser Thr
180 185 190
Tyr Arg Asp Thr Val Val Pro Pro Val Pro Pro Val Pro Gln His Ser
195 200 205
Phe Leu Ala Gln His Asp Gln Gln Ala Ser Val Gln Ser Leu Leu Ala
210 215 220
Asp Ser His Ser Asp His Ala Gln Gln Val Ser Arg Asp Val Pro Asp
225 230 235 240
Arg Ala Gln Cys Val Ser Pro Asp Ser Gly Asn Trp Ile Ala Tyr Pro
245 250 255
Ser Arg Ser Pro Ser Pro Ala Glu Ala Gly Leu Asn Glu Asn Leu Ala
260 265 270
Arg Arg Glu Pro Ser Ser Ala Tyr Ser Gln Thr Glu Ser Leu Ile Ser
275 280 285
Ala Gly Ser Ser Phe Lys Asp Trp Leu Thr Ser Ala Gln Arg Tyr Glu
290 295 300
Leu His Leu Asn Glu Ala Ile Ser Glu Asp Val Arg Gly Glu Tyr Glu
305 310 315 320
Ser Leu Ala Phe His Glu His Tyr Ala Asn Asp Glu Asp Ile His Asp
325 330 335
Asn Pro Gln Ala Thr Arg Phe Tyr Asp Asn Ala Glu Gln Asp Ile Gly
340 345 350
Asp His Asn Ile Asn Ile Phe Leu Asp His Asn Asp Arg Glu Arg Gln

```
        355                 360                 365
Phe Ser Ala Ser Leu Gln Val Asn Pro Leu Ala Leu Asn Pro Pro Thr
    370                 375                 380
Pro Gln Pro Val Gln Asp Glu Thr Asp Asn Ala Pro His Pro Pro Ala
385                 390                 395                 400
Arg Ala Pro Leu Thr Asp Ile Pro Asn Leu Ala Pro Asn Pro Pro Ala
                405                 410                 415
Ser Pro Thr Ser Pro Asp Ser Pro Glu Lys Lys Gly Arg Phe Tyr Gly
            420                 425                 430
Glu Leu Asn Asn Lys Pro Trp Leu Ser Val Ala Arg Ser Val Ser Gly
        435                 440                 445
Gln Asn Asp Pro Asp Ser Arg Asp Leu Asp Arg Lys Arg Ser Arg Leu
    450                 455                 460
Val Lys Arg Asn Ser Gln Lys Leu Asn Thr Tyr Ser Ser Leu Lys Gln
465                 470                 475                 480
His Asp Ala Asp Asp Ser Asp Val Glu Asn Glu Ile Pro Pro Val Pro
                485                 490                 495
Thr Asp Pro Ala Val Ala Asp Gly Asp Arg Lys Gly Arg Val Val Ser
            500                 505                 510
Asn Ser Gly Ala Asp Ile Gly Arg His Asp Phe Gly Ser Gly Ser Ser
        515                 520                 525
Cys Leu His His Gly Ala Gly Arg Ile Arg Gly Gly Ala
    530                 535                 540

<210> 26459
<211> 312
<212> PRT
<213> A.fumigatus

<400> 26459
Leu Met Thr Phe Gln Ala Gly Gly Glu Asp Ile Arg Thr Gly Arg Arg
1               5                   10                  15
Pro Asp Ala Tyr Asp Asn Arg Gln His Ala Arg Pro Arg Ser Gly Tyr
            20                  25                  30
Gly Asn Gly Pro Ala Pro Asp Tyr Arg Ser Met Pro Pro Ser Arg Pro
        35                  40                  45
Glu Tyr Gln Ser Pro Pro Val Pro Asp Met His Pro Arg His Ala Tyr
    50                  55                  60
Glu Ser Thr Ser Arg Pro Thr Ser His His Ser Asn Arg Gln Phe Pro
65                  70                  75                  80
Ala Pro Glu Gln Tyr Gly Tyr Glu Gly Asp Val Leu Arg His Ser His
                85                  90                  95
Gly His Glu Ala Ala Gln Tyr Ser Pro His Ser Ser Thr Arg Ser Tyr
            100                 105                 110
Asn Pro Pro Pro Val Asp Tyr Thr His Gly Ala Pro Pro Gly Pro Glu
        115                 120                 125
Pro Glu His His Tyr Arg Leu His Ser Asn Ser Gly Ala Ser Ile Asn
    130                 135                 140
Ser Arg His Arg Asn Ser Leu Ala His Glu Thr Phe His Pro Glu Tyr
145                 150                 155                 160
Ala Ala Met Gln Pro Arg Val Asp Asp Asp Glu Glu Glu Glu Gly Pro
                165                 170                 175
Pro Pro Pro Pro Pro Ala His Arg Ser Gly Leu Val Gln Pro Ser Gln
            180                 185                 190
Gln Leu Val Pro Ser Pro Thr Ser Ser Tyr Lys Ala Tyr Ser Pro Glu
        195                 200                 205
```

```
Phe Ala Pro Ser Pro Arg Asn Thr Thr Asp Met Thr Ala Leu Gln Pro
    210                 215                 220
Leu Arg Pro Ser His Gly Asn Arg Leu Gln Asp His Pro His Met Lys
225                 230                 235                 240
Asn Pro Ser Val Pro Arg Ser Leu Val Ala Gly Phe Asp Pro Ala Ile
                245                 250                 255
Ala Glu Gly Glu Ala Ala Arg Thr Ala Arg Glu Arg Pro Ala Asn Arg
            260                 265                 270
Arg Arg Ser Phe Phe Glu Glu Asp Ala Met Ile Arg Ala Ala Glu Ser
        275                 280                 285
Asn Pro Ala Ser Pro Thr Leu Thr Leu Pro Thr Pro Ile Arg Leu Pro
    290                 295                 300
Pro Arg Gly Leu Glu Asp Pro Ala
305                 310
```

<210> 26460
<211> 299
<212> PRT
<213> A.fumigatus

```
<400> 26460
Ser Ser Ala Pro Ala Tyr Ala Ser Leu Pro Ala Pro Gly Arg Lys Tyr
1               5                   10                  15
Leu Val His Gly Glu Lys Tyr Gln Val His Leu Ala Cys Val Gly Pro
            20                  25                  30
Leu Asn Gly Thr Ala Asp Gly Asn Gly Lys Lys Pro Pro Thr Val Leu
        35                  40                  45
Leu Glu Gly Gly Glu Gly Pro Val Glu His Ser Leu Gln Pro Phe Ile
    50                  55                  60
Asp Asp Val Tyr Lys Gln Gly Leu Ile Asp Arg Tyr Cys Tyr Trp Asp
65                  70                  75                  80
Arg Pro Gly Tyr Ala Trp Ser Asp Asn Ala Pro Ser Pro His Ser Ala
                85                  90                  95
Gly Met Ala Ala Asp Ala Leu Ser Glu Ala Leu Ala Leu Ala Gly Glu
            100                 105                 110
Glu Gly Pro Trp Ile Leu Val Ser Ser Gly Ile Gly Ser Ile Tyr Ser
        115                 120                 125
Arg Ile Phe Ser Ser Arg His Leu Leu Glu Thr Gln Gly Ile Met Leu
    130                 135                 140
Ile Asp Ala Met His Glu Asp Tyr Leu Gly Gln Val Gly Asn Ala Gly
145                 150                 155                 160
Arg Gly Phe Leu Leu Trp Leu Arg Gly Val Leu Ser Pro Leu Gly Leu
                165                 170                 175
Asp Arg Leu Phe Gly Ala Leu Phe Lys Gly Arg Thr Arg Glu Asp Arg
            180                 185                 190
Val Tyr Gly Arg Ser Ala Tyr Gln Thr Asp Lys Phe Leu Lys Ala Lys
        195                 200                 205
Leu Gln Glu Asn Leu Val Ala Glu Ser Met Thr Ala Ser Glu Ile Gln
    210                 215                 220
Thr Ala Arg His Val Gln Met Pro Asp Thr Pro Leu Val Val Val Ser
225                 230                 235                 240
Ser Gly Ile Glu Val Arg Arg Ser Asp Lys Trp Ala Lys Thr Gln Glu
                245                 250                 255
Asp Leu Thr Lys Ile Thr Lys Asn Leu Lys Glu Trp Asp Ile Val Lys
            260                 265                 270
Gly Ala Pro His Glu Val Trp Lys Thr Thr Glu Gly Arg Gln Val Leu
```

```
        275                 280                 285
Gly Lys Arg Leu Lys Glu Met Val Lys Gly Glu
    290                 295

<210> 26461
<211> 236
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (8),(11)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26461
Gly Gly Leu Tyr Thr Ala Gly Xaa Ala Asp Xaa Thr Arg Thr Ala Arg
1               5                   10                  15
Phe Arg Val Ser Ile Ser Cys Phe Tyr Tyr Gln Val Ser Pro Tyr Asn
            20                  25                  30
Leu Trp Ser Val Arg Ala Leu Arg Ala Phe Ser Ser Phe Cys Leu Ala
        35                  40                  45
Val Ser Phe Val Trp Trp Thr Phe Leu Leu Val Ser Ile Phe Val Ser
    50                  55                  60
Pro Pro Met Met His Ser Arg Gly Ser Gly Phe Phe Ser Phe Ala Tyr
65                  70                  75                  80
Thr Thr Leu Thr Val Gly Tyr Leu Val Ile Ala Leu Leu Phe Phe Thr
                85                  90                  95
Ile Pro Ser Leu Ala Met Thr Ile Ser Gly Ile Val Leu Ala Val Phe
            100                 105                 110
Leu Phe Val Asp Met Cys Ile Ile Leu Cys Val Pro Gln Leu Arg Val
        115                 120                 125
Glu Tyr Gly Trp Val Gly Ile Ala Ser Val Val Trp Ala Thr Leu Ile
    130                 135                 140
Ser Ile Phe Asn Val Leu His Phe Arg Thr Val Ala Trp Gly Lys Arg
145                 150                 155                 160
Glu Gly Arg Gly Thr Pro Tyr Arg Thr Arg Gly Asn Pro Ala Val Pro
                165                 170                 175
Pro Gly Met Asp Arg Cys Ala Tyr Arg Pro Asp Leu His Gly Cys Val
            180                 185                 190
Cys Asp Ser Phe His Pro Leu His Cys Tyr Ser Asp Leu Pro Arg Pro
        195                 200                 205
Arg Met Pro Pro Ser Pro Pro Arg Asp Glu Ser Thr Ser Ser Thr Val
    210                 215                 220
Arg Ser Thr Lys Ser Thr Ser Pro Val Ser Val Pro
225                 230                 235

<210> 26462
<211> 98
<212> PRT
<213> A.fumigatus

<400> 26462
Ser Glu Tyr His Thr Met Thr Gly Arg Ser Ser Ile Ser Gln Pro Pro
1               5                   10                  15
Ala Thr Asp Ser Thr Pro Leu Leu Ser Ser His Ala Ala Ser Gln Arg
            20                  25                  30
```

```
Phe Ser Val Phe Thr Asn Gly Gln Lys Arg Leu Ile Ile Leu Ala Ala
        35                  40                  45
Ala Leu Ala Ser Ser Phe Ser Pro Phe Ser Ala Asn Ile Tyr Tyr Pro
    50                  55                  60
Ser Leu Asn Ser Ile Ala Ala Asp Leu His Val Thr Ser Ser Gln Ile
65                  70                  75                  80
Asn Leu Thr Ile Thr Thr Tyr Met Val Ser Leu Leu Val Asp Leu Val
                85                  90                  95
Pro Phe
```

<210> 26463
<211> 393
<212> PRT
<213> A.fumigatus

<400> 26463

```
Val Lys Thr Gly Gln Val Met His Gln Leu Pro Val Gly His Tyr Ala
1               5                   10                  15
Met Val Ala Val Met Ser Tyr Ser Gly Tyr Asp Ile Glu Asp Ala Leu
            20                  25                  30
Val Leu Asn Lys Gly Ser Val Asp Arg Gly Phe Gly Arg Cys Gln Val
        35                  40                  45
Phe Arg Lys Tyr Val Thr Asn Leu Lys Ser Tyr Ser Asn Gly Thr Lys
    50                  55                  60
Asp Arg Leu Asn Pro Pro Thr Tyr Glu Asn Gly Ala Pro Ile Arg Lys
65                  70                  75                  80
His Ala Leu Leu Glu Ala Asp Gly Leu Ala Ala Val Gly Glu Gln Val
                85                  90                  95
Asn Ala Gly Glu Val Tyr Ile Asn Lys Ser Thr Pro Glu Gln Ser Asn
            100                 105                 110
Leu Ser Gly Ile Gly Ser Asp Ala Gly Arg Pro Val Gln Tyr Thr Pro
        115                 120                 125
Thr Pro Met Thr Tyr Lys Leu His Asp Pro Ala Tyr Ile Asp Lys Val
    130                 135                 140
Met Tyr Ser Val Gln Glu Asn Glu Asn Gln Leu Val Lys Val Leu Val
145                 150                 155                 160
Arg Gln Thr Arg Arg Pro Glu Val Gly Asp Lys Phe Ser Ser Arg His
                165                 170                 175
Gly Gln Lys Gly Val Val Gly Ile Ile Ala Asp Gln Val Asp Met Pro
            180                 185                 190
Phe Thr Asp Ser Gly Ile Asn Pro Asp Ile Ile Met Asn Pro His Gly
        195                 200                 205
Phe Pro Ser Arg Met Thr Val Gly Lys Met Leu Glu Leu Val Ala Gly
    210                 215                 220
Lys Ala Gly Val Leu Ala Gly His His Gly Tyr Gly Thr Cys Phe Gly
225                 230                 235                 240
Gly Thr Pro Val Glu Glu Ala Ser Arg Val Leu Ile Asp His Gly Phe
                245                 250                 255
Ser Tyr Gly Gly Lys Asp Tyr Leu Thr Ser Gly Ile Thr Gly Glu Ala
            260                 265                 270
Leu Pro Phe Tyr Val Phe Thr Gly Pro Ile Tyr Tyr Gln Lys Leu Lys
        275                 280                 285
His Met Val Gln Asp Lys Met His Ser Arg Ala Arg Gly Pro Arg Ala
    290                 295                 300
Ile Leu Thr Arg Gln Pro Thr Glu Gly Arg Ser Arg Ala Gly Gly Leu
```

```
305                 310                 315                 320
Arg Leu Gly Glu Met Glu Arg Asp Cys Leu Ile Ala Tyr Gly Thr Ser
                325                 330                 335
Gln Leu Leu Leu Glu Arg Leu Met Ile Ser Ser Asp Arg His Glu Ile
            340                 345                 350
Asp Val Cys Glu Gln Trp Arg Leu His Gly Leu Ser Glu Leu Val Ser
        355                 360                 365
Ala Val Gln Val Val Pro Glu Arg Ser Glu Asp Glu Asp Pro Pro Arg
    370                 375                 380
Arg Gln Ala Ser His Ser Gly Asn Gly
385                 390
```

<210> 26464
<211> 138
<212> PRT
<213> A.fumigatus

<400> 26464

```
Ser Ser Arg Leu Pro Arg Met Pro Pro Phe Val Pro Arg Lys Arg Val
1               5                   10                  15
Ser Ser Glu Asp Pro Pro Thr Ala Lys Arg Gln Asn Ala Thr Pro Ile
            20                  25                  30
Val Glu Ile Ala Asp Phe Asp Glu Asp Ser Asp Ser Glu Ser Ser Leu
        35                  40                  45
Ser Asp Ala Pro Ser Phe Asp Asp Glu Pro Leu Ala Lys Arg Asp Leu
    50                  55                  60
Gln Lys Gln Lys Lys Gln Ala Ser Asp Gly Ser Glu Ser Glu Ser Glu
65                  70                  75                  80
Ser Asp Asp Asp Asp Glu Val Asp Trp Glu Asp Ala Ile Asp Ser Lys
                85                  90                  95
Leu Thr Cys Thr Ser Ile Ser Thr Pro Ala Pro Ala Val Gln Asp Leu
            100                 105                 110
Glu Leu Thr Leu Asp Lys Asn Glu Val His Leu Ala Asp Ile Ala Asp
        115                 120                 125
Gly Lys Lys Gly Pro Ser Lys Thr Glu Leu
    130                 135
```

<210> 26465
<211> 82
<212> PRT
<213> A.fumigatus

<400> 26465

```
Lys Arg Thr Gln Gly Gly Arg Ser Ser Glu Ser Val Pro Val Tyr Ile
1               5                   10                  15
Gln Thr Gly Gly Pro Val Pro Leu Gln Arg Thr Val Met Lys Ile Ser
            20                  25                  30
Arg Arg Lys Lys Glu Gln Lys Thr Lys Lys Lys Lys Lys Lys Lys Lys
        35                  40                  45
Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
    50                  55                  60
Arg Lys Lys Lys Leu Arg Val Lys Lys Lys Ser Pro Tyr His Gln Thr
65                  70                  75                  80
Ala Gln
```

<210> 26466
<211> 103
<212> PRT
<213> A.fumigatus

<400> 26466
Pro Gln Leu Arg Glu Asp Trp Ser His Glu Ile Gln Phe Ala Leu Arg
1 5 10 15
Ala Ile Leu Phe Lys Leu Ser Ile Trp Asp His Asn Ala Ser Tyr Gly
20 25 30
Ala Ala Leu Gln Gly Leu Arg Tyr Val Asp Ser Arg Ser Lys Gly Pro
35 40 45
Val His Ser Thr Pro Thr Lys Trp Gln Lys Ser Leu Tyr Gly Leu Leu
50 55 60
Thr Val Gly Gly Arg Tyr Ala Trp Glu Lys Trp Glu Ser Trp Leu Ile
65 70 75 80
Ser Gln Glu Gly Gly Tyr Glu Glu Val Leu Ser Gly Thr Phe Phe Val
85 90 95
Gly Thr Tyr Met Asp Leu Cys
100

<210> 26467
<211> 242
<212> PRT
<213> A.fumigatus

<400> 26467
Leu Lys Gln Pro Ser Arg Asp Val Arg Met Leu Ala Arg Leu Thr Gly
1 5 10 15
Leu Val Ser Thr Thr His Ser Ile Ala Ala Phe Val Ser Phe Leu Val
20 25 30
Phe Leu Val Asn Gly Arg Tyr Arg Thr Leu Val Asp Arg Ile Leu Arg
35 40 45
Ile Arg Leu Thr Pro Pro Ser Ala Gln Ser Ala Arg Glu Val Ser Phe
50 55 60
Glu Tyr Leu Asn Arg Gln Leu Val Trp His Ala Phe Thr Glu Phe Leu
65 70 75 80
Leu Phe Leu Leu Pro Leu Val Gly Ile Ser Arg Trp Arg Arg Trp Leu
85 90 95
Ser Arg Ala Trp Arg Lys Ala Ile Ser Ala Ile Arg Ser Arg Asp Asp
100 105 110
Asp Glu Val Glu Val Glu Lys Arg Gly Glu Leu Ala Phe Leu Pro Glu
115 120 125
Arg Thr Cys Ala Ile Cys Tyr Lys Asp Gln Asn Pro Ala Ser Thr Ser
130 135 140
Glu Asn Asp Ile Ile Thr Ala Ser Ala Gly Gly Ile Val Gly Ser Ala
145 150 155 160
Gln Thr Asp Ile Thr Asn Pro Tyr Glu Thr Val Pro Cys Gly Cys Ile
165 170 175
Tyr Cys Phe Val Cys Leu Val Gln Lys Val Glu Gly Glu Glu Gly Glu
180 185 190
Gly Trp Ile Cys Leu Arg Cys Gly Glu Ile Val Lys Lys Cys Lys Pro
195 200 205
Trp Asn Gly Asp Val Leu Glu Glu Val Arg Pro Ser Thr Thr Ser Gly
210 215 220
Lys Ile Val Gly Phe Ala Met Leu His His Gly Ala Gly Arg Ser Ala

225 230 235 240
Ala Asn

<210> 26468
<211> 146
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (9)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26468
Ser Thr Gly Leu Asp Trp Ser Leu Xaa Ser Ile Tyr Phe Ser Leu Glu
1 5 10 15
Tyr Thr His Asn Asp Ser Thr Met Ser Ser Thr Asn Phe Ala Ala Ala
20 25 30
Gln Glu Arg Val Leu Glu Arg Arg Arg Leu Arg Glu Ala Glu Ala Arg
35 40 45
Lys Arg Leu Ala Glu Gln Gln Arg Ala Ser Pro Leu Asn His Pro Ala
50 55 60
Leu Asn Arg Leu Pro Tyr Pro Leu Asn Arg Ile Pro Gln Ser Gly Val
65 70 75 80
Thr Leu Trp Asn Ser Ile Lys Gly Arg Glu Gly Ser Arg Pro Ala Phe
85 90 95
Arg Val Gly Gln Val Asp Ala Glu Leu Leu Asp Glu Glu Leu Leu Gly
100 105 110
Leu Leu Lys Gly Gln Val Gly Asn Ala Leu Lys Tyr Phe Gly Val Trp
115 120 125
Pro Asn Val Ala Ala Ile Pro Val Ala Tyr Leu Ser Ile Thr Asn Cys
130 135 140
Leu Ser
145

<210> 26469
<211> 295
<212> PRT
<213> A.fumigatus

<400> 26469
Ala Ala Ser Pro Leu Ser Leu Ala Asp Ala Ser Pro Leu Pro Thr Ala
1 5 10 15
Ala Asn Ala Met Thr Gly Leu Ala Gln Cys Pro Ala Gln Val Val Glu
20 25 30
Glu Ile Asp Ala Tyr Leu Asp Leu Thr Asp Val Gly Asn Leu Arg Gln
35 40 45
Thr Asn Arg Arg Leu Arg Ser Gln Val Thr Gln Gly Arg Phe Arg Leu
50 55 60
Asn Phe Arg Ser Lys Arg Val Lys Ile Thr Gly Ala His Leu Gln Gln
65 70 75 80
Leu Gly Leu Leu Thr Gln Arg Gly Trp Leu Gly Cys Glu Thr Arg His
85 90 95
Leu Thr Leu Val Gly Val Val Asn Asp Thr Met Ala Leu Asp Ala Gly
100 105 110

```
Leu Lys Ala Asp Ala Thr Asn Pro Arg Lys Arg Asp Leu Ala Ile Leu
        115                 120                 125
Gln Gln Arg Arg Gln Asp Tyr Glu Gln Leu Leu Glu Ser Gly Lys Ile
    130                 135                 140
Val Gln Leu Leu Ser Gln Ala Phe Lys Tyr Leu Ala Thr Asn Ser Ala
145                 150                 155                 160
Glu Arg Lys Leu Gln Ser Leu Ser Leu Glu Val Thr Val Tyr Arg Gln
                165                 170                 175
Asp Ala Glu Arg Glu Val Thr Pro Leu Ala Gly Ser Ser Trp Arg Leu
            180                 185                 190
Val Trp Gln Thr Thr Ala Glu Thr Phe Arg Ile Val Leu Ala Ala Leu
        195                 200                 205
Gln Lys Ser Leu Leu Ala Val Asp Tyr Leu Asn Val Phe Asn Gly Ser
    210                 215                 220
Tyr Met Gln Arg Cys Ser Leu Glu Ser Arg Glu Leu Ser Gln Ile Asp
225                 230                 235                 240
Tyr His Asn Glu Arg Leu Ser Lys Val Leu Gly Ala Leu Lys Ala Leu
                245                 250                 255
Ser Ile Ser Val Ser Asp Arg Ile Leu Trp Leu Thr Pro Gln Asp Ala
            260                 265                 270
Gln Arg Ser Ser Asp Gly Ser Ala Asp Val Ile Asp Trp Ser Asp Asp
        275                 280                 285
Glu His Asp Arg Arg Ile Asp
    290                 295
```

<210> 26470
<211> 265
<212> PRT
<213> A.fumigatus

<400> 26470

```
Asp Pro Gly Leu Leu Arg Leu Pro His Ser Ala Asn Thr Val Thr Tyr
1               5                   10                  15
Leu His Asn Ile Met Leu Asp Ile Leu Ser Leu Arg Thr Glu Ala Glu
            20                  25                  30
His Gly Leu Ala Asp Ser Ile Leu Thr Ala Thr His Gln Tyr Ala Leu
        35                  40                  45
Leu Gln Arg Ala Ser Ile Leu Asp Asn Arg Leu Ala Gln Trp Glu Asp
    50                  55                  60
Arg Val Ala Pro Glu Asn Lys Pro Ile Thr Ile Ala His Met Arg Pro
65                  70                  75                  80
Gly Ser Asp Pro Tyr Ile Glu Val Gly His Trp Pro Gly Pro Leu His
                85                  90                  95
Met Tyr Thr Asp Leu Arg Ala Ala Ala Leu Leu Asn Ile Ser Arg Val
            100                 105                 110
Ala Arg Cys Tyr Leu Leu Asp Ile Ile Leu Arg Leu Lys Asp Met Gln
        115                 120                 125
Ala Asp Thr Gly Asn Asp Asp Lys Glu Arg Ala Thr Ala Val Gln Leu
    130                 135                 140
Ile Gln Asp Phe Thr Ser Ser Ile Pro Tyr His Leu Val Glu Asp Leu
145                 150                 155                 160
His Ser Phe Ser Met Ser Val Gln Arg Gly Asn Pro Ile Glu Pro Pro
                165                 170                 175
Gly Arg Ala Val Gly Gly Leu Leu Leu Met Tyr Pro Leu Tyr Ile Ala
            180                 185                 190
Ser Gln Leu Ser Ile Val Ser Val Gln Phe Gln Asp Tyr Phe Lys Arg
```

```
        195                 200                 205
Cys Leu Val Trp Ile Gly Gln Asn Thr Gly Val Gly Tyr Ala Ser Leu
    210                 215                 220
Leu Ala Lys Val Arg Tyr Thr Val Thr Gly His Ser Leu Cys Tyr Ala
225                 230                 235                 240
Asn Gly Gln Ser Lys Ala His Phe Asn Ile Gln Asp Leu Thr Ala Gly
                245                 250                 255
Cys Ile Ile Val Tyr Gly Gly Leu Leu
            260                 265
```

<210> 26471
<211> 139
<212> PRT
<213> A.fumigatus

<400> 26471

```
Cys Cys Val Val Leu Leu Val Thr Lys Leu Met Glu Ala Gly Ala Leu
1               5                   10                  15
Asn Met Ser Arg Ala Leu Gly Asp Leu Gln Tyr Lys Asn Pro Leu Asn
            20                  25                  30
Asn Asp Thr Met Gly Pro Ser Thr Ala Gly Gln Glu Ile Ala Ala Met
        35                  40                  45
Thr Pro Ser Ile Glu Gln Gly Ser Phe Val Ser Ser Glu Pro Ser Ile
    50                  55                  60
Ile Arg Val Asp Leu Arg Gln Asp Arg Arg Tyr Ile Leu Ala Leu Thr
65                  70                  75                  80
Thr Asp Gly Val Thr Asn Val Leu Lys Asp Ser Val Ile Ile Asn Glu
                85                  90                  95
Ile Lys Thr Arg His Glu Gly Gly Leu Gly Val Gln Gln Val Ala Asp
            100                 105                 110
Glu Leu Val Arg Gly Val Thr Gln Gly Glu Arg Arg Asp Asn Ala Thr
        115                 120                 125
Cys Ile Ala Val Phe Leu Asp Gly Cys Leu Ser
    130                 135
```

<210> 26472
<211> 191
<212> PRT
<213> A.fumigatus

<400> 26472

```
Leu Leu Arg Trp Cys Gly Glu Ser Phe Ser Ser Asp Met Leu Ala Gly
1               5                   10                  15
Thr Ala Arg Glu Cys Leu Asp Asp Leu Phe Leu Leu Glu Arg Arg Ser
            20                  25                  30
Pro Phe Phe Ser Glu Ala Cys Ile Asn Ala Ala Arg Arg Thr Asp Arg
        35                  40                  45
Leu Thr Asp His Ala Thr Ser Pro Arg His Ala Ser Thr Ala Ser Pro
    50                  55                  60
Ile Lys Pro Arg Ala Ala Pro Thr Ala Ile Asn Thr Val Pro Ser Gly
65                  70                  75                  80
Val Phe Asp Phe Cys Met Tyr Gly Ala Ser Ala Val Gly Gly Thr Val
                85                  90                  95
Thr Thr Gly Lys Pro Ser Val Glu Asp Ala Asp Val Ala Val Glu Pro
            100                 105                 110
Ala Glu Ser Val Val Glu Thr Val Asp Val Val Ala Ala Ser Val Val
```

```
        115                 120                 125
Val Glu Ala Ser Val Val Glu Val Ser Leu Leu Val Glu Ala Phe Val
    130                 135                 140
Val Val Ala Ser Val Val Asp Val Glu Ser Val Val Phe Pro Val Ser
145                 150                 155                 160
Val Val Ala Gly Ser Val Val Phe Val Pro Ser Val Val Cys Ala Val
                165                 170                 175
Val Ala Ala Ser Leu Val Glu Gly Ser Arg Trp Ala Glu Ala Ser
            180                 185                 190
```

<210> 26473
<211> 131
<212> PRT
<213> A.fumigatus

<400> 26473

```
Cys Ser Asp Asp Val Asp Ser Leu Tyr His Arg Leu Ser Arg Leu Asp
1               5                   10                  15
Cys Asn Val Cys Ile Leu Tyr Arg Arg Phe Pro Cys Gly Asp Arg Ala
            20                  25                  30
Thr Asp Ser Gly Cys Ala Val His Ala Lys Ile Glu His Ala Arg Arg
        35                  40                  45
Asn Gly Val Tyr Cys Cys Arg Cys Ser Ser Arg Leu Tyr Trp Ala Gly
    50                  55                  60
Ser Ala Gly Met Ala Trp Ala Arg Arg Met Val Gly Gln Pro Ile Cys
65                  70                  75                  80
Pro Pro Arg Arg Val Asp Ala Arg Leu Gly Lys Glu Arg Thr Pro Ser
                85                  90                  95
Phe Gln Glu Lys Glu Val Ile Lys Ala Phe Pro Arg Cys Thr Cys Glu
            100                 105                 110
His Val Thr Arg Lys Ala Phe Pro Thr Pro Pro Gln Gln Leu Gln Pro
        115                 120                 125
Lys Ser Thr
    130
```

<210> 26474
<211> 364
<212> PRT
<213> A.fumigatus

<400> 26474

```
Ala Pro Pro Thr Met Arg Phe Arg Asn Val Gly Arg Ala Lys Pro His
1               5                   10                  15
Gln Arg Ser Met Thr Leu Leu Leu Phe Leu Leu Ile Val Val Leu Ala
            20                  25                  30
Gln Leu Ala Ser Ala Gln Arg Asp Pro Ser Thr Asn Asp Ala Ala Thr
        35                  40                  45
Thr Ala Gln Thr Thr Asp Gly Thr Lys Thr Thr Asp Pro Ala Thr Thr
    50                  55                  60
Asp Thr Gly Lys Thr Thr Asp Ser Thr Ser Thr Thr Asp Ala Thr Thr
65                  70                  75                  80
Thr Lys Ala Ser Thr Ser Ser Glu Thr Ser Thr Thr Glu Ala Ser Thr
                85                  90                  95
Thr Thr Asp Ala Ala Thr Thr Ser Thr Val Ser Thr Thr Asp Ser Ala
            100                 105                 110
Gly Ser Thr Ala Thr Ser Ala Ser Ser Thr Asp Gly Phe Pro Val Val
```

```
        115                 120                 125
Thr Val Pro Pro Thr Ala Asp Ala Pro Tyr Met Gln Lys Ser Asn Thr
    130                 135                 140
Pro Glu Gly Thr Val Phe Ile Ala Val Gly Ala Ala Leu Gly Phe Ile
145                 150                 155                 160
Gly Leu Ala Val Leu Ala Trp Arg Gly Leu Val Ala Trp Ser Val Asn
                165                 170                 175
Arg Ser Val Arg Arg Ala Ala Leu Met His Ala Ser Glu Lys Lys Gly
            180                 185                 190
Leu Leu Arg Ser Lys Arg Lys Arg Ser Ser Arg His Ser Arg Ala Val
        195                 200                 205
Pro Ala Ser Met Ser Leu Glu Lys Leu Ser Pro His His Arg Asn Ser
    210                 215                 220
Tyr Asn Pro Arg Ala Pro Asn Ile Pro Ser Thr Gly Ser Gly Leu Phe
225                 230                 235                 240
Phe Ser Pro Thr Ala Gly Ala Gly Met His Thr Ser Gly Asn Arg Gly
                245                 250                 255
Ser Ser Tyr Leu Pro Ala Gly Tyr Tyr Ala Ala Gly Asn Ala Ala Pro
            260                 265                 270
Thr Gly Ser Gln Asn Ile Pro Tyr Ser Thr Pro Glu Met Arg Pro His
        275                 280                 285
Ser Gln Gly Tyr Ile Arg Thr Lys Ser Asn Pro Ser Pro Pro Arg Ser
    290                 295                 300
Pro Gly Leu Ser Pro Ser Gly Phe His Asp Thr His Tyr Asp Pro Ser
305                 310                 315                 320
Thr Arg His Ser Tyr Val Ala Gly Ser Thr Ser Ser Leu Asn Leu Ala
                325                 330                 335
Ser Pro Thr His Gly Arg Thr Pro Ser Ala Phe Leu Glu Asp Leu Phe
            340                 345                 350
Glu Ser His Ala Pro Gln Ser Asp Asn Gly His Arg
        355                 360
```

<210> 26475
<211> 245
<212> PRT
<213> A.fumigatus

<400> 26475

```
Ser Ser Ser His Phe His Lys Phe Ala Phe Ile Pro Glu Ser Phe Asp
1               5                   10                  15
Asp Cys Asp Leu Ser Thr Leu Ser Thr Met Ile Ala Val Val Pro Val
            20                  25                  30
Ser Arg Glu His Leu Ser Gln Pro Pro Leu Asn Leu Gln Arg Arg Ala
        35                  40                  45
Met Ala Gln Thr Tyr Tyr Leu Asp Ser Pro Asp Ile Ala Thr Phe Lys
    50                  55                  60
Asn Pro Leu Gln His Tyr Ser Gln Arg Asp Cys Pro Ser Pro Ile Thr
65                  70                  75                  80
Ser Ser Ala Pro Ser Ser Val Pro Pro Ser Pro His Phe Ala Pro Val
                85                  90                  95
Thr Glu Glu Gln Leu Leu Pro Thr Pro Ala Thr Leu Ser Ser Leu Ser
            100                 105                 110
Leu Ser Val Ser Asn Asp Ser Asp Asp Glu Ile Ile Leu Pro Ser Tyr
        115                 120                 125
Asp Ser Ser His Phe Asn Asp Leu Asn Glu Ile Val Ser Ala Val Ala
    130                 135                 140
```

```
Ser Asp Gln Ala Ser Glu Ser Phe Leu Thr Gly Pro Pro Cys Leu His
145                 150                 155                 160
Val His Thr Pro Ala Ala Asp Asp Thr Ser Val Glu Glu Glu Pro Thr
                165                 170                 175
Arg His Val Asp Tyr Leu Ser His Glu Trp Lys Glu Glu Asp Ile Trp
            180                 185                 190
Ala Ser Trp Lys Tyr Val Val Cys Arg Arg Asp Ile Tyr Ser Asn Gly
        195                 200                 205
Ala Arg Leu Glu Asn Ala Ser Trp Arg Thr Trp Ala Lys Leu Lys Asn
    210                 215                 220
Asn Leu Gly Thr Val Ser Pro Glu Thr Leu Asn Trp Ser Val Leu His
225                 230                 235                 240
Thr Leu Ala Phe His
                245
```

<210> 26476
<211> 75
<212> PRT
<213> A.fumigatus

```
<400> 26476
Leu Ser Gln Ser Asp Asn Lys Val Met Ser Met Tyr Ser Asn Met Phe
1               5                   10                  15
His Gln Val Glu Arg Leu Arg Cys Asn Met Ala Leu Trp Ser Val Glu
            20                  25                  30
Val Val His Gln Val Tyr Lys Ser Val Ala Glu Tyr Leu Pro Thr Ala
        35                  40                  45
Glu Leu Pro Arg Asn Pro Leu Val Val Cys Gly Gln Gly Ser Arg Ser
    50                  55                  60
Ser His Gly Ala Ala Arg Ser Glu Asn Ile Pro
65                  70                  75
```

<210> 26477
<211> 372
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (333),(336),(341)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 26477
Ser Lys Cys Cys Leu Gln His Leu Phe Asn Ser Asn Leu Ala Pro Ser
1               5                   10                  15
Pro Phe Ala Pro Phe Lys Asp Arg Ala Pro Leu Val Ser Lys Ser Cys
            20                  25                  30
Ile Met Thr Asp Ser Ser Thr Pro Asp Met Thr Leu Thr Val His His
        35                  40                  45
His Gly Lys Pro His Thr Phe Thr Leu Ala Pro Asp Ala Thr Leu Gln
    50                  55                  60
Asp Leu Ser Ser Thr Ile Ala Asp Thr Leu Asn Ile Pro Ile Glu Asn
65                  70                  75                  80
Gln Lys Ile Leu Ile Ala Pro Lys Pro Gly Met Gln Lys His Pro Phe
                85                  90                  95
Ala Pro Thr Pro Leu Ser Thr Leu Leu Pro Leu Thr Ser Pro Lys Phe
```

```
            100                 105                 110
Lys Leu Thr Leu Leu Gly Thr Pro Ala Gln Glu Ile Glu Ser Leu Asn
        115                 120                 125
Ala Gln Thr Ala Glu Thr Arg Arg Arg Leu Glu Ala Arg Ala Ala Ala
    130                 135                 140
Ala Ala Lys His Arg Thr Arg Arg Pro Ala Pro Ser Ile Ala Gly Gly
145                 150                 155                 160
Ile His Thr Leu Ser Ser Ala Gly Ser Asn Thr Tyr Thr Phe His Arg
                165                 170                 175
Leu Leu Pro Leu Ser Tyr Leu Pro Asn Pro Ser Arg Ser Leu Glu Phe
            180                 185                 190
Leu Ala Arg Leu Arg Asp Asp Pro Gly Ile Arg Ala Ala Met Ala Lys
        195                 200                 205
His Arg Phe Ser Val Pro Leu Leu Thr Glu Met Asp Pro Ala Glu His
    210                 215                 220
Thr Thr Ser Glu Ser Arg Thr Leu Gly Leu Asn Arg Asn Lys Gly Glu
225                 230                 235                 240
Val Ile Glu Leu Arg Leu Arg Thr Asp Ala Tyr Asp Gly Tyr Arg Asp
                245                 250                 255
Tyr Arg Thr Ile Arg Lys Thr Leu Cys His Glu Leu Ala His Cys Val
            260                 265                 270
Phe Ser Glu His Asp Arg Asp Phe Trp Asp Leu Thr Ala Gln Ile Glu
        275                 280                 285
Lys Glu Val Glu Arg Ala Asp Trp Lys His Gly Gly Lys Arg Leu Thr
    290                 295                 300
Asp Glu Glu Phe Tyr Asn Pro Gly Glu Trp Glu Arg Glu Lys Asp Ala
305                 310                 315                 320
Ala Val Val Asp Glu Lys Gly Trp Thr Gly Gly Glu Xaa Val Leu Xaa
                325                 330                 335
Gly Leu Lys Asp Xaa Asn Thr Gly Val Glu Ser Arg Arg Glu Ile Ile
            340                 345                 350
Pro Arg Ala Ala Glu Glu Lys Met Arg Lys Lys Glu Asp Asn Ile Met
        355                 360                 365
Gly Pro Gly Arg
    370
```

<210> 26478
<211> 146
<212> PRT
<213> A.fumigatus

<400> 26478

```
Gln Thr Gln Ser Pro Trp Asn Val Ile Glu Val Leu Pro Pro Ala Ser
1               5                   10                  15
Ile Gln Leu Gln Ser Cys Thr Gln Ser Leu Arg Ser Phe Gln Arg Ser
            20                  25                  30
Gly Ser Ser Cys Leu Glu Glu Leu His His Asp Gly Leu Ile Asn Ala
        35                  40                  45
Arg Tyr Asp Leu Asn Gly Pro Pro Pro Trp Gln Thr Thr His Leu His
    50                  55                  60
Pro Gly Pro Gly Arg Asn Thr Ala Arg Pro Leu Leu His His Arg Arg
65                  70                  75                  80
His Pro Gln His Pro Asn Arg Glu Pro Glu Asn Pro His Arg Pro Glu
                85                  90                  95
Thr Arg His Ala Glu Ala Pro Leu Arg Ala Asp Pro Ala Leu Asn Pro
            100                 105                 110
```

```
Pro Pro Pro His Leu Ser Gln Ile Gln Thr His Pro Pro Arg His Pro
        115                 120                 125
Ser Pro Gly Asn Arg Ile Pro Glu Arg Pro Asn Ser Arg Asn Pro Pro
    130                 135                 140
Pro Pro
145
```

<210> 26479
<211> 140
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (74)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26479

```
Ser Arg Lys Thr Arg Met Ser Ala Gln Leu Lys Arg Gln Arg Arg Ser
1               5                   10                  15
Lys Ile Ala Cys Glu Pro Cys Arg Thr Arg Lys Arg Lys Cys Asn Gly
            20                  25                  30
Gln His Pro Cys Glu Met Cys Thr Asp Ser Glu Tyr Thr Cys His Tyr
        35                  40                  45
Asp Leu Gly Ser Arg Lys Lys Arg Asn Lys Gly Leu Val Leu Glu Ser
    50                  55                  60
Leu Met Thr Val Arg Pro Ala Gln Met Xaa His Ala Gly Ser His Trp
65                  70                  75                  80
Glu Arg Pro Thr Ala Pro Thr Pro Arg Arg Pro Ser Pro Pro Val Glu
                85                  90                  95
Arg Phe Thr Asn Thr Val Gln Gln Ser Ile Gly Thr Asn Ser Gly Ala
            100                 105                 110
Phe Leu Val Gln Asn Leu Gly Thr Gln Asp Arg Pro Trp Ser Thr Pro
        115                 120                 125
Ser Asn Pro Pro Val Phe Pro Leu Glu Tyr Pro Gly
    130                 135                 140
```

<210> 26480
<211> 263
<212> PRT
<213> A.fumigatus

<400> 26480

```
Ala Gln Thr Ser Arg Leu Glu Arg Asp Val Ala Asp Pro Asn Arg Ile
1               5                   10                  15
His Lys Met Ile Leu Asp Asp Leu Gly Val Arg Gln Ile Ala Ala Val
            20                  25                  30
Val Gly Gly Ser Met Gly Gly Met Leu Thr Leu Glu Tyr Ala Tyr Phe
        35                  40                  45
Gly Lys Asp Tyr Val Arg Ala Ile Val Pro Ile Ala Thr Ser Ala Arg
    50                  55                  60
His Ser Ala Trp Cys Ile Ser Trp Gly Glu Ala Gln Arg Gln Ser Ile
65                  70                  75                  80
Tyr Ser Asp Pro Lys Tyr Glu Asp Gly Tyr Tyr Ser Phe Asp Asp Pro
                85                  90                  95
Pro Ala Thr Gly Leu Gly Ala Ala Arg Met Ser Ala Leu Leu Thr Tyr
```

```
            100                 105                 110
Arg Ser Arg Asn Ser Phe Glu Ser Arg Phe Gly Arg Asn Val Pro Asp
        115                 120                 125
Pro Ser Lys Arg Gln Asn Ile Asn Gly Thr Glu Arg Leu Pro Thr Pro
    130                 135                 140
Pro Asn Glu His Trp Ala Ile His Asn Asp Gly His Lys Ala Gly Met
145                 150                 155                 160
Ser Ser Arg Ala Ser Ser Glu Arg Asn Ser Pro Gly Pro Gln Gln Ser
                165                 170                 175
Ser Glu Val Gln Tyr Met Asp Pro Gln Phe Ser Gly Thr Lys Thr Phe
            180                 185                 190
Ser Ser Pro Val Ser Asn Ser Asp Arg Lys Arg Pro Pro Thr Tyr Phe
        195                 200                 205
Ser Ala Gln Ser Tyr Leu Arg Tyr Gln Gly Glu Lys Phe Val Lys Arg
    210                 215                 220
Phe Asp Ala Asn Cys Tyr Ile Ala Ile Thr Arg Lys Leu Asp Thr His
225                 230                 235                 240
Asp Val Ser Arg Tyr Arg Gly Leu His His Gly Val Glu Arg Arg Cys
                245                 250                 255
His Ala Asn Lys Ile Ser Ser
            260
```

<210> 26481
<211> 149
<212> PRT
<213> A.fumigatus

<400> 26481

```
Leu Leu Gly Glu Gln Leu Leu Asn Pro Val Glu Arg Val Ala Ser Leu
1               5                   10                  15
Pro Glu Asn Pro Tyr Ala Lys Leu Ile Thr Asp Gln Ser Ile Ala Ile
            20                  25                  30
Ile Pro Ser Phe Thr Leu Glu Ser Gly Val Thr Leu Tyr Asn Val Pro
        35                  40                  45
Val Ala Tyr Thr Thr Arg Gly Glu Met Ser Pro Asn Arg Asp Asn Val
    50                  55                  60
Leu Val Ile Cys His Ala Leu Ser Gly Ser Ala Asp Val Ala Asp Trp
65                  70                  75                  80
Trp Gly Pro Leu Leu Gly Gly Pro Gly Gln Ala Phe Asp Thr Ser Arg
                85                  90                  95
Phe Phe Val Ile Cys Leu Asn Ser Leu Gly Ser Pro Tyr Gly Ser Ala
            100                 105                 110
Ser Ala Val Thr Tyr Lys Asp Gly Asn Pro Glu Lys Gly Leu Tyr Gly
        115                 120                 125
Pro Glu Phe Pro Leu Thr Thr Val Arg Asp Asp Val Arg Leu Val Ser
    130                 135                 140
Ser Asp Ile Gln Thr
145
```

<210> 26482
<211> 77
<212> PRT
<213> A.fumigatus

<400> 26482

```
Lys Phe Pro His Val Leu Phe His Gly Pro Pro Gly Thr Gly Lys Thr
```

```
1               5                   10                  15
Ser Thr Ile Leu Ala Leu Ala Arg Gln Leu Tyr Gly Asp Ala Gly Met
            20                  25                  30
Ser Gln Met Val Leu Glu Leu Asn Ala Ser Asp Asp Arg Ser Val His
        35                  40                  45
Asn Val Gln Thr Arg Ile Lys Ala Phe Ala Ser Met Leu Thr Ser Pro
    50                  55                  60
Leu Leu Asp Gln Ser Ile Pro Asn Leu Val Ser Phe Ser
65                  70                  75
```

<210> 26483
<211> 174
<212> PRT
<213> A.fumigatus

<400> 26483

```
Gly Thr Arg Pro Ile Phe Lys Val Pro Leu Arg Glu Ser Pro Tyr Asn
1               5                   10                  15
Met Phe Lys Leu Val Ile Leu Asp Glu Ala Asp Thr Met Asp His Thr
            20                  25                  30
Ala Gln Met Ala Leu Arg Arg Ile Ile Glu Asp Tyr Ala Ala Phe Thr
        35                  40                  45
Arg Phe Cys Ile Ile Thr Asn Asn Ile His Arg Leu Leu Pro Ala Leu
    50                  55                  60
Ile Ser Arg Cys Ala Arg Leu Arg Phe Pro Pro Leu Arg Pro Ser Ala
65                  70                  75                  80
Ile Arg Thr Leu Leu Leu Gln Val Ala Thr Thr Glu Asn Ile Gln Val
                85                  90                  95
Arg Pro Glu Ala Leu Glu Tyr Leu Ser Thr Thr Ser His Gly Asp Met
            100                 105                 110
Arg Gln Ala Leu Ala Val Leu Gln Glu Cys His Leu Asn Ser Thr Phe
        115                 120                 125
Trp Ser Asp Asp Glu Ser Thr Thr Thr Ile Ser Arg Ile Lys Phe Leu
    130                 135                 140
Met Met Ala Ser Glu Thr Ser Gln Gln Ala Ser Thr Ser Asn Leu Pro
145                 150                 155                 160
Ala Gln Gly Val Ile Thr Val Glu Thr Ile Arg Glu Tyr Thr
                165                 170
```

<210> 26484
<211> 358
<212> PRT
<213> A.fumigatus

<400> 26484

```
Met Ser Met Ser Thr Gln Leu Ala His Cys Thr Ala Thr Lys Ser Leu
1               5                   10                  15
His Arg Tyr Ser Ile Ser Glu Leu Ser Thr Lys Lys Ile Ala Gln His
            20                  25                  30
Asn Ile Pro Leu Val Gln Asn Thr Ala Ala Asn Pro Tyr Ala Leu Tyr
        35                  40                  45
Lys Ala Leu Arg Gln Thr Pro Asp Ser Thr Asp Asn Asp Lys Leu Phe
    50                  55                  60
Asp Tyr Gln Asn Asn Val Met Met Gly Asn Ser His Ala Ala Asp Leu
65                  70                  75                  80
Leu Val Gln Lys Tyr Asp Gly Ile Ile Arg Ser Ala Ser Lys Ser Thr
```

```
                85                  90                  95
Leu Pro Ser Ser Leu Ser Leu Pro Pro Met Leu Gly Pro Thr Ala Ser
            100                 105                 110
Pro Ser Thr Ala Gln Arg His Thr His Lys Ala Lys Pro Gly Pro Lys
        115                 120                 125
Ala Leu Lys Ala Ile Phe Arg Val Leu Glu Arg Arg Pro Lys Asp Ile
    130                 135                 140
Gly Leu Val Leu Thr Val Val Gln Leu Tyr Val Asn Ala Gly Asn Thr
145                 150                 155                 160
Thr Ser Ala Ile Asn Thr Leu Glu Lys Leu Leu Gln Asn Leu Asp Glu
                165                 170                 175
Ser Ile Ala Glu Gln Asp Lys Asp Ile Arg Phe Ser Pro Gly Leu Leu
            180                 185                 190
Thr Val Leu Val Ser Leu Tyr Lys Leu Glu Gly Arg Lys Gly Gln Ile
        195                 200                 205
Arg Ser Glu Leu Ala Lys Ala Ala Ser His Trp Arg Asn Arg Ala Glu
    210                 215                 220
Ala Pro Val Pro Leu Leu Arg Ala Ala Ala Ala Ser Leu Leu His Ser
225                 230                 235                 240
Ser Asp Arg Ala Asp Leu Ser Leu Ser Gly Glu Leu Phe Lys Asp Leu
                245                 250                 255
Tyr Arg Asn Gly Thr Gly Asp Gln Phe Ala Val Ala Gly Tyr Val Ala
            260                 265                 270
Ser Gln Ala Thr Leu Asp Tyr Ala Lys Val Glu Ser Gln Leu Glu Ser
        275                 280                 285
Leu Pro Pro Val Asp Glu Leu Ile Ala Asp Val Asp Val Ala Ala Leu
    290                 295                 300
Glu Gln Ala Gly Ile Ser Pro Ser Ser Ala Thr Ala Ala Ala Ala Ala
305                 310                 315                 320
Ala Ala Ile Ala Gly Ala Arg Lys Arg Thr Ala Ala Glu Ser Gln Ile
                325                 330                 335
Arg Ala Thr Lys Arg Ile Arg Lys Ser Arg Leu His Pro Arg Gly Trp
            340                 345                 350
Lys Asp Thr Arg Pro Gly
        355
```

<210> 26485
<211> 67
<212> PRT
<213> A.fumigatus

<400> 26485

```
Tyr Tyr Gln Thr Thr Thr Pro Tyr Ser Ala Ser Gln Asp Pro Tyr Glu
1               5                   10                  15
Gln Ala Ile Ser Thr Ile Gln Asn Ser Thr Ser Leu His Asn Gly Tyr
            20                  25                  30
Trp Ser Ser Lys Phe Thr Arg Leu Ala Arg Phe Gln Gly Thr Glu Ala
        35                  40                  45
Gly Ser Asp Leu Phe Arg Lys Ile Asn Tyr Met Arg Leu Ala Leu Tyr
    50                  55                  60
Tyr Trp Pro
65
```

<210> 26486
<211> 187
<212> PRT

<213> A.fumigatus

<400> 26486
Ala Leu Tyr Asp Thr Thr Phe His Phe Ile His Ala Glu Phe Tyr Ser
1 5 10 15
Arg Phe Thr Gly Leu Lys Ala Ile Phe Tyr Asp Met Thr Ser Leu His
20 25 30
Phe Phe Asn Val Val Leu Ser Leu Leu Ala Leu Phe Pro Val Val Leu
35 40 45
Ala Gln Thr Cys Trp Arg Asn Thr Thr Cys Ser Gly Pro Lys Asp Ser
50 55 60
Ala Phe Glu Gly Pro Trp Glu Arg Gly Ile Tyr Ala Pro Ser Ser Arg
65 70 75 80
Thr Val Arg Pro Lys Lys Val Leu Ser Ile Thr Asp Leu Ser Leu Ser
85 90 95
Ser Ala Tyr Ala Gln Ala Met Pro Ala Thr Leu His Gly Asn Gly Ser
100 105 110
Leu Val Ile Phe Asp Phe Gly Ile Glu Val Gly Gly Ile Val Thr Leu
115 120 125
Asn Tyr Thr Ser Ser Gly Ser Gly Ala Leu Gly Ile Ala Phe Thr Glu
130 135 140
Ala Lys Asn Trp Ile Gly Glu Trp Ser Lys Ser Ser Asn Gly Ala Ile
145 150 155 160
Lys Gly Pro Asp Gly Ala Leu Tyr Ala Asn Phe Asn Ser Gly Trp Lys
165 170 175
Gly Leu Asp Thr Met Pro Asp Glu Thr Leu Pro
180 185

<210> 26487
<211> 101
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (86),(99)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26487
Ser His Ala Met Arg Pro Ser Ile Ile Ser Leu Val Ala Leu Ser Leu
1 5 10 15
Phe Leu Gly Leu Ala Tyr Ala Gly Gly Val Glu Lys Asp Lys Arg Asp
20 25 30
Asn Val Cys Thr Val Lys Ala Asn Gly Lys Gln Lys Asp Asp Val Pro
35 40 45
Asn Leu Leu Arg Ala Phe Asn Glu Cys Gly Asn Gly Gly Thr Ile Ile
50 55 60
Phe Pro Glu Asp Gln Ser Tyr Trp Ile Gly Ala Arg Leu Asn Pro Val
65 70 75 80
Leu Asn Asp Val Ser Xaa Gln Trp Lys Arg Lys Trp Thr Val Gly Pro
85 90 95
Pro Ala Xaa Cys Leu
100

<210> 26488
<211> 289

<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (234)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26488
Pro Ile Leu Thr Met Pro Pro Ala Ser Thr Arg Thr Cys Arg Trp Met
1 5 10 15
Val Arg Gln Ser Ala Arg Trp Ser Pro Ser Leu Ile Ala Arg Arg Ile
20 25 30
Cys Arg Ile Glu Arg Leu Trp Gly Asn Arg Thr Arg Thr Val Leu His
35 40 45
Gly Trp Gly Arg Lys Arg Arg Lys Gln Arg Leu Thr Cys Ala Glu Gly
50 55 60
Arg Arg Arg Asn Gly Ile Ala Pro Leu Ser Leu Glu Arg Ser Asn His
65 70 75 80
Ala Asp Arg Asn Ala Arg Asp Gln Glu Leu Arg Phe Thr Val His Glu
85 90 95
Ser Pro Asp Tyr Phe Arg Leu Lys Val Ser Val Phe Asn Asp Asp Lys
100 105 110
Lys Thr Asp Leu Ile Gly Glu Thr Trp Ile Asp Leu Lys Asp Leu Ile
115 120 125
Ile Pro Gly Gly Ser Gln Ser Asp Gln Trp His Pro Leu Gln Tyr Arg
130 135 140
Gly Lys Tyr Ala Gly Glu Val Arg Ile Glu Met Thr Tyr Tyr Asp Thr
145 150 155 160
Arg Pro Glu Asp Glu Ala Val Ile Glu Arg Arg Thr Gln Ala Ala Glu
165 170 175
Lys Ala His Ala Lys Ser Asn Ser Ser Arg Pro Ala Pro Ala Ala Pro
180 185 190
Val Thr Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Leu
195 200 205
Ser Gly Pro Arg Gln Leu Glu Lys Val Lys Arg Arg Pro Phe Pro Asn
210 215 220
Asp Pro Thr Ala Ala Thr Pro Ala Arg Xaa Gly Pro Pro Glu Lys Thr
225 230 235 240
Ser Pro Arg Leu Val Arg Phe Ile Arg Leu Gln Gly Arg Pro Val His
245 250 255
His Glu His Ala His Phe Met Pro Ala Met Asn Ser Pro Asp His Ile
260 265 270
Arg Tyr Ser Gln Arg Gln Ala Pro Lys Ala Pro Asp Asp Ala Phe Ser
275 280 285
Phe

<210> 26489
<211> 111
<212> PRT
<213> A.fumigatus

<400> 26489
Ser Arg Ser Ile Ile Phe Pro Gln Ala Thr Arg Ala Ser Ala Ala Val
1 5 10 15

```
Asp Ala Leu Arg Thr Lys Met Pro Gly Phe Ala Asp Ser Phe Trp Thr
            20                  25                  30
Pro Asp Tyr Ala Thr Gly Leu Gly Val Leu Tyr Gly Lys Leu Gln Gln
        35                  40                  45
Gly Val Thr Glu Asn Arg Gln Ile Leu Thr Ile Ala Ser Leu Arg Ala
    50                  55                  60
Asp Ala Glu Glu Gln Tyr Gly Leu Lys Leu Gly Glu Ile Ala Pro Ser
65                  70                  75                  80
Val Asp Arg Met Thr Ala Gly Phe Ala Lys Asp Asp Gly Ala Ser Val
                85                  90                  95
Arg Lys Val Gly Tyr Ser Ser Pro Phe Arg Gly Arg Leu Ile Cys
            100                 105                 110
```

<210> 26490
<211> 71
<212> PRT
<213> A.fumigatus

<400> 26490

```
Leu Ser Leu Leu Leu Asn Val Arg Ser Gly Arg Ser Leu Gly Ala Leu
1               5                   10                  15
Ile Tyr Ile Leu Leu Lys Pro Met Pro Ala Ala Asp Leu Phe Tyr Pro
            20                  25                  30
Gly Ile Cys Lys Cys Asp Lys Lys Lys Arg Phe Gly Arg Val Trp Ser
        35                  40                  45
Leu Ile Ile Pro Phe Ala Phe Leu Ser Ala Val Glu Ala Ala Ser Gly
    50                  55                  60
Val Ser Gln Arg Val Val Val
65                  70
```

<210> 26491
<211> 214
<212> PRT
<213> A.fumigatus

<400> 26491

```
Val Ile Leu His Pro Phe Glu Gly Gly Ser Phe Ala Asp Arg Met Arg
1               5                   10                  15
Ser Gln Ala Tyr Glu Gly Val Arg Ser Glu Met Ile Glu Ala Ser Lys
            20                  25                  30
Asn His Gln Lys Ile Ala Ser Asn Ile Arg Glu Leu Val Val Ser Pro
        35                  40                  45
Phe Arg Arg Trp Cys Asp Gln His Glu Ala Arg Ile Gln Asn Ser His
    50                  55                  60
Asp Asp Leu Gln Ala Arg Ile Lys Glu His Thr Lys Gln Val Glu Leu
65                  70                  75                  80
Thr Lys Lys Leu Arg Ser His Tyr Phe Asn Lys Cys Arg Val Val Glu
                85                  90                  95
Asp Leu Glu Glu Glu Asn Lys Leu Ala Phe Gln Asp Pro Glu Thr Ser
            100                 105                 110
Pro Lys Val Lys Ala Thr Pro Lys Ile Val Leu Pro Glu Glu Gln Ala
        115                 120                 125
Glu Glu Glu Glu Pro Ile Glu Leu Gly Asp Arg Val Tyr Ala Pro Glu
    130                 135                 140
Asp Leu Lys Lys Leu Leu Thr His Met Leu Asp Asn Ile Lys Ile Gly
145                 150                 155                 160
```

```
Glu Val Lys Val Pro Ile Ile Gly Thr Tyr Gln Asn Thr Ser Asn Gly
                165                 170                 175
Ala Asp Ile Val Glu Tyr Ile Gln Lys Tyr Met Asn Gly Thr Ser Ile
            180                 185                 190
Ser Tyr Ala Glu Arg Ile Gly Gln Asp Leu Val Val Leu Leu Pro Gln
        195                 200                 205
Gly Ala Glu Gly Thr Ala
    210
```

<210> 26492
<211> 154
<212> PRT
<213> A.fumigatus

<400> 26492

```
Arg Arg Glu Ala Phe Met Trp Met Met Ala Ile Ser Gly Leu Ser Ser
1               5                   10                  15
Ile Phe Thr Trp Gly Ser Val Cys Phe Ala His Ile Arg Phe Arg Lys
            20                  25                  30
Ala Trp Lys Val Gln Gly His Ser Leu Asn Glu Leu Ala Phe Gln Ser
        35                  40                  45
Gln Ala Gly Leu Val Gly Ser Trp Ile Gly Phe Ile Phe Asn Cys Leu
    50                  55                  60
Val Leu Val Ala Gln Phe Trp Val Gly Phe Ala Pro Ile Gly Tyr Ser
65                  70                  75                  80
Glu Met Thr Ser Gly Glu Leu Val Glu Ser Trp Phe Ser Val Tyr Leu
                85                  90                  95
Ala Ala Pro Val Val Leu Val Phe Tyr Phe Gly Tyr Lys Phe Tyr Tyr
            100                 105                 110
Lys Thr Ser Phe Leu Arg Ala Lys Asp Met Asp Leu His Thr Gly Arg
        115                 120                 125
Arg Glu Leu Asp Ile Gln His Leu Ile Glu Glu Glu Arg Ala Glu Gln
    130                 135                 140
Ala Ala Trp Pro Arg Met Glu Glu Gly Leu
145                 150
```

<210> 26493
<211> 474
<212> PRT
<213> A.fumigatus

<400> 26493

```
Trp Glu Gln Val Tyr Thr Gln Ser Met Ser Ser Ile His Ser Trp Arg
1               5                   10                  15
Ala Val Val Ser Arg Ala Lys Ser Ser Pro Asn Lys Leu Thr Ala Ile
            20                  25                  30
Ser Leu Asn Thr Met Tyr Phe Phe Asp Ser Asn Ser Ala Val Asp Gly
        35                  40                  45
Cys Lys Ala Lys Ser Gln Pro Gly Tyr Glu His Met Glu Trp Leu Arg
    50                  55                  60
Val Gln Leu Gln Leu Leu Arg Glu Arg Gly Met Lys Ala Ile Leu Ile
65                  70                  75                  80
Gly His Val Pro Pro Ala Arg Thr Val Ser Lys Arg Asn Trp Asp Glu
                85                  90                  95
Ser Cys Trp Gln Lys Tyr Ala Leu Trp Val His Gln Tyr Arg Asp Val
            100                 105                 110
```

```
Ile Val Gly Ser Val Tyr Gly His Met Asn Ile Asp His Phe Ile Leu
        115                 120                 125
Gln Asp His His Asn Ala Asn Ile Val Asp Val Asp Leu His Glu Thr
    130                 135                 140
Ser Leu Glu Ala Pro Asn Asp Thr Thr Gly Asp Ile Ser Ile Arg Ser
145                 150                 155                 160
Arg Ser Ala Tyr Leu Ser Asp Leu Arg His Asp Trp Ala Lys Leu Pro
                165                 170                 175
Ser Pro Pro Arg Asp Phe Pro Met Asp Asn Ser Thr Leu Asp Asp Trp
            180                 185                 190
Phe Gly Glu Gly Ala Thr Phe Glu Asn Asp Asp Asp Ile Gln Phe Lys
        195                 200                 205
Lys Ser Lys Lys Lys Arg Arg Gln Phe Leu Lys Glu Ile Gly Gly Pro
    210                 215                 220
Trp Ala Glu Arg Tyr Ser Val Ser Leu Val Ser Pro Ser Val Val Pro
225                 230                 235                 240
Asn Tyr Phe Pro Ser Leu Arg Ile Val Lys Tyr Asn Ile Thr Gly Leu
                245                 250                 255
Glu Asp Ile Asn Ala Trp Ala Gly Thr Ser Val Gly Ala Asp Ile Leu
            260                 265                 270
Leu Ser Leu Thr Glu Lys Ser Lys Glu Arg Arg Ser His Ser Glu Ser
        275                 280                 285
Ile Glu Asp Pro Asp Val Asp Glu Leu Glu Lys Arg Lys Asp Lys Lys
    290                 295                 300
Lys Lys Lys Lys Lys Lys Lys Lys Lys Pro Ser Phe Lys Val Pro
305                 310                 315                 320
Glu Pro Pro Ser Pro Thr Ala Pro Pro Gly Pro Ala Tyr Ser Asn Gln
                325                 330                 335
Pro Leu Thr Trp Leu Gly Tyr Thr Gln Tyr Phe Ala Asn Leu Thr Lys
            340                 345                 350
Ile Asn Ile Glu Tyr Tyr Glu Arg Tyr Gly Phe Ser Thr Asp Gly Leu
        355                 360                 365
Val Asn Glu Thr Ser Asp Lys Asp Ile Phe Thr Phe Glu Val Glu Tyr
    370                 375                 380
Asp Thr Thr Lys Asp Asp Met Tyr Lys Leu Ala Asp Leu Thr Val Arg
385                 390                 395                 400
Ser Tyr Phe Lys Leu Ala Ser Arg Ile Ala Lys Lys Ala Ser Thr Lys
                405                 410                 415
Asp Gln Met Ser Glu Thr Gly Ala Thr Asp Asp Leu His Ala Ala Ile
            420                 425                 430
Asp Asn Asp Gly Asp Asp Ser Arg Asn Met Lys Asp Thr Lys Gly Lys
        435                 440                 445
Met Met Arg Asn Arg Val Trp Lys Thr Phe Leu Lys Arg Ala Phe Val
    450                 455                 460
Gly Tyr Tyr Lys Gly Asp Glu Ile Asp Asp
465                 470
```

<210> 26494
<211> 301
<212> PRT
<213> A.fumigatus

<400> 26494

```
Ala Ala Gly Ile Ala Ala Val Gly Val Glu Leu Leu Thr His Pro Leu
1               5                   10                  15
Asp Thr Leu Ile Thr Arg Leu Gln Ser Pro Ala Tyr Ala Ser Thr Tyr
```

```
            20                  25                  30
Gln Arg Ala Asn Gly Arg Ile Asn Pro Val Leu Tyr Arg Gly Leu Tyr
        35                  40                  45
Gln Gly Phe Gly Pro Thr Ile Ile Thr Ser Ile Pro Ala Ser Val Ala
    50                  55                  60
Phe Phe Thr Ile Tyr Glu Ala Thr Lys Ser Thr Leu Gln Pro Asn Glu
65                  70                  75                  80
Ala Ile Pro Ser Ser Lys Thr Arg Glu Leu Ala Thr Tyr Ala Ile Ser
                85                  90                  95
Ser Ala Val Ala Asp Leu Val Ala Cys Ala Ile Thr Asn Pro Ala Glu
            100                 105                 110
Val Leu Lys Gln Asn Ala Gln Val Val His Ala Gln Ser Glu His Ser
        115                 120                 125
Arg Ser Pro Leu Leu Ser Thr Val Arg His Phe Ser Arg His Pro Thr
    130                 135                 140
Lys Leu Trp Ala Gly Tyr Thr Met Leu Ala Ala Gly His Leu Pro Gly
145                 150                 155                 160
Thr Ser Leu Thr Phe Ser Ile Tyr Glu Tyr Leu Lys Ser Ser Trp Phe
                165                 170                 175
Ala Val Pro Gln Gly Ser Ser Asp Val Arg Val His Phe Lys Gly Ser
            180                 185                 190
Phe Tyr Gly Gly Ala Leu Ala Ser Ala Val Val Ser Leu Leu Phe Val
        195                 200                 205
Pro Val Asp Val Val Lys Thr Arg Met Arg Leu Ala Ala Gly Thr Pro
    210                 215                 220
Thr Phe Ala Arg Leu Pro Leu Lys Ala Asp Ile Arg Pro Ile Pro Pro
225                 230                 235                 240
Ser Val Lys Ala Glu Gly Val Pro Ser Ala Asn Ala Val Ala Val Ala
                245                 250                 255
Lys Gly Ile Leu Leu Lys Glu Gly Val Arg Gly Leu Phe Arg Gly Gly
            260                 265                 270
Ala Leu Thr Cys Leu Ala Ala Gly Leu Gly Gly Gly Leu Phe Leu Gly
        275                 280                 285
Cys Tyr Asp Ala Leu Lys Val Tyr Phe Gly Gly Gln Gly
    290                 295                 300
```

<210> 26495
<211> 78
<212> PRT
<213> A.fumigatus

<400> 26495

```
His Asp Thr Gln Ala Ser Lys Ala Met Pro Tyr Gln Lys Asp Asp Pro
1               5                   10                  15
Leu Tyr Pro Gln Leu Arg Lys Glu Ala Val Ala His Phe Asp Asn Met
            20                  25                  30
Leu Ser Phe Ala Asn His Leu Gly Met Phe Ser Glu Glu Val Ala Ile
        35                  40                  45
Ser Gly Glu Gln Ile Gly Asn Thr Pro Gln Ala Phe Ser His Leu Ala
    50                  55                  60
Cys Val Ser Ala Ala Met Asn Leu Gly Glu Gln Gly Glu Arg
65                  70                  75
```

<210> 26496
<211> 71
<212> PRT

<213> A.fumigatus

<400> 26496
Thr Val Ala Gln Thr Leu Asp Gly Asn Ser Leu Ile Glu Ser Ala Met
1 5 10 15
His Asn Pro Val Asp Lys Asp Val Arg Tyr Ser Arg Thr Leu Tyr Val
20 25 30
Leu Arg His Gly Ile Gln Lys Pro Ile Phe Tyr Thr Met Phe Met Lys
35 40 45
Ile Arg Asp Ile Tyr Tyr Thr Ser Ser Gln Arg Arg Val Glu Lys Ala
50 55 60
Ala Gly Met Ser Asn Ala Pro
65 70

<210> 26497
<211> 193
<212> PRT
<213> A.fumigatus

<400> 26497
Arg His Ala Pro His Leu Ile Phe Gly Ala Ile Ser Pro Glu Thr Leu
1 5 10 15
Gln Trp Asn Tyr Ser Leu Thr Gly Ser Leu Gly Val Val Asp Leu Pro
20 25 30
Val Met Ala Ser Leu Ser Pro Thr Gly Gly Ile Asn Gly Arg Tyr Arg
35 40 45
Arg Tyr Glu Met Met Arg Ile Gln Gly Ser Val Arg Thr Leu Lys Ser
50 55 60
Pro Arg Gly Arg Lys Phe Asp Ile Asp Ala Gly Glu Ile Val Trp Ser
65 70 75 80
Leu Glu Glu Asn Asn Leu Gln Arg Ser Gly Leu Pro Arg Glu Phe Thr
85 90 95
Phe Ala Met Leu Ile Gln Lys Pro Arg Ala Asp Ser Arg Ile Val Phe
100 105 110
Ser Leu Asp Ile Glu Pro Thr Leu Gln Ser Trp Tyr Gly Ser Tyr Pro
115 120 125
Asp Trp Trp Leu Ser Leu Pro Lys Tyr Gln Pro Gln Ser Arg Arg Pro
130 135 140
Val Asp Phe Arg Ser Glu Val Gly Gln Arg Phe Glu Pro Ala Glu Ser
145 150 155 160
Lys Lys Gly Phe Asn Phe Ala Thr Leu Glu Ser Ser Phe Asp Asp Tyr
165 170 175
Val Ser Met Pro Gly Lys Arg Ile Ala Phe Val Gly Ser Pro Lys Pro
180 185 190
Gln

<210> 26498
<211> 138
<212> PRT
<213> A.fumigatus

<400> 26498
Leu Ala Glu Thr Glu Thr Asn Gly Asn Leu Tyr Arg Ile Pro Ala Asn
1 5 10 15
Cys Ala Phe Thr Ser Gln His Ala Thr Pro Asp Lys Ala Gln Thr Asn

```
            20                  25                  30
Gly Ala Pro Ser Asp Arg Gly Leu Gly Leu Cys Asn Ser Gly Leu Leu
        35                  40                  45
Val Ile Asn Pro Ser Lys Gly Val Tyr Asp Arg Ile Ile Asp Gln Leu
    50                  55                  60
Asn Ser Pro Ala Thr Met Asn Tyr Thr Phe Pro Asp Gln Asp Leu Leu
65                  70                  75                  80
Ser Asp Val Phe Arg Gly Arg Trp Val Gly Ile Pro Tyr Ile Tyr Asn
                85                  90                  95
Ala Leu Lys Thr Leu Arg Arg Lys Gly Val His Asp Thr Ile Trp Arg
            100                 105                 110
Asp Asp Lys Val Lys Asn Val His Tyr Ile Leu Ser Pro Lys Pro Trp
        115                 120                 125
Asp Glu Ile Asp Ser Ala Ala Glu Gly His
    130                 135

<210> 26499
<211> 288
<212> PRT
<213> A.fumigatus

<400> 26499
Ile Ile Ile Ala Thr Pro Gly Leu His Val Gln Arg Pro Leu His Ser
1               5                   10                  15
Cys Leu Cys Arg Val Gln Thr Leu Leu His His Ala Pro Gln Gln Trp
            20                  25                  30
Cys Pro Pro Gln His Cys Arg Asn Gln Arg Tyr Ala Gln Ala Glu Ser
        35                  40                  45
Cys Asp Pro Pro Ile Asp Lys Leu Thr Asp Ser Phe Arg Ala Val Trp
    50                  55                  60
Ala Thr Leu Val Thr Asn Thr Asn Tyr Leu Pro Gly Leu Phe Thr Leu
65                  70                  75                  80
Glu Tyr Ser Leu Arg Lys Val Gly Ser Lys Tyr Ala Val Val Val Leu
                85                  90                  95
Tyr Thr Asp Ser Phe Pro Ala Glu Gly His Ala Ala Val Asn Ala Arg
            100                 105                 110
Gly Leu Pro Lys Gln Arg Val Pro His Leu Leu Pro Thr Leu Pro Lys
        115                 120                 125
Glu Tyr Thr Asn Asp Pro Arg Phe His Asp Thr Trp Thr Lys Leu Thr
    130                 135                 140
Ala Phe Ser Leu Val Glu Tyr Glu Arg Val Val Leu Leu Asp Ser Asp
145                 150                 155                 160
Met Leu Val Met Gln Asn Met Asp Glu Leu Met Asp Met Glu Leu Asp
                165                 170                 175
Ala Pro Glu Leu Glu Gly Ser Gly Ser Arg Val Phe Ala Ala Ser His
            180                 185                 190
Ala Cys Val Cys Asn Pro Leu Lys Lys Pro His Tyr Pro Lys Asn Trp
        195                 200                 205
Tyr Asp Leu Ser Val Ser Arg Gly Ser Ser Asp Trp Leu Arg Pro Arg
    210                 215                 220
Leu Thr Glu Thr Cys Thr Gly Ser Arg Pro Thr Ala Arg Leu His His
225                 230                 235                 240
Ser Met Pro Leu Pro Thr Arg Pro Arg Gln Thr Glu His His Arg Thr
                245                 250                 255
Val Asp Leu Asp Ser Ala Thr Arg Ala Ser Ser Ser Ser Ile Arg Arg
            260                 265                 270
```

Lys Glu Ser Met Ile Gly Ser Leu Thr Ser Ser Thr Pro Pro Gln Arg
275 280 285

<210> 26500
<211> 135
<212> PRT
<213> A.fumigatus

<400> 26500
Pro Val Phe Phe Met Lys Gly Ser Phe Gly Ala Arg Asn Val Pro Lys
1 5 10 15
Val Leu Lys Asn Val Glu Ile Leu Gly Ile Ile Gln Ser Arg Lys Trp
20 25 30
Asn Val Gly Ser Leu Asn Glu Phe Arg Lys Phe Phe Gly Leu Lys Pro
35 40 45
Tyr Glu Thr Phe Glu Glu Ile Asn Ser Asp Pro Asp Val Ala Glu Ser
50 55 60
Leu Arg Ser Leu Tyr Asp His Pro Asp Phe Val Glu Leu Tyr Pro Gly
65 70 75 80
Ile Val Ala Glu Glu Ala Lys Gln Pro Met Val Pro Gly Val Gly Ile
85 90 95
Ala Pro Thr Tyr Thr Ile Ser Arg Ala Val Leu Ser Asp Ala Val Ala
100 105 110
Leu Val Arg Gly Asp Arg Phe Tyr Thr Val Ser His Thr Ala Ser Phe
115 120 125
Gly Phe Ser Leu Pro Pro Pro
130 135

<210> 26501
<211> 182
<212> PRT
<213> A.fumigatus

<400> 26501
Gln Leu Phe Gln Ile Asp Tyr Asn Pro Arg Asn Leu Thr Asn Trp Gly
1 5 10 15
Tyr Ser Glu Val Arg Tyr Asp Leu Ser Ile Asn Gln Gly Cys Ile Phe
20 25 30
Tyr Lys Leu Ala Thr Arg Ala Phe Pro Asn Trp Phe Lys Pro Asp Ser
35 40 45
Ile Tyr Ala His Tyr Pro Met Thr Ile Pro Ser Glu Asn Arg Lys Ile
50 55 60
Met Lys Asp Leu Gly Arg Glu Ile His Tyr Ser Trp Asp Arg Pro Gln
65 70 75 80
Tyr Thr Pro Pro Arg Val Asp Leu Val Ser Tyr Ser Asn Ala Lys Leu
85 90 95
Val Ala Glu Gln Gln Asn Gln Phe Arg Ala Ala Trp Gly Asp Thr Val
100 105 110
Glu Phe Val Phe Gly Lys Ala Ser Lys Glu Phe Lys Leu Tyr Gln Asp
115 120 125
Ser Ala Phe Ile Gln Lys His Ala Asp Val Met Ser Lys Leu Leu Asn
130 135 140
Lys Glu Glu Trp His Arg Ser Val Lys Glu Phe Tyr Glu Asp Ile Thr
145 150 155 160
Ala Lys Leu Leu Glu Asp Lys Thr Arg Arg Phe Gly Gly Ile Asn Gln
165 170 175

Val Asp Ile Thr Asn Glu
180

<210> 26502
<211> 74
<212> PRT
<213> A.fumigatus

<400> 26502
Ser Lys Arg Val Ala Ile Val Gly Gly Gly Cys Ala Gly Val Thr Ala
1 5 10 15
Phe Trp Ala Ser Gln Lys Pro Pro His Asp Val His Leu Phe Glu Thr
20 25 30
Ser Ala Met Leu Asp Gly Arg Ile Lys Ala Val Pro Phe Glu His Ala
35 40 45
Gly Asn Lys Val Thr Val Asn Thr Val Pro Pro Val Phe Asn Ala Thr
50 55 60
Ala Ser Arg Gln Cys Ile Leu Gly Ser Gly
65 70

<210> 26503
<211> 202
<212> PRT
<213> A.fumigatus

<400> 26503
Asn Arg Arg Gln Ser Tyr Pro Ser Pro Leu Asn Tyr Asn His Phe Pro
1 5 10 15
Lys Ser Ile Cys Thr Ser Pro Asn Glu Val Val Cys His Gly Ile Pro
20 25 30
Asp Gln Arg Val Leu Leu Asp Gly Asp Ile Leu Asn Leu Asp Val Ser
35 40 45
Leu Tyr His Gly Gly Tyr His Ala Asp Leu Asn Glu Thr Tyr Tyr Val
50 55 60
Gly Asp Lys Ala Lys Ala Asp Pro Asp Ser Val Arg Leu Val Glu Thr
65 70 75 80
Thr Arg Glu Ala Leu Asp Met Ala Ile Glu Ile Val Lys Pro Gly Val
85 90 95
Pro Ile Arg Glu Phe Gly Lys Ile Ile Glu Lys His Ala Ala Ser Arg
100 105 110
Gly Leu Val Val Ile Lys Thr Trp Gly Gly His Gly Ile Asn Ser Glu
115 120 125
Phe His Pro Pro Pro Trp Ile Pro His Tyr Ala Lys Asn Lys Ala Val
130 135 140
Gly Thr Cys Lys Pro Gly Met Thr Phe Thr Ile Glu Pro Ile Leu Ala
145 150 155 160
Leu Gly Gly Asn Arg Glu Lys Tyr Trp Pro Asp Glu Trp Thr Asn Val
165 170 175
Thr Val Asp Gly Lys Arg Thr Ala Gln Phe Gly Val Tyr Gly Pro Ser
180 185 190
Ser Cys Thr Arg Cys Ile Leu Thr Trp Pro
195 200

<210> 26504
<211> 125
<212> PRT

<213> A.fumigatus

<400> 26504

```
Phe Gln Asn Arg Phe Pro Ser Gln Pro Ser Ser Leu Gly Ser Gly Gln
1               5                  10                  15
Thr Arg Phe Ile Ser Phe Phe Pro Gly Asn Gly Ser Val Pro Pro Asn
            20                  25                  30
Leu Leu Lys Ser Gly Pro Asp Trp Ala Gln Arg Trp Gln Phe Pro Gly
        35                  40                  45
Val Lys Met Gly Leu Thr Ser Ser Lys Leu Gly Pro Phe Gly Ile Lys
    50                  55                  60
Lys Gly Gln Gln Ala Met Arg Lys Val Cys Arg Leu Ala Arg Glu Val
65                  70                  75                  80
Leu Asp Ile Thr Ala Ala Ala Val Arg Pro Gly Val Thr Thr Asp Tyr
                85                  90                  95
Leu Asp Glu Ile Cys His Asn Ala Cys Ile Glu Arg Asp Val Ser Thr
            100                 105                 110
Ser His Ser Cys Met His Met Ser Ser Cys Leu Leu Lys
        115                 120                 125
```

<210> 26505
<211> 265
<212> PRT
<213> A.fumigatus

<400> 26505

```
Asp Ser Thr His Thr Asn Glu Val Glu Lys His Leu Met Ala Gly Gly
1               5                  10                  15
Ala Ile Ser Tyr Leu Asp Cys Phe Lys Arg Val Asp Leu Arg Arg Thr
            20                  25                  30
Glu Ile Thr Cys Cys Val Trp Ile Ser Gln Gln Leu Cys Gly Thr Ser
        35                  40                  45
Leu Met Gly Trp Ala Ala Tyr Tyr Tyr Lys Gln Ala Gly Phe Asp Thr
    50                  55                  60
Ser His Ala Phe Asp Leu Thr Val Gly Thr Phe Gly Leu Ala Ile Ala
65                  70                  75                  80
Gly Gly Val Ile Ser Trp Phe Leu Met Pro Arg Val Gly Arg Arg Arg
                85                  90                  95
Leu Tyr Leu Ser Gly Leu Leu Val Leu Phe Leu Thr Leu Leu Thr Ala
            100                 105                 110
Gly Cys Ile Ser Val Ala Ser Ser Thr Gln Trp Arg Leu Trp Ala Leu
        115                 120                 125
Gly Ser Phe Leu Ile Phe Met Thr Phe Val Tyr Asn Ile Thr Val Gly
    130                 135                 140
Pro Ile Cys Tyr Val Leu Val Ala Glu Ile Pro Ser Thr Arg Leu Arg
145                 150                 155                 160
Val Lys Thr Val Val Leu Ala Arg Val Ala Tyr Asn Phe Ser Gly Val
                165                 170                 175
Leu Ile Asn Trp Met Thr Pro Asn Met Leu Ser Pro Asp Glu Trp Asp
            180                 185                 190
Trp Lys Gly Lys Ser Cys Phe Phe Phe Ala Gly Thr Thr Leu Leu Cys
        195                 200                 205
Leu Leu Trp Cys Tyr Trp Arg Leu Pro Glu Thr Tyr Gly Leu Ser Tyr
    210                 215                 220
Leu Glu Ile Asp Ile Leu Phe Glu Lys Lys Ala Lys Lys Ser Lys Phe
225                 230                 235                 240
```

```
Arg Glu Leu Gln Ala Asn Leu Gln Asp Arg Gly Tyr Phe Gly Leu Arg
                245                 250                 255
Glu Asp Glu Cys Pro Phe Arg Gly Tyr
            260                 265

<210> 26506
<211> 89
<212> PRT
<213> A.fumigatus

<400> 26506
Ile Asp Ser Leu Leu Phe Asp Cys Lys Tyr Asn Asp Leu Leu Val Lys
1               5                   10                  15
Ala Gln Val Thr Thr Glu Tyr Cys Val Ser Ser Leu Leu Ser Ser Asp
            20                  25                  30
Val Ser His Thr Gln Ser Ser Ile Val Ser Ala Leu His Leu Trp His
        35                  40                  45
Asp Tyr Trp Asn Lys Pro Ile Thr Lys Thr Leu Ile Pro Ser Arg Leu
    50                  55                  60
Arg Ser Asn Thr Ser Asn Arg Ala Arg Leu Ile Ser Trp Val Pro Ser
65                  70                  75                  80
Ile Gly Arg Asn Val Met Asn Arg His
                85

<210> 26507
<211> 129
<212> PRT
<213> A.fumigatus

<400> 26507
Cys Gly Ser Phe Gln Pro Arg Gly Glu Asp Asp Gly Glu Thr Asp Ser
1               5                   10                  15
Thr His Asp Thr Ser Val Tyr Glu Asp Thr Ile Asp Lys Trp Ala Asp
            20                  25                  30
Met Ala Gly Ala Val Tyr Ser Gly Val Thr Ser Ile Thr Val Ala Cys
        35                  40                  45
Arg Trp Ala Ile Lys Leu Gln Pro Arg Tyr Val Asp Cys Val Arg Glu
    50                  55                  60
Arg Lys Pro Leu Ala Leu Val Ile Leu Ala Tyr Tyr Cys Ala Ile Leu
65                  70                  75                  80
His Arg Leu Arg His Asn Trp Cys Leu Asp Glu Trp Gly Pro Arg Val
                85                  90                  95
Ser Lys Ala Leu Trp Leu Val Leu Asp Glu Arg Trp Arg Pro Leu Ile
            100                 105                 110
Tyr Trp Pro Met Arg Asp Ile Phe Gly Gln Ala Phe Glu Pro Asn Leu
        115                 120                 125
Thr


<210> 26508
<211> 157
<212> PRT
<213> A.fumigatus

<400> 26508
Met Arg Ala Lys Thr Ile Met Ile Arg Cys Thr Thr Gly Ala Gly Ile
```

```
1               5                   10                  15
Leu Val Thr Asp Asn Gln Ser Ile Gly Glu Asn Val Ile Val Gly Gly
            20                  25                  30
Leu Phe Val Gln Ile Ile Phe Phe Gly Phe Phe Val Ile Ser Ala Phe
        35                  40                  45
Val Phe Gln Arg Arg Ile Thr Ala His Ala Thr Pro Glu Ser Val Ala
    50                  55                  60
Glu Tyr Ile Pro Trp Lys Lys His Met Gly Ala Leu Tyr Ala Ser Ser
65                  70                  75                  80
Ile Leu Ile Leu Val Arg Ser Val Phe Arg Val Ala Glu Tyr Leu Gln
                85                  90                  95
Gly Trp Asp Gly Ser Leu Leu Gln Ser Glu Val Phe Ile Tyr Val Leu
            100                 105                 110
Asp Gly Leu Leu Met Trp Phe Val Met Ala Ile Phe Leu Val Val His
        115                 120                 125
Pro Ser Glu Ile Asn Cys Leu Leu Gly Arg Gly Lys Met Met Thr Ala
    130                 135                 140
Lys Gly Gly Leu Gln Val Cys Glu Ala Ala Pro Pro Val
145                 150                 155
```

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<210> 26509
<211> 61
<212> PRT
<213> A.fumigatus

<400> 26509

```
Ala Ala Gln Gly Pro Glu Leu Asn Lys Leu Tyr Ile Leu Asn Ile Ser
1               5                   10                  15
Ala Ala Pro Asp Phe Asp Ile Ser Phe Arg Phe Ser Leu Ser Ala Leu
            20                  25                  30
Val Gln Leu Leu Leu Asp Ser Lys Ile Ala Thr Pro Ala Ser Phe Leu
        35                  40                  45
Ala Trp Leu Arg Leu Gln Cys Thr Ser Pro Ile His Asp
    50                  55                  60
```

<210> 26510
<211> 66
<212> PRT
<213> A.fumigatus

<400> 26510

```
Lys Val Ser Leu Ser Asn Leu Thr Arg Cys Asp Val Gln Leu Thr Leu
1               5                   10                  15
Gly Asp Ile Gly Asp Arg Asn Gln Ser Asp Tyr Glu Arg Gly Pro Met
            20                  25                  30
Val Thr Ser Ser Met Lys Pro Cys Ala Leu Ala Ala Ile Lys Ile Phe
        35                  40                  45
Leu Pro Val Phe Cys Gln Ser Leu Gln Leu Asp Pro Leu Leu Leu Ser
    50                  55                  60
Leu Met
65
```

<210> 26511
<211> 134
<212> PRT
<213> A.fumigatus

<400> 26511
Pro Asp Thr Arg Ser Gln Ala Ser Asp Leu Ala Thr Thr Ser Arg Ile
1 5 10 15
Leu Val Thr Ile Val Thr Ile Cys Lys Asp Ser Gly Asn Trp Asn Leu
20 25 30
Leu Asn Asp Gln Val Leu Leu Leu Ser Lys Lys His Gly Gln Leu Lys
35 40 45
Gln Ala Thr Thr Arg Met Val Gln Thr Val Met Lys Phe Leu Asp Glu
50 55 60
Thr Pro Ser Met Asp Val Lys Leu Ser Val Ile Asp Thr Leu Arg Thr
65 70 75 80
Val Thr Glu Gly Lys Val Asn Ala Pro Ala Arg Arg Ser Ser Thr Leu
85 90 95
Ser Leu Met Ser Phe Ala Asp Phe Arg Arg Ser Arg Glu Gly Ser Cys
100 105 110
Asn Thr His Phe Val Glu His Gln Glu Ser Leu Pro Thr Gly Leu Glu
115 120 125
Gly Ala Ala Pro Cys Gln
130

<210> 26512
<211> 113
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (94)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26512
Thr Leu Thr Met Ala Gly Ser Asp Asp His Pro Asp Gly Leu Pro Val
1 5 10 15
Ala Val Ser Tyr Leu Ala Gly Tyr Ile Phe Leu Ser Tyr Val Val Ser
20 25 30
Thr Met Gly Cys Ala Thr Thr Leu Glu Leu Leu His Arg Arg Thr Ser
35 40 45
Lys Ser Gly Leu Tyr Asn Trp Tyr Asn Asp Tyr Cys Ser Met Tyr Ser
50 55 60
Phe Thr Trp Leu Thr Asn Asn Tyr Arg Tyr Ile Leu Leu Thr Ser Ser
65 70 75 80
Gly Thr Met Gly Gly Ile Gly Ile Trp Cys Met His Phe Xaa Leu Gln
85 90 95
Leu Lys Thr Met Pro Trp Phe Ser His Leu Thr Arg Asp Gln His Cys
100 105 110
Pro

<210> 26513
<211> 61
<212> PRT
<213> A.fumigatus

<400> 26513
Leu Gly Pro Pro Ala Gly Asn Met Leu Gly Asn Leu Ser Pro Glu Ala

```
1               5                   10                  15
Pro Gly Pro Thr Leu Lys Phe Phe Asp Thr Gly Phe Ser Ile Leu Val
            20                  25                  30
Pro Gly Phe Ala Arg Ala Ile Arg Leu Leu Val Leu Lys Gly His Arg
        35                  40                  45
Leu Val Cys Ile Leu Gln Ser Ser Gln Lys Ser Arg Pro
    50                  55                  60
```

<210> 26514
<211> 138
<212> PRT
<213> A.fumigatus

<400> 26514

```
Thr Thr Pro Ala Gln Asp Gln Arg Thr Lys Met Ala Ala Ser Glu Lys
1               5                   10                  15
Arg Pro Glu Ile Ile Ala Leu Ala Arg Glu Leu Lys Asp Val Pro Met
            20                  25                  30
Cys Glu Glu Tyr Glu Arg Met Val Ser Gly Met Met Tyr Asn Pro Asn
        35                  40                  45
Thr Pro Lys Leu Leu Glu Ala Arg His Arg Cys Arg Gly Leu Thr Ala
    50                  55                  60
Asp Tyr Asn Gly Leu Asp Thr Lys Thr Val Pro Tyr Glu Gln Ile Ala
65                  70                  75                  80
Glu Lys Arg Leu Glu Leu Leu Arg Arg Val Val Gly Arg Val Gly Asp
                85                  90                  95
Gly Thr Phe Ile Glu Pro Pro Phe Met Ala Asp Tyr Gly Cys Asn Ile
            100                 105                 110
Ile Ile Gly Lys Asn Cys Phe Ile Asn Trp Lys Tyr Val Asp Pro Cys
        115                 120                 125
Ser Arg Pro Ala Ile Phe Val Val Leu Ala
    130                 135
```

<210> 26515
<211> 123
<212> PRT
<213> A.fumigatus

<400> 26515

```
Ala Glu Leu Thr Gly Gly Ile Ser Leu Thr Val Leu Asp Thr Ser Leu
1               5                   10                  15
Val Val Ile Gly Asp Arg Val Gln Ile Gly Thr Asn Val Ser Ile Ile
            20                  25                  30
Thr Ala Gly His Asp Thr Ser Ile Leu Ser Arg Arg Lys Asn Val Glu
        35                  40                  45
Phe Gly His Pro Ile Phe Ile Glu Asp Asp Cys Trp Ile Gly Ala Asn
    50                  55                  60
Val Val Ile Leu Pro Gly Val Arg Ile Gly Gln Gly Ser Thr Ile Gly
65                  70                  75                  80
Ala Gly Ser Ile Val Thr Lys Asp Ile Pro Pro Phe Ser Val Ala Leu
                85                  90                  95
Gly Ser Pro Cys Arg Val Lys Arg Thr Ile Pro Ser Ala Glu Glu Glu
            100                 105                 110
Glu Gln Asp Glu Thr Asn Pro Phe Arg Asn Leu
        115                 120
```

<210> 26516
<211> 145
<212> PRT
<213> A.fumigatus

<400> 26516
Arg Gln Arg Ala Tyr Ala Asp Ser His Arg Phe Leu Ala Arg Leu Thr
1 5 10 15
Pro Thr Ser Pro Met Glu Arg Ser Asn Tyr Phe Val Glu Val Lys Arg
20 25 30
Pro Asp Glu Thr Leu Phe Glu Ile Leu Tyr Arg Pro Thr Thr Leu Ser
35 40 45
Glu Asp Asn Pro Asp Pro Ala Pro Glu Asp Ile Val Ile Arg Arg Glu
50 55 60
Arg Gln Thr Phe Arg Arg Leu Pro Lys Thr Gly Thr Ile Val Phe Gly
65 70 75 80
Val Lys Thr Phe Leu Thr Thr Leu Asp Glu Leu Pro Met Gln Glu Leu
85 90 95
Gln Asn Leu Ala Lys Glu Thr Lys Ser Trp Pro Asp Tyr Val Gly Glu
100 105 110
Tyr Lys Gly Arg Glu Ile Trp Gly Pro Lys Val Leu Glu Phe Cys Glu
115 120 125
Asn Arg Thr Arg Ser Phe Ser Gln Gln Leu Glu Ser Glu Lys Leu Asp
130 135 140
Val
145

<210> 26517
<211> 77
<212> PRT
<213> A.fumigatus

<400> 26517
Glu Ser Ala Tyr Ala Leu Cys Leu Tyr Glu Ala Ile Gln Asp Tyr Leu
1 5 10 15
Leu Ala Asn Arg Thr Ser Asn Leu Leu Val Pro Arg Met His Gly Ile
20 25 30
Val Lys Leu Gly Asp Cys Pro Thr Asp Ala Phe Leu Asp Cys Pro Ala
35 40 45
Asn Arg Asp Glu Thr Gly Thr Gly Gly Ser Ile Gly Gly Val Ser Arg
50 55 60
Gly Gln Thr Val Ser Ala Ser Leu Gln Arg Thr Ser Tyr
65 70 75

<210> 26518
<211> 200
<212> PRT
<213> A.fumigatus

<400> 26518
Ile Lys Lys Glu Phe Leu Gly Arg Asp Val Pro Asn Gln Glu Asp Trp
1 5 10 15
Cys Asn Phe Lys Lys Gly Phe Arg Ala Ser Leu Phe Gln Gly Tyr Gly
20 25 30
Pro Pro Pro Trp Gly Pro Ser Thr Pro Ser Leu Trp Trp Thr Glu Asn
35 40 45

```
Pro Arg Phe Ile Ser Thr Ser Asp Asp Lys Tyr Met Arg Ala Trp Glu
    50                  55                  60
Tyr Ala Phe Pro Val Pro Ile Lys Phe Ile Ala Glu Pro Asn Met Phe
65                  70                  75                  80
Ala Met Thr Arg Ala Ala Pro His Pro Asn Gly Lys Tyr Val Ala Phe
                85                  90                  95
Gln Ser Gly Asp Asn Gln Ile Val Val Tyr Gly Ala Thr Asp Lys Phe
            100                 105                 110
Arg Gln Asn Arg Lys Lys Ser Phe Arg Gly His Asn Asn Ala Gly Tyr
        115                 120                 125
Ala Ile Asp Val Lys Ile Ser Pro Asp Gly Gln Phe Ile Ala Ser Gly
    130                 135                 140
Asp Ser Gly Gly Tyr Val Cys Phe Trp Asp Trp Lys Thr Gly Lys Met
145                 150                 155                 160
Tyr His Lys Ile Met Ala Gly Gly Lys Glu Gly Gly Ala Thr Thr Cys
                165                 170                 175
Leu Asp Trp His Pro Gln Glu Thr Ser Lys Val Val Thr Gly Gly Leu
            180                 185                 190
Glu Gly Val Ile Lys Tyr Trp Asp
        195                 200
```

<210> 26519
<211> 60
<212> PRT
<213> A.fumigatus

<400> 26519

```
Ser His Arg Thr Gln Asp Ala Pro Phe Ile Asp Ser Pro Ser Ser Pro
1               5                   10                  15
Gly Ser Ile Val Ile Ile Leu His Pro Ala Thr Pro Trp Ser His Thr
            20                  25                  30
Pro Ser Leu His Ala Asp Ala Tyr Ser Leu Gly Ile Pro Glu Pro Asp
        35                  40                  45
Arg Ala Arg Gly Glu Gly Thr Arg Arg Tyr Arg Arg
    50                  55                  60
```

<210> 26520
<211> 71
<212> PRT
<213> A.fumigatus

<400> 26520

```
Leu Ser Ile Leu Leu Leu Leu Phe Leu Trp Gly Phe Trp Ile Asn Ser
1               5                   10                  15
Phe Val Asn Cys Arg Val Leu Phe Tyr Ser Arg Ile Phe Ala Leu Asn
            20                  25                  30
Met Pro Gln Ile Gly Ala Val Ser Ile Ile Lys Cys Val Ser Phe Asn
        35                  40                  45
Trp His Ala Cys Gly Tyr Ser His Cys Glu Arg Ser Tyr Ser Ala Phe
    50                  55                  60
Val Asn Asn Cys Met Gln Leu
65                  70
```

<210> 26521
<211> 598
<212> PRT

<213> A.fumigatus

<220>
<221> UNSURE
<222> (484)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26521

```
Arg Pro Pro Arg Leu Val Arg Ala Trp Leu Tyr Lys Pro His Ser Ala
1               5                  10                  15
Thr Phe Leu Ile Phe Ser Ile Asp Pro Pro Met Glu Asp Asn Ser Asn
            20                  25                  30
Ile Arg Ile Thr Arg Ser Ala Arg Ala Ser Arg Asp Ala Arg Ala His
        35                  40                  45
Asn Met Asn Ile Pro Ser Thr Pro Ser Ser Thr Asn Asn Thr Thr Pro
    50                  55                  60
Asn Asn Leu Asn Asn Gly Arg Pro Ser Arg Ile Ile Thr Leu Ser Thr
65                  70                  75                  80
Arg Thr Ala Arg Ala Asn Ser Ala Arg Gln Ala Gln Ala Asn Ser Val
                85                  90                  95
Arg Glu Ala Gln Ala Asn Asn Ala Pro Val Ala Asp Thr Ala Thr Ser
            100                 105                 110
Thr Ala Asn Pro Leu Arg Glu Thr Arg Thr Ser Arg Ala Arg Ala Ala
        115                 120                 125
Ala Ala Ala Ala Ala Gly Ser Thr Val Pro Ser Thr Pro Ala Gly Pro
    130                 135                 140
Pro Ala Pro Ala Pro Ala Ala Ala Asp Ser Val Ala Ser Thr Asn Ile
145                 150                 155                 160
Pro Glu Thr Pro Arg His Lys Arg Val Lys Arg Thr Pro Thr Val Glu
                165                 170                 175
Glu Thr Pro Arg Thr Thr Arg Gln Ser Ala Arg Leu Arg Gly Asn Ile
            180                 185                 190
Gln Pro Val Ser Ser Thr Glu Lys Thr Phe Ser Asn Ser Gln Ala Glu
        195                 200                 205
Ser Lys Gln Pro Asp Gly Ser Pro Ser Ala Gly Met Ala Pro Gly Gly
    210                 215                 220
Arg Thr Arg Thr Arg Ser Arg Gln Met Ala Ser Ser Leu Asn Gln Lys
225                 230                 235                 240
Thr Gly Asp Ser Thr Arg Val Thr Ser Ser Pro Ser Lys Lys Asn Ala
                245                 250                 255
Gly Arg Asn Glu Glu Asn Ile Ser Pro Leu Asp Thr Val Ala Ser Gln
            260                 265                 270
Leu Ser Thr Arg Asp Gln Met Ser Asp Leu Val Asp Glu Lys Leu Ser
        275                 280                 285
Lys Asp Asn Gly Pro Asp Asn Val Glu Asn Lys Met Asn Gly Pro Leu
    290                 295                 300
Asp Met Glu Ser Glu Glu Lys His Glu Pro Glu Thr Val Pro Pro Asn
305                 310                 315                 320
Ser Leu Lys Arg Lys Ser Pro Glu Pro Asp Asp Gly Arg Ala Gly Glu
                325                 330                 335
Pro Thr Pro Ser Ser Asp Ser Pro Arg Lys Lys Pro Lys Val Glu Asn
            340                 345                 350
Pro Glu Leu Asp Arg Ala Leu Asp Gln Gln Leu Gln Glu Gly Thr Val
        355                 360                 365
Ile Asn Val Asp Asp Lys Ala Ala Leu Gln Ser Gln Ser Pro Gly Gly
    370                 375                 380
```

```
Val Asp Ala Ile Ser Ala Glu Gly Glu Val Glu Ala Ser Glu Asn Gly
385                 390                 395                 400
Ala Leu Lys Ala Arg Ala Thr Ser Val Ala Ala Asp Ala Asp Val Pro
                405                 410                 415
Asn Val Gln Val Ala Glu Ile Ser Ala Leu Ser Ala Ala Asn Ala Ser
            420                 425                 430
Asp Lys Ser Leu Glu Val Ala Asp Ala Ala Asp Asn Asp Thr Thr Ala
        435                 440                 445
Ala Arg Gly Ser Ala Ala Gly Asp Glu Ser Arg Gln Ile Thr Glu Glu
    450                 455                 460
Val Glu Glu Gln Val Ser Glu Asn Gly Val Glu Leu Arg Ser Ala Val
465                 470                 475                 480
Asp Glu Ala Xaa Val Val Ala Val Gly Val Glu Ala Val Ala Trp Glu
                485                 490                 495
Pro Ser Arg Ala Ala Gly Ala Cys Arg Lys Gly Lys Gly Lys Ser Lys
            500                 505                 510
Gly Pro Ala Lys Gly Lys Gly Lys Gly Lys Leu Val Asn Arg Gly Arg
        515                 520                 525
Lys Arg Met Gly Asn Met Asn Lys Asn Ser Gly Pro Asp Pro Asn Leu
    530                 535                 540
Trp Gly Pro Leu Leu Arg Ile Gln Ala Thr Arg Arg Ser Arg Thr Arg
545                 550                 555                 560
Gln Gly Glu Leu Asp Lys Gly Phe Lys Lys Gly Thr Ala Ala His Thr
                565                 570                 575
Thr Gly Phe Ala Trp Val Asn Pro Thr Phe Leu Arg Ala Thr Trp Arg
            580                 585                 590
Gly Ile Lys Asn Ala Leu
        595
```

<210> 26522
<211> 169
<212> PRT
<213> A.fumigatus

<400> 26522

```
Thr Asn Gln Ser Gln Gly Leu Ser Ala Glu Thr Asp Leu Leu Met Leu
1               5                   10                  15
Tyr Ser Cys Leu Ala Ser Lys Thr Thr Phe His Phe Ala Ala Gly Leu
            20                  25                  30
Cys Ser Gly Leu Thr Ser Ser Ile Leu Leu Gln Pro Ala Asp Leu Leu
        35                  40                  45
Lys Thr Arg Val Gln Gln Ser Gln Lys Thr Ala Ser Leu Leu Pro Thr
    50                  55                  60
Ile Lys Thr Ile Leu Ser Ser Pro His Pro Ile Arg Gly Leu Trp Arg
65                  70                  75                  80
Gly Thr Leu Pro Ser Ala Leu Arg Thr Gly Phe Gly Ser Ala Leu Tyr
                85                  90                  95
Phe Thr Ser Leu Asn Ala Leu Arg Gln Gly Leu Ala Gln Thr Glu Ala
            100                 105                 110
Ala Met Ala Ile Ala Ala Ser Ser Ser Asp Gly Lys Ser Arg Thr Ser
        115                 120                 125
Ser Ser Ala Leu Pro Lys Leu Ser Asn Trp Gly Asn Leu Ala Thr Gly
    130                 135                 140
Ala Val Ala Arg Thr Ala Ala Gly Phe Val Met Met Pro Val Thr Gly
145                 150                 155                 160
Ser Ser Pro Gly Ala Glu Gly Arg Pro
```

165

<210> 26523
<211> 78
<212> PRT
<213> A.fumigatus

<400> 26523
Pro Arg Gly Thr Val Asp Met Lys Phe Leu Ser Gln Ser Arg Trp Phe
1 5 10 15
Leu Arg Cys Cys Leu Val Gly Glu Ile Val Pro Phe Ala Thr Ala Glu
20 25 30
Ile Gly Ser Cys Ser Glu Thr Glu Glu Cys Gln Thr Gly Cys Cys Ser
35 40 45
Lys Ala Gly Tyr Cys Gly Phe Gly Pro Asp Phe Cys Gly Asp Asp Val
50 55 60
Cys Ile Ser Asn Cys Asp Ala Val Ala Glu Cys Gly Gly Met
65 70 75

<210> 26524
<211> 79
<212> PRT
<213> A.fumigatus

<400> 26524
His Leu Tyr Tyr Ser Phe Ala Gly Ile Asp Pro Ser Asp Phe Thr Ile
1 5 10 15
Thr Thr Thr His Asp Asn Asp Ala Asp Tyr Trp Glu Lys Phe Thr Ala
20 25 30
Leu Lys Gln Lys Lys Ser Thr Leu Lys Thr Tyr Ile Ser Val Gly Gly
35 40 45
Trp Asp Leu Gly Gly Lys Val Phe Ser Asp Met Val Arg Phe Pro Gly
50 55 60
Ser Arg Arg Ala Phe Ile Asp Ser Ala Ile Ala Met Met Asn Lys
65 70 75

<210> 26525
<211> 69
<212> PRT
<213> A.fumigatus

<400> 26525
Leu Gln Ala Val Leu Ile Ser Leu Ile Tyr Ile Ser Thr Trp Leu Ala
1 5 10 15
Tyr Pro Arg Leu Val Ala Trp Tyr Phe Ile His Phe Leu Pro Ile Glu
20 25 30
Ser Val Leu Pro Trp Phe Leu Ala His Phe Pro Pro Ile Ser Leu Pro
35 40 45
Phe Thr Ser His Leu Ser Pro Ile Tyr Leu Pro Phe Thr Ser Arg Glu
50 55 60
Pro Thr Gln Asn Gly
65

<210> 26526
<211> 88
<212> PRT

<213> A.fumigatus

<400> 26526
Asn Ala Arg Ser Ser Tyr Phe Pro His His Leu Ile Leu Phe Asn Leu
1 5 10 15
Ser Leu Val Phe Thr Ile Ser Ser Lys Met Pro Ala Val Asp Val Ser
20 25 30
Ser Val Pro Val Val Ser Gly Lys Glu Thr Ala Gln Ala Val Ala Val
35 40 45
Leu Glu Asp Leu Ile Lys Asn Leu Asn Ile Ser Thr Ser Ala Asp Glu
50 55 60
Val His Ala Ala Thr Gly Asn Leu Ala Thr Tyr Phe Ser Gly Pro Ile
65 70 75 80
Pro Glu Gln Thr Leu Pro Leu Lys
85

<210> 26527
<211> 77
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (63)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26527
Leu Ser Thr Arg Ile Leu Ser Ala Ser Phe Ser Ser Ser Ser Ser Val
1 5 10 15
Ser Pro Asn Leu Arg Thr Phe Pro Arg Leu Phe Thr Cys Ser Val Pro
20 25 30
Pro Leu Ser Phe Pro Met Ser Leu Gly Pro Thr Leu Ala Ile Met Val
35 40 45
Pro Leu Leu Asp Arg Gly Leu Val Glu Arg Glu Thr Ala Ile Xaa Arg
50 55 60
Lys Ser Ala Val Ile Val Asp Asn Met Cys Lys Leu Arg
65 70 75

<210> 26528
<211> 217
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (163)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26528
Lys Ser Leu Tyr Val Leu Met Phe Asp Ser Leu Arg Ala Val Glu Val
1 5 10 15
Phe Gln Lys Gln Leu Asn Asn Lys Lys Asp Ala Thr Ala Arg Glu Arg
20 25 30
Ala Cys Glu Ala Ile Arg Ala Ile Ala Ser His Gln Thr Ile Ala Pro
35 40 45
Gly Val Glu Pro His Leu Val Ser Leu Leu Gly Pro Val Leu Ala Ala

```
    50                  55                  60
Ser Gly Asp Lys Met Thr Ala Val Gln Lys Ala Ala Gln Ser Ala Ala
65                  70                  75                  80
Leu Ala Ile Val Gln Ala Ile Asn Ala Asn Ala Val Lys Ala Val Val
                85                  90                  95
Pro Val Ile Leu Asn Ser Leu Gln Asn Ala Gln Lys Trp Gln Glu Lys
            100                 105                 110
Met Cys Ala Leu Asp Cys Leu Asn Cys Leu Val Glu Ser Ala Pro Ala
        115                 120                 125
Gln Leu Ser Phe Arg Val Pro Asp Leu Ile Pro Ala Val Ser Glu Ala
    130                 135                 140
Met Trp Asp Thr Lys Ala Asp Ile Lys Lys Ala Ala Tyr Ser Thr Met
145                 150                 155                 160
Glu Lys Xaa Cys Gly Leu Ile Val Asn Lys Asp Ile Glu Arg Phe Ile
                165                 170                 175
Leu Glu Leu Ile Lys Cys Ile Ala Gln Pro Glu Asn Val Pro Glu Thr
            180                 185                 190
Val His Leu Leu Gly Ala Thr Thr Phe Val Ser Asp Val Thr Gly Pro
        195                 200                 205
Tyr Pro Arg His His Gly Pro Ser Ala
    210                 215
```

<210> 26529
<211> 72
<212> PRT
<213> A.fumigatus

<400> 26529

```
Ser Leu Lys Ala Arg Pro Leu Arg Ser Val His Thr Cys Ala Ile Phe
1               5                   10                  15
Leu Glu Ser Lys Tyr Ser Ile Asn Phe Ser Leu Leu Ser Lys Ile Gln
            20                  25                  30
Arg Pro Ser Phe Thr Thr Ser Arg Ile Glu Ala Arg Leu Ser Ser Val
        35                  40                  45
Lys Ile Ile Ser Glu Ala Ser Leu Ala Thr Ser Asn Leu Pro Gly Leu
    50                  55                  60
Ser Arg Ser Gln His Pro His Ala
65                  70
```

<210> 26530
<211> 72
<212> PRT
<213> A.fumigatus

<400> 26530

```
Ala Cys Gly Cys Trp Asp Arg Asp Arg Pro Gly Arg Phe Asp Val Ala
1               5                   10                  15
Lys Asp Ala Ser Asp Ile Ile Leu Thr Asp Asp Asn Leu Ala Ser Ile
            20                  25                  30
Leu Glu Val Val Lys Glu Gly Arg Cys Ile Phe Asp Asn Asn Glu Lys
        35                  40                  45
Phe Met Leu Tyr Leu Leu Ser Lys Asn Ile Ala Gln Val Cys Thr Leu
    50                  55                  60
Leu Arg Gly Leu Ala Phe Lys Asp
65                  70
```

<210> 26531
<211> 231
<212> PRT
<213> A.fumigatus

<400> 26531
Gln His Thr Arg Ile Leu Thr Ile Met Met Ala Val Gly Thr Lys Cys
1 5 10 15
Met Val Lys Arg Asn Val Ile Val Pro Lys Leu Asp Tyr Leu Glu Ala
20 25 30
Leu Gly Ala Val Thr Asn Asn Cys Ser Asn Lys Thr Gly Thr Leu Thr
35 40 45
Gln Gly Lys Met Val Val Lys Lys Val Trp Ile Pro Ser Lys Gly Ile
50 55 60
Tyr Ser Met Gly Val Ser Asn Glu Pro Phe Asn Pro Thr Val Ser Asp
65 70 75 80
Val Thr Phe Thr Pro Val Pro Pro Met His Phe Asp Gln Glu Lys Glu
85 90 95
Gly Ala Pro Ile Asp Ser Leu Glu Asn Ser Val Ala Gly Asn Pro Arg
100 105 110
Leu Glu Glu Phe Leu Asn Val Ala Ala Met Ala Asn Leu Ser His Val
115 120 125
Tyr Arg Ser Glu Gln Gly Glu Trp His Val His Gly Glu Ala Thr Glu
130 135 140
Ile Ala Ile Gln Val Phe Ala Ser Gln Phe Asn Leu Asn Arg Asp Gln
145 150 155 160
Trp Thr Lys Asp Glu Gly Ala Ile Trp His Gln Lys Ala Glu Phe Gln
165 170 175
Phe His Ser Ser Val Lys Lys Met Ser Val Val Phe Thr Arg Leu Glu
180 185 190
Gly Gln Thr Glu Cys Ser Met Val Phe Thr Lys Gly Ala Val Glu Arg
195 200 205
Ile Val Asp Ala Cys Thr Ser Val Leu Trp Glu Val Ser Pro Asp Pro
210 215 220
Val Ala Leu Met Asp Asp His
225 230

<210> 26532
<211> 126
<212> PRT
<213> A.fumigatus

<400> 26532
Gln Asp Lys Ala Leu Glu Gly Ala Asn Leu Gln Cys Asn Glu Val Glu
1 5 10 15
Arg Asp Leu Cys Phe Leu Gly Leu Ile Gly Leu Tyr Asp Leu Leu Cys
20 25 30
Pro Glu Thr Ala Gly Ala Ile Cys Ala Cys Tyr Gln Ala Gly Ile Ala
35 40 45
Val His Met Val Met Gly Asp His Pro Gly Thr Ala Lys Ala Ile Ala
50 55 60
Gln Gln Val Gly Met Val Leu Ala Asn Leu Ser Thr Ala Ala Ala Asp
65 70 75 80
Val Ala Asp Val Met Val Met Thr Ala Gly Glu Phe Asp Lys Leu Met
85 90 95
Asp Asp Asn Val Asn Ala Leu Pro Thr Leu Leu Leu Ile Ile Ala Arg

```
            100                 105                 110
Cys Ala Pro Gln Thr Lys Val Trp Ile Ile Asn Thr Leu Tyr
        115                 120                 125
```

<210> 26533
<211> 200
<212> PRT
<213> A.fumigatus

<400> 26533

```
Cys Arg Gly Met Leu Leu Leu Val Cys Tyr Arg Gly Leu Ser Phe Ala
1               5                   10                  15
Arg Thr Ser Asp Pro Val Phe Cys Arg Lys Lys Ser Pro Trp Gln Thr
            20                  25                  30
Leu Arg Gln Asp Glu Gln Met Arg Ala Asp Ile Ser Gln Asp Val Asp
        35                  40                  45
Arg Cys Leu Gln Glu Asn Tyr Phe Phe Arg Glu Pro Ala Thr Lys Ala
    50                  55                  60
Lys Met Ile Asp Ile Leu Phe Ile Tyr Ala Lys Leu Asn Pro Asp Leu
65                  70                  75                  80
Gly Tyr Arg Gln Gly Met His Glu Leu Leu Ala Pro Ile Leu Trp Val
                85                  90                  95
Ile His Gly Asp Ala Val Asp Gly Lys Val Leu Glu Glu Ser Ser Val
            100                 105                 110
Lys Glu Glu Gly Asp Asp Leu Met Leu His Leu Leu Asn Phe Asp Tyr
        115                 120                 125
Val Glu His Asp Ser Phe Ala Leu Phe Cys Ser Val Met Gln Thr Thr
    130                 135                 140
Arg Val Tyr Tyr Glu His Asn Lys Glu Arg Ser Ala Asn Gly Gln Met
145                 150                 155                 160
Asp Glu Ile Pro Ile Val Asn Gln Cys Gln His Ile His Gln Asn Leu
                165                 170                 175
Leu Thr Thr Thr Asp Leu Glu Leu Ala Asp His Leu Gln Ala Leu Glu
            180                 185                 190
Ile Leu Pro Gln Ile Phe Leu Thr
        195                 200
```

<210> 26534
<211> 92
<212> PRT
<213> A.fumigatus

<400> 26534

```
Pro His Thr Thr Thr Thr Ser Lys Met Ala Trp Ala Pro Arg Asp Thr
1               5                   10                  15
Leu Arg Pro Phe Leu Leu Val Ala Arg Leu Phe Ala Trp Ile Ser Ala
            20                  25                  30
Val Ile Val Met Gly Ile Thr Ala Trp Ala Val Thr Lys Arg Asp Gly
        35                  40                  45
Tyr Arg Val Ile Tyr Pro Leu Val Ile Val Gly Leu Ser Arg Tyr Met
    50                  55                  60
Thr Gly Thr Met Leu Leu Thr Leu Ala Gly Arg Ser Asn Asn Arg Val
65                  70                  75                  80
Phe Tyr Ser Cys Asp Asp Ser Ile Ser Tyr Glu Thr
                85                  90
```

<210> 26535
<211> 606
<212> PRT
<213> A.fumigatus

<400> 26535
Ile Leu Phe Gly Ser Leu Ala Ser Ala Phe Gln Gly Ile Ser Leu Gly
1 5 10 15
Thr Met Pro Tyr His Glu Phe Tyr His Lys Leu Thr Lys Asn Val Leu
20 25 30
Tyr Phe Val Tyr Leu Gly Ile Ala Glu Phe Val Thr Val Tyr Val Ser
35 40 45
Thr Val Gly Phe Ile Tyr Thr Gly Glu His Leu Thr Gln Lys Ile Arg
50 55 60
Glu Asn Tyr Leu Glu Ala Ile Leu Arg Gln Asn Met Ala Tyr Phe Asp
65 70 75 80
Lys Leu Gly Ala Gly Glu Val Thr Thr Arg Ile Thr Ala Asp Thr Asn
85 90 95
Leu Ile Gln Asp Ala Ile Ser Glu Lys Val Gly Leu Thr Leu Thr Ala
100 105 110
Phe Ala Thr Phe Val Thr Ala Phe Ile Val Ala Tyr Val Lys Tyr Trp
115 120 125
Lys Leu Ala Leu Ile Cys Thr Ser Thr Ile Val Ala Leu Val Met Val
130 135 140
Met Gly Gly Gly Ser Arg Phe Ile Val Lys Tyr Ser Lys Lys Ser Ile
145 150 155 160
Glu Ser Tyr Gly Ala Gly Gly Thr Val Ala Glu Glu Val Ile Ser Ser
165 170 175
Ile Arg Asn Ala Thr Ala Phe Gly Thr Gln Asp Lys Leu Ala Lys Gln
180 185 190
Tyr Glu Thr His Leu Ala Glu Ala Glu Lys Trp Gly Val Lys Gln Gln
195 200 205
Val Ile Leu Gly Met Met Ile Gly Gly Met Phe Gly Ile Met Phe Ser
210 215 220
Asn Tyr Gly Leu Gly Phe Trp Met Gly Ser Arg Phe Val Val Gly Lys
225 230 235 240
Glu Val Asn Val Gly Gln Val Leu Thr Val Leu Met Ser Ile Leu Ile
245 250 255
Gly Ser Phe Ser Leu Gly Asn Val Ala Pro Asn Gly Gln Ala Phe Thr
260 265 270
Asn Gly Val Ala Ala Ala Ala Lys Ile Tyr Ser Thr Ile Asp Arg Arg
275 280 285
Ser Pro Leu Asp Pro Tyr Ser Asp Glu Gly Lys Val Leu Asp His Phe
290 295 300
Glu Gly Asn Ile Glu Phe Arg Asn Val Lys His Ile Tyr Pro Ser Arg
305 310 315 320
Pro Glu Val Thr Val Met Glu Asp Val Ser Leu Ser Met Pro Ala Gly
325 330 335
Lys Thr Thr Ala Leu Val Gly Pro Ser Gly Ser Gly Lys Ser Thr Val
340 345 350
Val Gly Leu Val Glu Arg Phe Tyr Leu Pro Val Gly Gly Gln Val Leu
355 360 365
Leu Asp Gly His Asp Ile Gln Thr Leu Asn Leu Arg Trp Leu Arg Gln
370 375 380
Gln Ile Ser Leu Val Thr Gln Glu Pro Val Leu Phe Ser Thr Thr Ile
385 390 395 400

```
Phe Arg Asn Ile Glu His Gly Leu Ile Gly Thr Lys Phe Glu His Glu
                405                 410                 415
Ser Lys Asp Lys Ile Arg Glu Leu Val Glu Asn Ala Ala Arg Met Ala
            420                 425                 430
Asn Ala His Asp Phe Ile Met Ala Leu Pro Glu Gly Tyr Asp Thr Asn
        435                 440                 445
Val Gly Gln Arg Gly Phe Leu Leu Ser Gly Gly Gln Lys Gln Arg Ile
    450                 455                 460
Ala Ile Ala Arg Ala Ile Val Ser Asp Pro Lys Ile Leu Leu Leu Asp
465                 470                 475                 480
Glu Ala Thr Ser Ala Leu Asp Thr Lys Ser Glu Gly Val Val Gln Ala
                485                 490                 495
Ala Leu Asp Lys Ala Ala Glu Gly Arg Thr Thr Ile Val Ile Ala His
            500                 505                 510
Arg Leu Ser Thr Ile Lys Thr Ala His Asn Ile Val Ala Met Val Gly
        515                 520                 525
Gly Lys Ile Ala Glu Gln Gly Thr His Asp Glu Leu Val Asp Arg Lys
    530                 535                 540
Gly Thr Tyr Tyr Lys Leu Val Glu Ala Gln Arg Ile Asn Glu Glu Lys
545                 550                 555                 560
Glu Ala Glu Ala Leu Glu Ala Asp Ala Asp Met Asp Ala Asp Asp Phe
                565                 570                 575
Gly Gln Glu Gly Val Thr Arg Ile Lys Thr Ala Val Ser Ser Ser Asn
            580                 585                 590
Ser Leu Asp Ala Val Asp Glu Asn Ala Arg Leu Glu Leu Lys
        595                 600                 605
```

<210> 26536
<211> 196
<212> PRT
<213> A.fumigatus

```
<400> 26536
Gln Leu Gly Thr Ala Ile Asp Phe Leu Tyr Glu Ala Ser Lys Ala Asn
1               5                   10                  15
Glu Asp Gly Thr Asp His Val Phe Leu His Gln Ala Ile Leu Asn Ala
            20                  25                  30
Lys Gly Ala Thr Gln Leu Asp Cys Val Lys Thr Ala Glu Leu Asn Gly
        35                  40                  45
Gly Ile Thr Arg Arg Val Ile Leu Thr Lys Asp Pro Glu Asn Ile Lys
    50                  55                  60
Ala Ile Leu Thr Gly Gln Phe Ala Asp Tyr Gly Lys Gly Glu Glu Phe
65                  70                  75                  80
His Glu Gln Trp Lys Asp Phe Leu Gly Asp Ser Ile Phe Ala Thr Asp
                85                  90                  95
Gly Glu Leu Trp Ser Arg Ser Arg His Leu Ile Arg Pro Met Phe Val
            100                 105                 110
Arg Asp Arg Ile Val Asp Thr Glu Ile Phe Glu Lys His Val Gln Asn
        115                 120                 125
Leu Ile Pro Leu Leu Glu Gly Ser Asn Ser Pro Ser Gly Ser Lys Ala
    130                 135                 140
Val Asp Val Gly Ser Leu Phe Phe Arg Phe Thr Leu Asp Ala Ala Thr
145                 150                 155                 160
Asp Tyr Leu Leu Gly Gln Gly Thr Asn Ser Leu His Asn Pro Glu Thr
                165                 170                 175
Arg Phe Ala Glu Ala Phe Gly Tyr Val Lys His Arg Gln Ser Glu Ile
```

```
            180                 185                 190
Phe Arg Leu Gly
        195

<210> 26537
<211> 300
<212> PRT
<213> A.fumigatus

<400> 26537
Leu Asn Thr Ser Asp Gly Ile Ser Met Phe Ser Phe Ile Val Ala Lys
1               5                  10                  15
Arg Lys Phe Arg Arg Glu Leu Lys Val Met Asp Asp Phe Phe Gln Pro
            20                  25                  30
Tyr Ile Lys Arg Ala Leu Ser Leu Thr Pro Ser Glu Leu Asp Gln Lys
        35                  40                  45
Ile Ser Lys Arg Glu Thr Phe Leu Asp Ala Leu Ala Arg Phe Thr Arg
    50                  55                  60
Asp Pro Arg Val Leu Arg Asp Gln Ile Val Ala Val Leu Leu Ala Gly
65                  70                  75                  80
Arg Asp Thr Thr Ala Ala Val Leu Thr Phe Cys Ile Phe Glu Leu Ala
                85                  90                  95
Arg Asn Pro Asp Val Val Ala Lys Leu Arg Glu Glu Ile Ser Ala Arg
            100                 105                 110
Leu Gly Leu Gly Pro Ser Ala Gln Lys Ser Ser Tyr Asn Asp Leu Lys
        115                 120                 125
Glu Met Lys Tyr Leu Asn Ala Val Leu Asn Glu Thr Met Arg Leu Tyr
    130                 135                 140
Pro Pro Val Pro Phe Asn Val Arg Tyr Ser Leu Arg Asp Thr Thr Leu
145                 150                 155                 160
Pro Arg Gly Gly Gly Pro Asp Gly Leu Ser Pro Val Gly Val Arg Ala
                165                 170                 175
Asn Thr Arg Val Ile Tyr Ser Thr Met Ile Met Gln Arg Ser Ala Glu
            180                 185                 190
Asn Tyr Asp Pro Pro Gly Ser Pro Asn Tyr Phe Asp Pro Glu Lys Trp
        195                 200                 205
Leu Pro Asp Arg Trp Leu Ser Gly Trp Gln Pro Lys Pro Trp Gln Tyr
    210                 215                 220
Ile Pro Phe Asn Gly Gly Pro Arg Ile Cys Leu Gly Gln Gln Phe Ala
225                 230                 235                 240
Thr Ile Glu Met Gly Tyr Thr Val Val Arg Ile Leu Gln Ala Phe Glu
                245                 250                 255
Arg Ile His Ala Met Pro Ala Asn Gly Lys Glu Arg Val Glu Asp Pro
            260                 265                 270
Val Leu Lys Phe Glu Val Thr Leu Tyr Pro Gly Phe Gly Ile Glu Leu
        275                 280                 285
Cys Phe Arg Ala Arg Arg Arg Arg Tyr Phe Thr Phe
    290                 295                 300

<210> 26538
<211> 375
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
```

<222> (34)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26538

```
Leu Leu Ser Cys Ile Arg Val Cys Cys Ser Val Cys Ala Ile Ile Met
1               5                  10                  15
Pro Glu Ser Gln Pro Leu Glu Glu Arg Leu Leu Lys Gln Lys Arg Glu
            20                  25                  30
Ser Xaa Gln Ala Lys Gln Lys Val Ala Tyr Ala Leu Ala Met Tyr Lys
        35                  40                  45
Arg Thr Phe Leu Gln Ser Pro Arg Leu Thr Gln Ala Ile Arg Thr Leu
    50                  55                  60
Cys Thr Arg His Pro Leu Leu Ser Pro Thr Val Arg Leu Leu Lys His
65                  70                  75                  80
Trp Phe His Cys His Leu Phe Lys Gly His Val Cys Asp Glu Leu Met
                85                  90                  95
Glu Leu Phe Ala Val Arg Val Phe Thr Gln Ser Tyr Pro Trp Asp Thr
            100                 105                 110
Pro Ser Ser Val Met Ala Gly Phe Leu Arg Thr Leu His Leu Leu Ser
        115                 120                 125
Arg Trp Asp Trp Gln Gln Glu Pro Leu Met Val Asp Leu Gly Gly Gln
    130                 135                 140
Leu Asp Gln Asn Ala Val Glu Val Ile Arg Thr Arg Phe Asp Ala Trp
145                 150                 155                 160
Arg Lys Ile Asp Pro Ala Met Asn Asn Val Ala Leu Phe Val Ala Ser
                165                 170                 175
Asp Ile Asp Thr Asp Gly Ile Ser Trp Thr Gln Tyr Glu Met Pro Ser
            180                 185                 190
Lys Val Val Ala Ala Arg Met Ser Ser Leu Ala Lys Ala Ala Val Arg
        195                 200                 205
Leu Met Arg Glu Lys Gly Tyr Ala Leu Asp Val Ser Asp Leu Phe His
    210                 215                 220
Thr Ser Leu Ala Pro Tyr Asp Phe Val Leu Ser Leu Arg Ser Lys Ala
225                 230                 235                 240
Leu Thr Glu Val Leu Ala Pro Pro Pro Pro Ser Ser Ser Ser Ser Ser
                245                 250                 255
Ser Lys Phe Lys Asn Leu Gln Gln Gln Ile Ile Pro Glu Arg Ala Asp
            260                 265                 270
Arg Leu Thr Val Ala Arg Thr Phe Val Arg Glu Leu Gln Ala Cys Phe
        275                 280                 285
Ser Pro Asn Ile Leu Phe Phe His Gly Asp Glu Gln Cys Asp Val Ile
    290                 295                 300
Ala Gly Leu Trp Asn Pro Ser Thr Val Lys Pro Lys Val Trp Ser Leu
305                 310                 315                 320
Lys Met Thr Tyr Ser Thr Lys Pro Val Ala Leu Val Lys Pro Glu Val
                325                 330                 335
Lys Gly Ser Glu Asp Val Ser Ile Asn Gln Thr Ala Ile Leu Asn Glu
            340                 345                 350
Ile Ala Arg Leu Gly Ala His Leu Ile Glu Gly Ile Asp Val Tyr Asn
        355                 360                 365
Glu Asp Ala Glu Asn Ser Ala
    370                 375
```

<210> 26539
<211> 71
<212> PRT

<213> A.fumigatus

<400> 26539
Glu Asp His Trp Ala Val Ile Cys Ile Gly Pro Ser His Asp Leu Ile
1 5 10 15
Arg Arg Leu Thr Gly Asn Ser Thr Tyr Tyr Gly Arg Thr Ala Ile Gly
20 25 30
Trp Tyr Leu Gly Leu Thr Thr Leu Tyr Ser Leu Pro Leu Arg Pro Phe
35 40 45
Arg Leu Leu Asp Phe Gly Glu Leu Trp Pro Val Thr Tyr Ile Thr Ala
50 55 60
Phe Thr Ile Glu Ser Cys Pro
65 70

<210> 26540
<211> 84
<212> PRT
<213> A.fumigatus

<400> 26540
Arg His Gln Thr Ser Gln Ser Leu Asp Ile Lys Arg Ala Glu Asp Leu
1 5 10 15
Ser Ser Val Glu Leu Leu Asn Pro Leu Gly Ser Leu Tyr Pro His Val
20 25 30
Val Ala Leu Gln Leu Gln Ser Asp Asp Thr Pro Trp Ile Arg Ala Lys
35 40 45
Asn Ser Pro Gly Tyr Arg Asp Pro Asn Ser Trp Ile Asp Val Tyr Ser
50 55 60
Thr Glu Asp Tyr Ser Lys Pro Ser Ala Arg Arg Asn Cys Gly Glu Phe
65 70 75 80
Ile His His Ile

<210> 26541
<211> 272
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (194)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26541
Phe His Gly Leu Asp Pro Ser Val Pro Trp Arg Ala Leu Leu Leu Asp
1 5 10 15
Gln Val Leu Asn Asp Phe Asn Gly Leu Gln Gln Tyr Ala Leu Val Asp
20 25 30
Ile Lys Tyr Ala Ala Arg Val Ala Asp Thr Gly Leu Ser Asp Asp Glu
35 40 45
Ala Ala Thr Ile Pro Val Asn Val Ala Thr Gly Phe Val Val Phe Phe
50 55 60
Ala Glu Ser Gly Phe Gly Leu Pro Leu Pro Asp Ser Gly Val Asp Phe
65 70 75 80
Asp Tyr Ala Ser Gln Lys Leu Val Val Ile Gly Ala Ala Thr Asn Cys
85 90 95

```
Gly Arg Tyr Ala Ile Gln Phe Ala Lys Trp Leu Gly Phe Gly Val Ile
            100                 105                 110
Val Ala Val Ala Gly Leu Arg Thr Ala Glu Glu Leu Arg Glu Leu Gly
        115                 120                 125
Ala Thr His Val Val Asp Arg His Ala Asp Asp Val Leu Arg Gln Val
    130                 135                 140
Arg Asp Ile Val Gly Asp Glu Leu Val Tyr Ala Leu Asp Ala Phe Asn
145                 150                 155                 160
Phe Gly Pro Lys Gln Glu Leu Gly Val Ala Val Leu Ser Asp Ser Arg
                165                 170                 175
Arg Gly Thr Leu Ala Thr Leu Ala Pro Ala Val Gly Glu Leu Asp Arg
            180                 185                 190
Ala Xaa Ile Gly Glu Lys Arg Ala Gly Tyr Glu Arg Arg Phe Ile Arg
        195                 200                 205
Gly Ser Cys Ala Asn His Ser Asp Asp Phe Thr Lys Leu Phe Trp Glu
    210                 215                 220
Arg Ile Thr Gly Trp Leu Lys Ala Gly Val Ile Arg Pro Ser Arg Phe
225                 230                 235                 240
Arg Val Ile Asp Gly Leu Asp Ala Asp Glu Ile Asn Ala Ala Leu Asp
                245                 250                 255
Glu Tyr Arg Asp Met Thr Gly Met Lys Val Gln Val His Pro Asn Val
            260                 265                 270
```

<210> 26542
<211> 182
<212> PRT
<213> A.fumigatus

```
<400> 26542
Ser Gln Thr Val Val Thr Glu Ala Val Ala Val Ala Leu His Asp Ser
1               5                   10                  15
Glu Val Asp Val Ser Ser Ser Ser Glu Pro Pro Pro Pro Pro Ser Trp
            20                  25                  30
Arg Gln Leu Pro Arg Arg Ala Thr Glu Lys Leu Cys Gln Arg His Ala
        35                  40                  45
Arg Trp Ala Asn Tyr Asp Ile Gly Ala Trp Leu Leu Asn Thr Val Asp
    50                  55                  60
Ser Pro Asp Pro His Pro Gly Pro Gln Pro Arg Arg Pro His Pro Pro
65                  70                  75                  80
Pro Gln Asn Pro Lys Pro Gln Pro Pro Ser His Pro Lys Lys Pro His
                85                  90                  95
Ser Pro Pro Gln Pro Lys Arg Glu Gln Ser Ile Phe Pro Gln Pro Val
            100                 105                 110
Val Ser Pro Pro Glu Leu His Pro Pro Phe Glu Gly Ala Phe Pro Ser
        115                 120                 125
Glu Tyr Val Ser Met Gly Ile Leu Val Pro Gly Gly Trp Ile Asp Val
    130                 135                 140
Ala Val Gly Cys Gly Ala Thr Val Ile Thr Cys Glu Leu Pro Gln Lys
145                 150                 155                 160
Val Thr Gly Met Gly Val Tyr Asp Val Val Leu Val Ala Leu Ala Thr
                165                 170                 175
Ala Thr Pro Asp Met Gly
            180
```

<210> 26543
<211> 70

<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (9)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26543
Pro Pro Pro Arg Ile Asn Leu Val Xaa Gly Gly Tyr Leu Pro Ser Pro
1 5 10 15
Ala Cys Thr His Ala Val Gln Ser Gly Ile Val Ser Asp Cys Thr Glu
20 25 30
Phe Tyr Lys Ala Ile Ala Gly Asp Gly Cys Tyr Ala Ile Ala Thr Ala
35 40 45
His Asp Ile Thr Leu Ala Gln Phe Ile Val Ser Tyr Ala Arg Leu Arg
50 55 60
Asn Thr Ile Asn Pro Tyr
65 70

<210> 26544
<211> 215
<212> PRT
<213> A.fumigatus

<400> 26544
His Asn Phe Ser Val Ala Arg Leu Gly Ser Cys Leu Gln Glu Gly Gly
1 5 10 15
Gly Gly Gly Ser Glu Glu Glu Glu Thr Ser Thr Ser Glu Ser Cys Ser
20 25 30
Ala Thr Ala Thr Ala Ser Val Thr Thr Val Cys Asp Tyr Ala Cys Pro
35 40 45
Asp Gly Ala Ser Thr Ser Cys Ala Thr Leu Cys Thr Ser Leu Thr Ile
50 55 60
Ser Cys Glu Pro Thr Gly Leu Val Asn Phe Ala Pro Gly Thr Val Asp
65 70 75 80
Ala Asp Ala Leu Pro Leu Thr Leu Leu Glu Ala Ser Asp Glu Ala Met
85 90 95
Thr Ser Ala Ala Glu Ser Val Ala Ser Trp Leu Asn Pro Lys Tyr Thr
100 105 110
Ser Leu Asp Pro Val Met Ile Ser Gly Thr Thr Ile Thr Ala Ser Ala
115 120 125
Thr Ala Pro Ala Val Thr Thr Ser Ala Ser Ile Thr Ser Ala Thr Ala
130 135 140
Ile Ser Ala Ser Ser Cys Asp Ile Lys Ser Thr Ser Ser Ser Ser Tyr
145 150 155 160
Cys Ser Cys Asp Gly Gly Tyr Gly Val Thr Leu Ser Thr Lys Ala Asn
165 170 175
Lys Ser Lys Thr Thr Phe Leu Val Cys Asp Val Thr Pro Ala Leu Thr
180 185 190
Ile Ser Thr Ile Lys Pro Thr Thr Thr Ser Thr Lys Pro Ser Ser Pro
195 200 205
Arg Gly Ser Lys Asp Pro Arg
210 215

<210> 26545

<211> 172
<212> PRT
<213> A.fumigatus

<400> 26545
Leu His Met Ile Gly Glu Ser Gly Leu Gly Lys Ser Thr Leu Val Asn
1 5 10 15
Thr Leu Phe Asn Thr Ser Leu Tyr Pro Pro Lys Glu Arg Thr Gly Pro
20 25 30
Ser His Asp Ile Ile Pro Lys Thr Val Ser Ile Gln Ser Ile Ser Ala
35 40 45
Asp Ile Glu Glu Asn Gly Ala Arg Leu Arg Leu Thr Val Val Asp Thr
50 55 60
Pro Gly Phe Gly Asp Phe Val Asn Asn Asp Asp Ser Trp Arg Pro Ile
65 70 75 80
Val Glu Asn Ile Glu Gln Arg Tyr Asp Ala Tyr Leu Glu Ala Glu Asn
85 90 95
Lys Val Asn Arg Thr Asn Ile Val Asp Asn Arg Ile His Ala Cys Val
100 105 110
Tyr Phe Ile Gln Pro Thr Gly His Ser Leu Lys Pro Leu Asp Ile Glu
115 120 125
Val Met Arg Arg Leu His Thr Lys Val Asn Leu Ile Pro Val Ile Ala
130 135 140
Lys Ala Asp Thr Leu Thr Asp Glu Glu Ile Ser Leu Phe Lys Gln Arg
145 150 155 160
Val Ser Ser Pro Arg Phe Ser Ser Ile Leu Gly Gln
165 170

<210> 26546
<211> 76
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (59)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26546
Ile Leu Ala Asp Ile Gln His His Ser Ile Gln Ile Phe Glu Gly Pro
1 5 10 15
Arg Tyr Glu Leu Asp Asp Glu Glu Thr Ile Ala Glu Asn Gln Glu Ile
20 25 30
Met Ser Lys Val Pro Phe Ala Val Val Gly Ala Asn Thr Glu Val Thr
35 40 45
Thr Ala Asp Gly Arg Lys Val Arg Gly Arg Xaa Tyr Pro Trp Gly Val
50 55 60
Ile Glu Val Asp Asn Glu Glu His Cys Asp Phe Val
65 70 75

<210> 26547
<211> 220
<212> PRT
<213> A.fumigatus

<400> 26547

```
Ser Ala Val Pro Ser Ser Pro Val Val Lys Ile Arg Asp Ser Phe Ala
1               5                  10                  15
Ser Ser Tyr Val Val Val Pro Thr Ser Pro Pro Thr Pro Arg Gln Leu
            20                  25                  30
Ser Leu Val Ile Leu Leu Ser Ser Thr Cys Tyr Asn Lys Thr Met Ser
        35                  40                  45
Val Ala Ser Glu Asn Pro Thr Val Glu Glu His Leu Pro Leu Glu Ser
    50                  55                  60
Leu Ser Pro Thr Ile Ser Ser Leu Gln Gln Lys Pro Gly Ser Thr Thr
65                  70                  75                  80
Leu Ser Leu Ser Ser Leu Leu Pro Gly Thr Tyr Pro Ser Arg Ser Glu
                85                  90                  95
Ser Arg Ile Pro Tyr Asp Phe Ala Asp Ser Ser Ser Asp Asp Val Ala
            100                 105                 110
Ser Pro Ser Ser Pro Ala Asn Gly Thr Pro Ala Ser Val Lys Glu Ser
        115                 120                 125
Pro Ala Pro Ser Ser Pro Gly Ser Pro Tyr Val Glu Arg Ser Asn Pro
    130                 135                 140
Met Gly Ala Gly Asn Ala Gln Thr Val Ser Ser Lys Asp Pro Lys Ala
145                 150                 155                 160
Val Ala Gln Ala Ala Thr Asp Met Lys Asn Val Val Arg Arg Lys Leu
                165                 170                 175
Thr Gly Tyr Val Gly Phe Ala Asn Leu Pro Asn Gln Trp His Arg Lys
            180                 185                 190
Ser Val Arg Lys Gly Phe Asn Phe Asn Val Met Val Val Gly Lys Phe
        195                 200                 205
Arg Pro Asn Gly Val Arg Lys Arg Ser Gln Phe Arg
    210                 215                 220
```

<210> 26548
<211> 184
<212> PRT
<213> A.fumigatus

<400> 26548

```
Tyr Val Thr Ala Cys Phe Gln Val Asn Leu Gly Gln Ala Tyr Leu Leu
1               5                  10                  15
Arg Gly Phe Tyr Phe Lys Tyr Cys Trp Leu Leu Thr Leu Trp Leu Ser
            20                  25                  30
Met Phe Cys Trp Ser Ala Ser Phe Tyr Pro Gln Pro Ile Ser Asn Phe
        35                  40                  45
Arg Arg Arg Ser Thr Val Gly Leu Ala Ile Asp Phe Pro Thr Ile Asn
    50                  55                  60
Val Leu Gly Phe Val Cys Tyr Thr Ala Tyr Thr Ser Ala Phe Leu Tyr
65                  70                  75                  80
Ser Pro Val Ile Arg Arg Gln Tyr Ala Ala Arg His Pro Ser Asp Glu
                85                  90                  95
Glu Ser Thr Val Arg Phe Asn Asp Phe Ala Phe Ala Leu His Ala Val
            100                 105                 110
Ile Leu Ser Thr Leu Val Tyr Thr Gln Phe Trp Pro Lys Ile Trp Gly
        115                 120                 125
Phe Lys Val Ser Arg Phe Gln Thr Val Ser Lys Pro Val Leu Gly Leu
    130                 135                 140
Phe Trp Gly Ser Asn Ala Ala Ile Gly Ile Val Val Cys Ile Val Leu
145                 150                 155                 160
Val Lys Ser Pro Asp Gly Gly Tyr Asp Pro Ser Thr Trp Ala Trp Ile
```

```
                165                 170                 175
Asp Val Val Ser Gly Leu Asp Asp
            180
```

<210> 26549
<211> 200
<212> PRT
<213> A.fumigatus

<400> 26549

```
Arg Pro Lys Ser Ser Arg Ile Gly Arg Pro Val Val Lys Met Cys Gly
1               5                  10                  15
Ala Phe Gly Met Cys Val Ser Gln Leu Ile Val Ala Ile Val Gly Thr
            20                  25                  30
Ala Thr Ser Ser Asp Val Gly Asn Lys Val Leu Ile Ala Phe Val Cys
        35                  40                  45
Ile Tyr Ile Phe Phe Cys Ala Cys Ser Trp Gly Pro Val Ala Trp Val
    50                  55                  60
Val Thr Gly Glu Leu Phe Pro Leu Lys Ala Arg Ala Lys Cys Leu Ser
65                  70                  75                  80
Ile Thr Thr Ala Thr Asn Trp Leu Leu Asn Trp Ala Ile Ala Tyr Ala
                85                  90                  95
Thr Pro Tyr Met Val Asn Ser Gly Pro Gly Asn Ala Asn Leu Gln Ser
            100                 105                 110
Lys Val Phe Phe Ile Trp Gly Gly Phe Cys Phe Ile Ala Phe Val Phe
        115                 120                 125
Val Tyr Thr Cys Ile Tyr Glu Thr Lys Gly Leu Ser Leu Glu Gln Val
    130                 135                 140
Asp Glu Leu Tyr Gly Lys Val Ser Lys Ala Trp Lys Ser Ser Gly Phe
145                 150                 155                 160
Val Pro Thr Val His Phe Thr Asp Val Arg Asp Val Ala Glu Gly His
                165                 170                 175
Gln Lys Ala Ser Leu Ser Gln Leu Glu Val Asp Ala Gln Glu Lys His
            180                 185                 190
Lys Leu Glu His Leu Glu Lys Ala
        195                 200
```

<210> 26550
<211> 165
<212> PRT
<213> A.fumigatus

<400> 26550

```
Leu Gly Ser Cys Ser Arg Ser Arg Pro Val Pro Ser Val Ser Pro Ser
1               5                  10                  15
Pro Pro Pro Pro Thr Gly Cys Ser Thr Gly Pro Ser Pro Thr Arg Leu
            20                  25                  30
Leu Thr Trp Ser Thr Ala Ala Arg Ala Met Pro Thr Cys Ser Pro Arg
        35                  40                  45
Cys Ser Ser Ser Gly Val Ala Ser Ala Ser Ser Arg Leu Ser Leu Cys
    50                  55                  60
Thr Pro Ala Ser Thr Arg Pro Arg Val Ser Leu Ser Ser Lys Ser Thr
65                  70                  75                  80
Ser Cys Thr Ala Arg Ser Pro Arg Pro Gly Ser Arg Val Val Ser Ser
                85                  90                  95
Pro Arg Ser Thr Ser Pro Met Ser Gly Met Trp Pro Lys Asp Thr Arg
```

```
            100                 105                 110
Arg Pro Val Phe Leu Ser Leu Arg Leu Met Leu Lys Arg Ser Thr Ser
        115                 120                 125
Trp Asn Ile Trp Arg Arg Arg Lys Ser Val Ser Phe Pro Leu Val Leu
    130                 135                 140
Leu Gly Ala Cys Ile Phe Gly Ser Leu Ala Leu Leu Thr Ala His Met
145                 150                 155                 160
Glu Ile Pro Gly Leu
                165
```

<210> 26551
<211> 159
<212> PRT
<213> A.fumigatus

<400> 26551

```
Leu Cys Arg Trp Tyr Val Ala Ala Arg Pro Trp Arg Thr Arg Ser His
1               5                   10                  15
Leu Leu Ile Ser Trp Ser His Lys Ile Leu Val Val Val Ala Thr Val
            20                  25                  30
Phe Leu Thr Gln Cys Val Gln His Gly Phe Gly Lys Asn Leu Leu Leu
        35                  40                  45
Leu Val Lys Glu Lys Pro His Asp Val Gln Leu Val Leu Lys Tyr Ile
    50                  55                  60
Ala Ile Gln Val Pro Ile Val Thr Ile Ser Thr Thr Ile Ala Arg Cys
65                  70                  75                  80
Ser Phe Val Leu Tyr Leu Leu Ala Ile Leu Gly Asn Asn Lys Lys Tyr
                85                  90                  95
Gln Ile Ala Leu Trp Thr Val Met Val Leu Gln Phe Ala Gly Asn Val
            100                 105                 110
Val Ser Ala Val Leu Pro Leu Ser Ile Cys Arg Asn Val Arg Ile Leu
        115                 120                 125
Trp Asp Pro Thr Thr Lys Thr Thr Cys Gly Asp Val His Ala Val Ile
    130                 135                 140
Lys Phe Ala Tyr Tyr Ser Asn Ser Arg Ser Pro Leu Leu Ser Pro
145                 150                 155
```

<210> 26552
<211> 61
<212> PRT
<213> A.fumigatus

<400> 26552

```
Arg Val Ile Ala Ala Asn Ser Ala Cys Asp Leu Phe Leu Ala Val Phe
1               5                   10                  15
Pro Thr Leu Ile Phe Trp Asn Leu Asn Leu Lys Met Arg Ile Lys Ile
            20                  25                  30
Ser Leu Ile Ile Leu Leu Ser Leu Gly Ile Leu Tyr Val Ala Ser Pro
        35                  40                  45
Pro Pro Leu Ile Ile Met Ile Leu Thr Arg Pro Val Pro
    50                  55                  60
```

<210> 26553
<211> 266
<212> PRT
<213> A.fumigatus

<400> 26553
Pro Met Ser Ser Gln Pro Leu Pro Arg Val Leu Phe Phe Asp Val Phe
1 5 10 15
Gly Thr Val Val Gln Trp Arg Thr Ser Val Ser Glu Ala Leu Arg Asp
20 25 30
Ala Ala Gln Ser Ala Leu Arg Asp Pro Glu Lys Asn Leu Pro Asp Ala
35 40 45
Val Arg Ala Lys Ala Ser Ser Met Thr Gln Ser Asp Trp Leu Asp Ile
50 55 60
Thr Gln Glu Trp Arg Glu Ser Tyr Tyr His Phe Thr Arg Asn Ser Asp
65 70 75 80
Leu Ser Lys Pro Phe Val Ser Val Asp Glu His His Tyr Ser Tyr Leu
85 90 95
Leu Lys Leu Leu Gln Ala His Gly Leu Glu Thr Leu Phe Thr Asp Ala
100 105 110
Gln Arg Trp Asp Leu Ala Leu Ser Trp His Arg Leu Ala Pro Trp Pro
115 120 125
Asp Ser Val Arg Gly Leu Glu Leu Leu Asn Arg Lys Phe Arg Thr Cys
130 135 140
Thr Leu Ser Asn Gly Asn Val Ala Leu Leu Gln Asp Leu Cys Arg His
145 150 155 160
Gly Ser Leu Pro Phe Thr Glu Val Leu Ser Ala Glu His Phe Gly Ala
165 170 175
Tyr Lys Pro Ser Pro Lys Val Tyr Gly Gly Ala Ala Glu Arg Phe Gly
180 185 190
Leu Glu Pro Gly Glu Cys Ala Leu Val Ala Ala His Leu Gly Asp Leu
195 200 205
Lys Ala Ala Lys Ala Cys Gly Phe Gln Thr Val Tyr Val Glu Arg Pro
210 215 220
Lys Glu Glu Thr Leu Asp Met Glu Gln Ala Arg Glu Glu Gly Tyr Val
225 230 235 240
Asp Ile Trp Ile Asp Ala Gly Cys Asp Gly Phe Val Glu Leu Ala Arg
245 250 255
Arg Phe Ser Leu Asp Ile Glu Ala Lys Ala
260 265

<210> 26554
<211> 92
<212> PRT
<213> A.fumigatus

<400> 26554
Thr Ala Trp Gln Val Gln Gln Ile Arg Arg Ser Leu His Gln Ser Arg
1 5 10 15
Tyr Pro His Ile Pro Pro Pro Val Pro Ala Pro Cys Pro Thr Ser Pro
20 25 30
Pro Ser Asp Ala Pro His Lys Pro Ser Gly Thr His Arg Leu Trp Gln
35 40 45
Leu Ser Asp Pro Pro Asp Ala Pro Pro Gln Ala His Thr Leu Pro Ala
50 55 60
Pro Val Arg Thr Ser Pro Gln Pro Arg Arg Arg Pro Leu Ala Thr Ala
65 70 75 80
Cys Thr Pro Gln Ser Ala Leu Arg Leu Ala Pro Leu
85 90

<210> 26555
<211> 164
<212> PRT
<213> A.fumigatus

<400> 26555
Pro Ala Ala Leu Ser Gln Pro Ser Thr Ala Phe Ser Leu Asn Cys Met
1 5 10 15
Ser Pro Ser Ser Ser Asn Gly Asn Ser His Phe Glu Ala Asp His Ser
20 25 30
Leu Ile Gly Val Arg Thr Thr Asp Glu Gln Thr Thr Ala Phe Thr Arg
35 40 45
Ser Ile Ser His Leu Phe Gly Ala Gly Asp Gln Asn Thr Phe Leu Glu
50 55 60
Leu Leu Val Arg Gly Val Arg Leu Pro Tyr Leu Ser Cys Val Leu Lys
65 70 75 80
Asp Leu Phe Asp Phe Val Lys Val Cys Leu Gly Leu Asn Val Leu Cys
85 90 95
Asn Ile Ile Met Trp Ala Leu Phe Thr Arg Ala Leu Thr Ala Ser Pro
100 105 110
Ser Thr Thr Lys Val Ser Ile Thr Asn Thr Ser Ala Asn Phe Leu Ile
115 120 125
Thr Ala Leu Leu Gly Met Ile Val Phe Arg Glu Lys Val Ser Gly Leu
130 135 140
Trp Trp Leu Gly Ala Ala Met Met Gly Gly Gly Cys Ile Leu Val Gly
145 150 155 160
Met Arg Asp Ser

<210> 26556
<211> 111
<212> PRT
<213> A.fumigatus

<400> 26556
Lys Lys Cys Thr Val Tyr Ala Pro Arg Trp Val Leu Phe Pro Gly Leu
1 5 10 15
Asp Cys Pro Val Phe Leu Gly Leu Ala Leu Thr Thr Gly Ser Gly Ile
20 25 30
Val Val Ala Ala Tyr Asn Leu Gly Cys Phe Ala Gly Ser Ile Pro Thr
35 40 45
Ile Trp Val Gly Asn Trp Leu Gly Arg Arg Lys Thr Ile Phe Leu Gly
50 55 60
Ser Ala Ile Met Val Val Gly Ala Ile Leu Gln Cys Thr Ser Tyr His
65 70 75 80
Leu Pro Gln Leu Ile Ile Gly Arg Leu Val Thr Gly Phe Gly Glu Phe
85 90 95
Ile Arg Leu Asn Arg Asp Ile Pro Asp Ser Ser Arg Ser Met Cys
100 105 110

<210> 26557
<211> 168
<212> PRT
<213> A.fumigatus

<400> 26557

```
Ala Val Trp Ser Ser Val Pro Asp Val Val Trp Gly Arg Trp Asp Val
1               5                  10                  15
Asp Leu His Gly Asp Pro Gly Arg His Cys Gln Ser Arg His Arg Cys
            20                  25                  30
Ile Gln Ser Arg Leu Cys Arg Leu Pro Leu Cys Val Gln His Leu Leu
        35                  40                  45
Arg His Trp Leu Val Gly Tyr Asp Leu Ala Val Pro Cys Arg Asn Cys
    50                  55                  60
Ala Ser Glu Asp Pro Cys Pro Gly Gln Cys Leu Gly Tyr Val Leu Glu
65                  70                  75                  80
Leu Asp Phe Gln Leu His Gly Arg His Asp Tyr Ser Arg Gly Ile Arg
                85                  90                  95
Glu His Gln Met Ala Asp Leu His Tyr Phe Cys Arg His Val Ser Tyr
            100                 105                 110
Pro Tyr Ser Leu Val Pro Val Gln Thr Leu Thr Pro Asp Ser Asn Ala
        115                 120                 125
Ala Ile Phe Pro Val Val Tyr Phe Phe Tyr Pro Glu Thr Thr Arg Arg
    130                 135                 140
Ser Leu Glu Glu Met Asp Arg Ile Phe Arg Lys Asn Arg Ser Ile Phe
145                 150                 155                 160
Ser Val Val Gln Val Ala Thr Asp
                165
```

<210> 26558
<211> 143
<212> PRT
<213> A.fumigatus

```
<400> 26558
Val Trp Asp Gly Ser Ile Phe Ser Gly Ile Gly Ala Phe Arg Glu Arg
1               5                  10                  15
Tyr Leu Thr Val Phe Ser Thr Ser Tyr Asp Gln Gly Val Thr Gly Gly
            20                  25                  30
Leu Leu Thr Leu Glu Ser Phe Ile Lys Tyr Phe Pro Thr Ile Ala Leu
        35                  40                  45
Asn Gly Pro Tyr Phe Glu Ser Leu Ser Pro Ser Glu Arg Ser Ala Gln
    50                  55                  60
Ser Thr Arg Gln Gly Gly Tyr Tyr Phe Gln Ala Leu Ile Ala Leu Phe
65                  70                  75                  80
Ser Ser Val Trp Arg Leu Gln Leu Val Gln Val Ser Leu Leu Leu Pro
                85                  90                  95
Ile Ile Trp Asp Val Ser Pro Val Arg Phe Pro Gln Ser Gly Trp Val
            100                 105                 110
Ile Gly Trp Val Ala Ala Arg Gln Ser Ser Ser Val Leu Arg Ser Trp
        115                 120                 125
Trp Ser Glu Arg Ser Cys Ser Val His Pro Thr Ile Ser Arg Ser
    130                 135                 140
```

<210> 26559
<211> 331
<212> PRT
<213> A.fumigatus

```
<400> 26559
Thr Gly Ile Ser Pro Thr Gln Ala Asp Pro Cys Ala Asp Ser Asp Asp
1               5                  10                  15
```

```
Thr Gly Asn Gly Met Asn Thr Ser Thr Val Pro Thr Trp Gln Ser Glu
            20                  25                  30
Cys Cys Arg Ser Asn Arg Arg Gly Gln Met Val Met Ile Glu Gly Ala
        35                  40                  45
Met Ile Thr Cys Gly Ile Thr Thr Ser Tyr Trp Ile Asp Phe Gly Leu
    50                  55                  60
Leu Phe Ala Asp Pro Asn Glu Val Ala Trp Arg Phe Pro Leu Ala Phe
65                  70                  75                  80
Gln Ile Phe Phe Ala Ala Ile Ile Leu Ala Phe Val Met Trp Leu Pro
                85                  90                  95
Glu Ser Pro Arg Trp Leu Val Leu Lys Gly Arg Glu Asp Glu Ala Arg
            100                 105                 110
Gln Thr Leu Thr Ala Leu Leu Gly His Asp Ala Asp Glu Thr Phe Val
        115                 120                 125
Asp Thr Glu Phe Thr Ala Ile Lys Ala Thr Val Leu Glu Met Ser Lys
    130                 135                 140
Gly Ser Phe Arg Asp Met Phe Thr Met Thr Glu Asp Arg His Phe His
145                 150                 155                 160
Arg Thr Val Leu Ala Tyr Val Asn Gln Met Phe Gln Gln Ile Ser Gly
                165                 170                 175
Ile Asn Leu Ile Thr Tyr Tyr Ile Pro Val Val Leu Glu Gln Gln Leu
            180                 185                 190
Gly Met Asp Met Ile Lys Ser Arg Leu Val Ala Ala Cys Asn Gly Thr
        195                 200                 205
Glu Tyr Phe Ile Ala Ser Trp Ile Ala Val Phe Thr Ile Glu Gln Phe
    210                 215                 220
Gly Arg Arg Ser Leu Met Leu Phe Gly Ala Ala Gly Met Ser Ile Ser
225                 230                 235                 240
Met Val Ile Leu Ala Val Thr Ala Ser Leu Gly Thr Asp Ala Ser Lys
                245                 250                 255
Val Ala Cys Ala Val Phe Leu Phe Val Phe Asn Thr Phe Phe Ala Ile
            260                 265                 270
Gly Trp Leu Gly Met Thr Trp Leu Tyr Pro Ala Glu Ile Val Pro Leu
        275                 280                 285
Lys Ile Arg Ala Pro Ala Asn Ala Leu Ala Thr Ser Ser Asn Trp Ile
    290                 295                 300
Phe Asn Phe Met Val Val Met Ile Thr Pro Val Ala Phe Glu Asn Ile
305                 310                 315                 320
Lys Trp Arg Thr Tyr Ile Ile Phe Ala Val Met
                325                 330
```

<210> 26560
<211> 121
<212> PRT
<213> A.fumigatus

<400> 26560

```
Glu Ser Phe Ile Ser Thr Arg Ile Val Met Arg Gly Ser Asn Ile Leu
1               5                   10                  15
Glu Gln Ile Thr Leu Ile Phe Val Ile Met Ile Asn Ser Thr Phe Gln
            20                  25                  30
Ile Gly Ile Ile Phe Val Val Leu Asn Ile Leu Leu Asp Leu Leu Val
        35                  40                  45
Ala Arg Tyr Lys Tyr Phe Asp Asn Gly Thr Ser Gly Gly Gly Trp Ser
    50                  55                  60
Pro Ile Arg Ser Gly Thr Glu Pro Asp Asp Pro Phe Ala Ser Phe Ser
```

```
65                  70                  75                  80
Ser Thr Asn Ile Ile Thr Val Lys Thr Ile His Ser Pro Tyr His Cys
                85                  90                  95
Leu Val Lys Glu Asn Ile Ile Ile Asp Ile Thr Asn Asn Asn Tyr Ser
            100                 105                 110
Lys Glu Ser Gly Leu Leu Ser Leu Phe
        115                 120
```

<210> 26561
<211> 114
<212> PRT
<213> A.fumigatus

<400> 26561

```
Leu Ser Ser Phe Leu Ser Leu Ser Ser Leu Leu Leu Ser Pro Pro Leu
1               5                   10                  15
Leu Arg Thr Ser Leu Pro Pro Thr Gln Gln Pro Ser Pro Asn Leu Arg
            20                  25                  30
Thr Gln Thr Gln Leu Ser Ile His Phe Pro Ser Ile Ser Phe His Pro
        35                  40                  45
Ser Ile Ser Leu Ile Ser Leu Ser Leu Leu Phe Asn Phe Ser Phe Phe
    50                  55                  60
Phe Phe Ser Val Val Phe Arg Leu Asn Pro Ile Ser Val Thr Met Glu
65                  70                  75                  80
Gly Thr Trp Phe Leu Asp Thr Ser Thr Ala Leu Leu Gly Phe Pro Ala
                85                  90                  95
Thr Lys Gln Pro Pro Val Pro Thr Pro Leu Leu Leu Ala Cys Ser Thr
            100                 105                 110
Pro Ile
```

<210> 26562
<211> 191
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (177)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26562

```
Pro Pro Cys Phe Arg Val Ile Trp Gly Ile Leu Glu Phe Ser Leu Gly
1               5                   10                  15
Ile Gln Leu Ser Asp Glu Asp Ile Lys Gln Ile Arg His Ile Leu Asp
            20                  25                  30
Val Ala Asp Arg Ile Phe Val Asn Thr Lys Asp Tyr Phe Ser Trp Glu
        35                  40                  45
Val Glu Arg Asp Arg Asp Pro Arg Gly Gln Asn Thr Val Lys Thr Val
    50                  55                  60
Met Asp Ser Glu Gly Lys Ser Glu Gln Gln Ala Lys Glu Lys Leu Arg
65                  70                  75                  80
Val Ala Ile Leu Glu Asp Glu Arg Lys Tyr Lys Leu Leu Met Lys Gln
                85                  90                  95
Phe Ala Leu Ser Thr Leu Asp Ala Pro Ala His Val Gln Arg Phe Leu
            100                 105                 110
```

```
Val Met Leu Glu Val Leu Leu Gly Gly His His Ile Trp Ser Ala Ala
        115                 120                 125
Cys Gly Arg Tyr Lys Arg Arg Ala Pro Ser Val Gly Asn Pro Phe Leu
    130                 135                 140
Arg Arg Glu Ser Ile Ile Pro Asn Arg Val Glu Asp Ala Asn Glu Ser
145                 150                 155                 160
Ala Ala Ser Pro Val Ala Leu Gly Asn Ser Ala Leu Leu Asp Pro Ser
                165                 170                 175
Xaa Tyr Ile Arg Leu His Gln Pro Pro Trp Lys Ile Lys Asn Pro
            180                 185                 190

<210> 26563
<211> 139
<212> PRT
<213> A.fumigatus

<400> 26563
Arg Tyr Pro Ile Leu Val Leu Leu Ala Glu Val Glu Ala Asn Leu Ala
1               5                   10                  15
Glu Glu Asp Val Arg Asp Arg Asp Glu Leu Gly His Thr Thr Asp Tyr
            20                  25                  30
His Lys Met Ala Ala Ser Ala Leu Arg Ala Ser Leu Gly Val Gly Thr
        35                  40                  45
Val Ser Ser Met His Gly Leu Lys Gly Asn Ala Phe Met Ser Arg His
    50                  55                  60
Leu Thr Ala Phe Met Thr Lys Tyr Gly Ala Ala Gly Lys Ala Leu Met
65                  70                  75                  80
Ala Arg Cys Leu Asp Asn Trp Val Gln Pro Gln Glu Ser Arg Val Glu
                85                  90                  95
Thr Glu Pro Val Asn Phe Glu Asp Ser Val Ala Arg Arg Val Val Thr
            100                 105                 110
Val Gly Thr Arg Tyr Val Phe Leu Ala Met Ala Glu Ser Ala Ser Leu
        115                 120                 125
Thr Ser Leu Phe Gln Gly Asp Met Gly Asp Pro
    130                 135

<210> 26564
<211> 79
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (15)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26564
Arg Ile Leu Tyr Phe Pro Gly Arg Leu Val Lys Thr Asp Val Xaa Arg
1               5                   10                  15
Trp Ile Gln Glu Ser Arg Ile Ala Gln Gly Tyr Gly Thr Arg Gly Ala
            20                  25                  30
Leu Ile Arg Val Leu Asp Ser Val Trp Tyr Asp Ala Phe Ser Pro Lys
        35                  40                  45
Glu Gly Ile Pro His Arg Trp Ser Ala Thr Phe Val Ser Ser Thr Gly
    50                  55                  60
Ser Arg Pro Asp Met Met Ala Ala Glu Lys His Leu Lys His Asp
```

65 70 75

<210> 26565
<211> 604
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (62),(84),(85)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26565
Pro Asn Leu Tyr Asn Pro Asp Ser Ser Leu Phe Phe Arg Lys Arg Tyr
1 5 10 15
Gln Phe Arg Pro Phe Ser Pro Glu Thr Tyr Ser Met Pro Lys Asn Phe
20 25 30
Pro Asp Cys Leu Phe Gly Pro Ile Pro Met Gly Asn Leu Lys Leu Leu
35 40 45
Val Ser Gly Asn Tyr Ile Val Trp Ala Ser Gly Val Ser Xaa Lys Val
50 55 60
Tyr Val Ser Ala Leu Asn Pro Phe Ser Gln Ser Cys Ala Tyr Gln Cys
65 70 75 80
Leu Gly Lys Xaa Xaa Thr Ser Val Gln Thr Arg Glu Ala Arg Arg Tyr
85 90 95
Ser Thr Ser Ser Ser Ser Thr Asp Pro Asp Ala Ser Arg Asn Asp Ser
100 105 110
Pro His Gly Ser Ala Val Ser Asp Tyr Pro Val Val Ala Leu Arg Gly
115 120 125
Arg Trp Leu Ala Ile Val Pro Pro Ser Ser Thr Tyr Arg Ala Ser Ile
130 135 140
Cys Gly Arg Val Pro Ala Ser Leu Ile Gln Gly Lys Ala Phe Gly Leu
145 150 155 160
Glu Thr Arg Ser Pro Pro Ala Lys Pro Pro Val Thr Ser Ala Thr Asp
165 170 175
Val Gly Glu Gly Glu Ser Leu Phe Asp Lys Val Ala Arg Gly Val Thr
180 185 190
Gln Glu Leu Val Arg Gly Ala Arg Trp Met Gly Asp Gln Gly Leu Gln
195 200 205
Ala Trp Asn Ser Tyr Trp Asn Lys Asp Gln Ser Gln Asn Thr Ser Ser
210 215 220
Arg Arg Ser Pro Asn Phe Met Asp Leu Pro Gln Gln Gly Tyr Ser Leu
225 230 235 240
Phe Pro Pro Thr His Ala Gln Glu Thr Gln Thr Thr Ser Ser Thr Glu
245 250 255
Pro Asp Phe Val Ser Ile Leu Asp Leu Arg Arg Leu Asp Asp Gly Gly
260 265 270
Glu Ala Lys Asn Ala Ile Leu Asn Pro Ile Val Thr Phe Gln Ala Pro
275 280 285
Asn Gly Cys Ser Phe Leu Ser Phe Ser Pro Asn Gly Leu Met Leu Leu
290 295 300
Thr Ala Ser Lys Lys Gly Asp Val Gln Tyr Val Trp Asp Leu Met Gln
305 310 315 320
Ala Arg His Cys Arg Ala Gly Val Phe Phe Ser Glu Asp Ser Thr Pro
325 330 335
Pro Ser Ala Asn Val Arg Gln Val Ala Arg Phe Ala Arg Leu Thr Thr

```
            340                 345                 350
Ser Ser Ile Val Asp Val Ile Trp Ser Pro Pro Ser Gly Asp Arg Leu
        355                 360                 365
Ala Val Ile Thr Arg Lys Gly Thr Val His Val Phe Asp Leu Pro Arg
    370                 375                 380
Ser Ala Phe Gln Trp Pro Pro Phe Arg Arg Ala Arg Pro Gln Pro His
385                 390                 395                 400
Lys Ser Gln Ala Asn Asn Ser Pro Thr Asp Glu Ala Thr Asp Arg Gly
                405                 410                 415
Ala Val Thr Asn Pro Leu Ser Ala Ala Phe Lys Leu Val Gly Gly Lys
            420                 425                 430
Thr Gln Pro Ile Leu Ala Ala Val Arg Gly Arg Thr Pro Ser Ala Ser
        435                 440                 445
Ser Ala Phe Pro Ala Val Ser Ala Phe Ala Met Pro Ser Ala Ala Gly
    450                 455                 460
Val Arg Ser Gly Arg Ala Val Ala Ala Gly Leu Ser Lys Ser Met Gly
465                 470                 475                 480
Ala Ala Thr Gly Thr Val Asn Thr Leu Arg His Ala Gly Glu Asn Arg
                485                 490                 495
Leu His Leu Ser Gly Leu Ala Arg Asp Pro Ala Ala Phe Arg Val Val
            500                 505                 510
Trp Ile Ser Asn Lys Gly Gln Ser Phe Leu Gly Val Val Asn Asn Gly
        515                 520                 525
Phe Phe Pro Leu Tyr Arg Val Lys Arg Ser Met Ser Ser His Arg Asn
    530                 535                 540
Arg Gln Leu Gln Ser Val Ile Gly Asn Lys Glu Ile Glu Tyr Lys Leu
545                 550                 555                 560
Pro Ala Asn Leu Gln Ile Pro Cys Gly Pro Leu Leu Ile Gly Lys Phe
                565                 570                 575
Ala His Glu His Thr Val Ser Ala Ile Leu Thr Leu Pro Ser Phe Lys
            580                 585                 590
Leu Ala Gly Pro Pro Ile Pro Pro Arg Ser Asp Ala
        595                 600
```

<210> 26566
<211> 94
<212> PRT
<213> A.fumigatus

<400> 26566

```
Asp Thr Phe Phe Ile Leu Ala Gln Gly Met Arg Cys Thr Asn Gln Gln
1               5                   10                  15
Ile Leu Gly Asn Leu Ala Ile Leu Glu Phe Glu Glu Ser Asn Phe Ile
            20                  25                  30
Ile Ser Ala Asn Ala Leu Phe Thr Leu Thr Leu Leu Leu Gln Glu Gly
        35                  40                  45
Tyr Gly Ser Met Thr Gly Leu Cys Val Thr Thr Ile Leu His His Phe
    50                  55                  60
Gln Tyr Val Leu Leu Leu Ala Gly Cys Ile Lys His Arg Leu His Phe
65                  70                  75                  80
Leu Leu Pro Val Ile Ala Gly Pro Trp Phe Trp Arg Leu Gln
                85                  90
```

<210> 26567
<211> 333
<212> PRT

<213> A.fumigatus

<400> 26567

```
Gly Glu Glu Ile Arg Arg Leu Leu Ala Thr Glu Asp Glu Leu Arg Ser
1               5                  10                  15
Lys Leu Tyr Leu Thr Met Trp Phe Ser Lys Glu Gly Phe Leu Trp Ile
            20                  25                  30
Pro Val Ser Thr Lys Glu Gly Leu Arg Thr Asp Ala Val Ile Gln Arg
        35                  40                  45
Ser Val His Ile Arg Gln Ser Tyr Asp Val Ile Val Ile Gly Ala Gly
    50                  55                  60
Phe Ala Gly Leu Ile Ala Ala Arg Asp Leu Ser Gln Lys His His Leu
65                  70                  75                  80
Lys Val Leu Ile Val Glu Ala Arg Asp Arg Ile Gly Gly Arg Thr Trp
                85                  90                  95
Thr Ala Gln Val Leu Gly Glu Glu Met Glu Met Gly Gly Thr Trp Val
            100                 105                 110
His Trp Ala Gln Pro His Leu Tyr Ala Glu Leu His Arg Tyr Gly Leu
        115                 120                 125
His Arg Asn Leu Lys Thr Ser Ser Gly Thr Tyr Ser Pro Glu Lys Gln
    130                 135                 140
Phe Phe Lys Gln Ala Gly Arg Pro Val Glu Glu Ile Ser Leu Asn Lys
145                 150                 155                 160
Ala Ala Glu Ala Leu Glu Arg Val Ala Gln Met Phe Phe Thr Val Asp
                165                 170                 175
Ser Thr Asp Ser Arg Gly Leu Met Pro Tyr Pro His Asp Pro Leu Arg
            180                 185                 190
Glu Pro Ala Lys Trp Lys Gln Tyr Asp His Trp Thr Val Lys Asp Arg
        195                 200                 205
Leu Asp Arg Leu Glu Gly Leu Pro Met Trp Glu Lys Gln Leu Phe Glu
    210                 215                 220
Ser Ile Ile Ser Thr Phe Gly Ser Ala Pro Gly Lys Asp Ile Gly Phe
225                 230                 235                 240
Thr Glu Ala Leu Arg Trp Phe Ala Leu Gly Gly His Ser Met Lys Gly
                245                 250                 255
Val Phe Asp Leu Ala Gly Thr Tyr Lys Leu Gly Asn Gly Gly Met Thr
            260                 265                 270
Ser Leu Ala Arg Ala Ile Leu Asp Glu Phe Leu Gly Asp Ile Leu Leu
        275                 280                 285
Asn Thr Ala Ile Lys Glu Ile His Gln Ser Ser Pro Gly Ile Lys Val
    290                 295                 300
Val Thr Ala Glu Gly Gln Gln Leu Lys Ala Lys Thr Val Ile Ser Thr
305                 310                 315                 320
Ile Pro Leu Tyr Gly Asn Leu Ser Leu Cys Ile Glu Thr
                325                 330
```

<210> 26568
<211> 205
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (185)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26568
Phe His Ser Arg Tyr Ser Val Arg Asn Cys Leu Gly Asp Val Asn Phe
1 5 10 15
Asp Pro Pro Leu Ser Pro Val Arg Glu Ala Ala Ile Ala Arg Gly His
20 25 30
Ile Asn Lys Gly Ala Lys Ile His Phe Lys Leu Lys Ser Thr Glu Ala
35 40 45
Gly Trp Phe Val Thr Thr Asp Pro Ser Gly Asp Ser Ser Tyr Val Phe
50 55 60
Gly Phe Ser Asp His Asn Gly Thr Asn Ser Ala Cys Gln Ser Gly Thr
65 70 75 80
Trp Cys Ile Gly Phe Gly Tyr Asn Gly His Leu Thr Asp Lys Asn Asp
85 90 95
His Arg His Ile Ile Lys Lys Phe Gln Asn Asp Leu Arg Phe Ser Ala
100 105 110
Asp Ile Glu Ala Tyr Ala Thr His Asp Trp Met Asn Asp Pro Tyr Ala
115 120 125
Lys Gly Ala Trp Ala Cys Trp Gly Pro Ser Cys Ala Ser Met Tyr Leu
130 135 140
Glu Glu Leu Gln Arg Ala His Gly Arg Val Ile Phe Ala Ser Ala Asp
145 150 155 160
Trp Ala Asn Gly Trp Arg Gly Cys Ile Asn Gly Ala Ile Glu Arg Gly
165 170 175
Gln Cys Ala Val Gln Glu Val Val Xaa Met Leu Lys Glu Lys Ile Trp
180 185 190
His Ser Pro Ala Thr Phe Met Met Val Glu Asn Ala Lys
195 200 205

<210> 26569
<211> 218
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (201)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26569
Ala Ala Leu Val Ser Val Ser Phe Leu Ile Pro Phe Ala Ile Tyr Gly
1 5 10 15
Val Thr Leu Tyr Asn Gly Gln Met Val Lys Cys Asn Asp Gly Ser Ile
20 25 30
Val Gly Ser Leu Asp Gln Cys Ile Asn Glu Tyr Leu Ser Ser Pro Tyr
35 40 45
Asn Trp Asp Val Leu Ala Pro Arg Val Ala Ser Asn Pro Phe Tyr Asp
50 55 60
Phe Asp Asn Phe Gly Asp Ala Leu Phe Ile Leu Phe Gln Ile Val Ser
65 70 75 80
Gln Glu Gly Trp Ile Asp Val Gln Asn Ser Ala Met Ser Ile Thr Gly
85 90 95
Lys Asp Met Gln Pro Gln Ser Phe Ala Ala Pro Ala Asn Gly Leu Phe
100 105 110
Phe Ile Met Phe Asn Leu Leu Gly Ala Val Phe Val Leu Thr Leu Phe
115 120 125
Val Ser Val Phe Met Arg Asn Tyr Thr Glu Gln Thr Gly Val Ala Phe

```
    130                 135                 140
Leu Thr Ala Glu Gln Arg Ser Trp Leu Glu Leu Arg Lys Leu Leu Arg
145                 150                 155                 160
Gln Ile Ser Pro Ser Lys Arg Ser Leu Asp Arg Lys Ser Ser Lys Trp
                165                 170                 175
Lys Leu Leu Cys Tyr Arg Asn Ala Gly Lys Lys His Gly Pro Leu Ala
            180                 185                 190
Arg Cys Val Thr Ser Ile Leu Gly Xaa His Ser Leu Leu Val Val Pro
        195                 200                 205
Glu Phe Tyr Pro Asp Pro Tyr Phe Gly Asn
    210                 215
```

<210> 26570
<211> 187
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (17)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26570

```
Gln Ser Cys Ser Gly Ile Cys Phe Asn Ala Leu Leu Gly Gln Glu Arg
1               5                   10                  15
Xaa Asn Gln Arg Val Glu Gly Val Asp Pro Tyr Lys Pro Val Trp Tyr
            20                  25                  30
Thr Phe Ser Ala Phe Val Tyr Ala Ala Ile Val Ala Met Val Leu Ile
        35                  40                  45
Ala Cys Ile Thr Thr Pro Ile Tyr Gln Arg Asn Tyr Gln Val Gln Trp
    50                  55                  60
His Gly Glu Val Met Pro Trp Tyr Val Tyr Thr Asp Thr Gly Phe Ala
65                  70                  75                  80
Ile Leu Phe Thr Ile Glu Ala Leu Ile Lys Val Ile Ala Asp Gly Phe
                85                  90                  95
Phe Trp Thr Pro Asn Ala Tyr Phe Arg Gly Ser Trp Gly Phe Ile Asp
            100                 105                 110
Gly Ile Val Leu Ile Thr Leu Trp Ile Asn Val Gly Ser Ser Leu Phe
        115                 120                 125
Lys Asp Trp Gly Val Ser Arg Ala Ile Gly Ala Phe Lys Ala Leu Arg
    130                 135                 140
Ala Leu Arg Leu Leu Asn Val Ser Asp Ser Ala Lys Asp Thr Phe His
145                 150                 155                 160
Ser Val Ile Ile Val Gly Gly Trp Lys Val Ile Ala Val Ser Leu Gly
                165                 170                 175
Leu Arg Phe Val Ile Trp Ser Lys Asp Ala His
            180                 185
```

<210> 26571
<211> 414
<212> PRT
<213> A.fumigatus

<400> 26571

```
Val Met Ser Ile Lys Leu Arg Ser Ser Ser Ala Ala Ser Ile Val Leu
1               5                   10                  15
```

```
Leu Val Ser Ser Ile Pro Pro Met Pro Leu Ser Ile Ala Met Thr Pro
            20                  25                  30
Lys Asn Gln Ala Ala Trp Ile Pro Ala Lys Lys Ala Arg Pro Phe Lys
        35                  40                  45
Val Gly Asp Ala Pro Tyr Thr Pro Ala Gly Pro Gly Gln Val Val Val
    50                  55                  60
Arg Asn Thr Ala Val Ala Ile Asn Pro Phe Asp Trp Val Leu Gln Phe
65                  70                  75                  80
Ile Gly Pro Ala Ile Ala Ser Tyr Ile Lys Tyr Pro Phe Ile Phe Gly
                85                  90                  95
Thr Asp Val Ala Gly Glu Val Val Glu Val Gly Pro Asp Val Glu Arg
            100                 105                 110
Phe Arg Val Gly Asp Arg Val Phe Gly Ser Ala Thr Ala Ile Ala Lys
        115                 120                 125
Glu Val Asn Arg Pro Ala Glu Gly Gly Phe Gln Leu Tyr Thr Val Met
    130                 135                 140
Arg Gln His Met Leu Ala Pro Thr Pro Ala His Ile Thr Asp Glu Gln
145                 150                 155                 160
Ala Cys Val Leu Gly Leu Gly Leu Leu Thr Ala Ala Trp Gly Leu Phe
                165                 170                 175
His Pro Asn Tyr Leu Gly Leu Asp Met Pro Gln Val Pro Ala Pro Thr
            180                 185                 190
Gly Ala Val Gly Lys Ser Gly Leu Pro Arg Ala Val Ile Ile Thr Gly
        195                 200                 205
Gly Ala Ser Ser Val Gly Ser Asn Ala Val Gln Leu Ala Val Ser Ala
    210                 215                 220
Gly Tyr Gln Val Leu Ser Thr Ser Ser Pro Lys Asn Phe Glu Tyr Val
225                 230                 235                 240
Lys Gly Leu Gly Ala Thr Gln Val Phe Asp Tyr Arg Ser Arg Thr Leu
                245                 250                 255
Ser Lys Asp Leu Leu Ala Ala Leu Arg Gly His Glu Leu Val Gly Ala
            260                 265                 270
Leu Thr Ile Gly Arg Gly Ala Val Glu Ala Cys Thr Ala Val Met Lys
        275                 280                 285
His His Asp Val Arg Leu Thr Arg Lys Arg Ile Ala Val Ala Gly Ala
    290                 295                 300
Ile Ile Pro Ala Glu Lys Leu Thr Thr Phe Val Gly Lys Gly Thr Tyr
305                 310                 315                 320
Leu Met Gly Met Val Gly Gly Met Ile Lys Ser Asn Ala Arg Arg Arg
                325                 330                 335
Arg Thr Gly Val Glu Ala Lys Phe Ile Leu Leu Asp Gly Leu Val Asp
            340                 345                 350
Pro Glu Ser Ile Val Ala Arg Ile Tyr Arg Glu Phe Leu Pro Leu Ala
        355                 360                 365
Leu Glu Arg His Gln Phe Val Pro Ala Pro Pro Thr His Val Val Gly
    370                 375                 380
Lys Gly Leu Asn Lys Ile Gln Asp Ala Leu Glu Leu Gln Arg Met Ser
385                 390                 395                 400
Ser Pro Arg Gly Trp Lys Asp Pro Arg Trp Arg Asp Val Arg
                405                 410
```

<210> 26572
<211> 317
<212> PRT
<213> A.fumigatus

<400> 26572
Arg Leu Lys Arg Arg Ala Arg Gln Leu Ala Gly Ile Asp Val Arg Lys
1 5 10 15
Ala Ala Gln Thr Met Gln Glu Phe Val Pro Glu Thr His Glu Thr Phe
20 25 30
Leu Lys Ala Leu Glu Asp Asp Gly Tyr Lys Gln Tyr Gln Tyr Leu Leu
35 40 45
Val Val Val Glu Ser Pro Thr Arg Asp Val Ala Glu Ala Gly Ala Pro
50 55 60
Arg Asn Val Ala Asn Trp Met Ile Glu Arg Tyr Val Gln Leu Leu Cys
65 70 75 80
Arg Tyr Asn Pro Ser His Val Ala Glu Phe Val Asp Asp Leu Arg Ala
85 90 95
Gly Asp Val His Leu Glu Glu Leu Leu Pro Ala Met Glu Glu Ser Gly
100 105 110
Val Val Asp Ala Ala Val Ile Leu Leu Val Arg Gln Gly Gln Val Arg
115 120 125
Ala Ala Met Asp Arg Leu Ile Ala His Leu Gly Ala Leu Gln Ser Gly
130 135 140
Leu Val Gly Ile Leu Gln Ser Ala Arg Glu Ser Pro Asp Ser Ala Ser
145 150 155 160
Thr Ala Glu Ala Ile Thr Asp Leu Leu Glu Ser Leu Asp Lys Tyr Ala
165 170 175
His Val Gly Ile Trp Leu Cys Gln Ser Gln Ser Gln Thr Thr Lys Thr
180 185 190
Ser Arg Pro Glu Arg Asn Gly Thr Gly Ser Lys Val Ala Leu Asp Gln
195 200 205
Pro Leu Ser Phe Asn Glu Thr Leu Trp Leu Asp Leu Ile Glu Ala Val
210 215 220
Val Arg Thr Ala Ser Ser Val Phe Ala Leu Val Arg Gly Gln Gln Val
225 230 235 240
Tyr Asp Gly Lys Leu Thr Gln Met Ala Pro Glu Thr Ser Ser Pro Gly
245 250 255
Asp Asn Thr Ala Gln Leu Met Ser Ser Val Arg Thr Leu Val Gln Gln
260 265 270
Val Phe Thr Ala Leu Leu Ser Ser Thr Val Lys Leu Gly Gly Ala Thr
275 280 285
Pro Ser Ala Glu Arg Thr Asp Val Thr Phe Leu Arg Ile Leu Arg Ala
290 295 300
Phe Leu Thr Arg Ala Ala Ser Trp Ser Pro Ser Arg Leu
305 310 315

<210> 26573
<211> 83
<212> PRT
<213> A.fumigatus

<400> 26573
Ala Leu Lys Phe Phe Tyr Ser Asn Gln Thr Asn Leu Ala Leu Lys Gly
1 5 10 15
Ile Ile Gly Ile Glu Ala Met Ala Thr Ile Ser Lys Leu Thr His His
20 25 30
Ala Asp Ala Ala Thr Asn Arg Ser Ala Ile Ala His Asp Tyr Ile Asp
35 40 45
Arg Trp Gln Val Leu Gly Ile Ala His Glu Ala Asp Pro Pro His Thr
50 55 60

```
Thr Leu Ser Tyr Gly Ser Asn Asp Ser His Gly Gln Phe His Phe Ser
65                  70                  75                  80
Ser Ser Phe
```

<210> 26574
<211> 210
<212> PRT
<213> A.fumigatus

<400> 26574

```
Val Tyr Thr Val Ala Gly Ile Cys Leu Thr Leu Ala Met Phe Gln Leu
1               5                  10                  15
Glu Phe Phe His Tyr Asp Tyr Ser Thr Ala Asn Lys Leu Ser Ser Ala
            20                  25                  30
Leu Asp Glu Arg Ile Ala Arg Asp Ser Val Ala Ala Ala Gly Gln Asp
        35                  40                  45
Tyr Leu Thr Ile Thr Ser Leu Ser Ala Arg Gln Ala Phe Ala Ala Thr
    50                  55                  60
Gln Leu Cys Gly Thr Leu Gln Asn Pro Tyr Leu Phe Met Lys Glu Ile
65                  70                  75                  80
Ser Ser Asn Gly Asn Met Asn Thr Val Asp Val Ile Phe Pro Ala His
                85                  90                  95
Pro Val Phe Leu Tyr Thr Asn Pro Glu Leu Leu Glu Leu Leu Met Lys
            100                 105                 110
Pro His Phe Glu Ile Gln Glu Ser Gly Gln Tyr Pro Asn Ala Tyr Ala
        115                 120                 125
Met His Asp Ile Gly Thr His Tyr Pro Asn Ala Thr Gly His Pro Glu
    130                 135                 140
Gly Asn Asp Glu Pro Met Pro Leu Glu Glu Cys Gly Asn Met Ile Ile
145                 150                 155                 160
Met Ala Leu Ala Tyr Ala Leu Lys Ser Ser Asn Thr Asp Tyr Leu Asn
                165                 170                 175
Glu His Tyr Pro Leu Leu Glu Gln Trp Thr Ser Tyr Leu Val Asp Glu
            180                 185                 190
Ala Ile Tyr Pro Ala Asn Gln Ile Ser Thr Asp Asp Phe Ala Gly Pro
        195                 200                 205
Leu Ala
    210
```

<210> 26575
<211> 80
<212> PRT
<213> A.fumigatus

<400> 26575

```
Ser Ile Thr Gly Leu Leu Tyr Asn Leu Tyr Ala Asp Arg Glu Leu Gly
1               5                  10                  15
Leu Asn Leu Val Pro Gln Ser Val Tyr Asp Met Gln Ser His Phe Tyr
            20                  25                  30
Pro Thr Val Gln Lys Lys Tyr Gly Val Pro Leu Asp Thr Arg His Gln
        35                  40                  45
Tyr Thr Lys Gly Glu Phe Leu Ala Phe Arg Ile Pro Thr Cys Leu His
    50                  55                  60
Cys Val Phe Ala Phe Lys Glu Ile Phe Ser Asn Leu Thr Arg Val Phe
65                  70                  75                  80
```

<210> 26576
<211> 84
<212> PRT
<213> A.fumigatus

<400> 26576
Trp Met Ala Thr Lys Pro Lys Ala Val Glu Val Asn Tyr Pro Pro Gln
1 5 10 15
Met Phe Leu Gly Trp Thr Thr Asn Arg Ile Thr Gly Tyr Ile Asn Gln
20 25 30
Ile Val Ser Ser Thr Ala Ser Asn Pro Asn Leu Ala Gln Val Gly Phe
35 40 45
Lys Ala Gly Leu Glu Ser Val Ile Leu Ile Asn Pro Ser Gln Ala Ser
50 55 60
Val Ser Pro Gly Ser Ser Pro Arg Gly Trp Glu Asp Pro Ser Arg Arg
65 70 75 80
Thr Cys His Arg

<210> 26577
<211> 80
<212> PRT
<213> A.fumigatus

<400> 26577
Ser Thr Met Thr Arg Ser His Met Ser Leu Asp Glu Arg Ala Asp Val
1 5 10 15
Val Glu Asp Ile Ile His Tyr Asp Phe Asn Asn Arg Ser Ile Leu Tyr
20 25 30
Glu Ala Leu Arg Ser Ala Gly Ala Leu Ala Leu Thr Gly Arg Ala His
35 40 45
Arg Ser Asp Gly Asn Lys Asp Leu Ala Gln Val Gly Asp Ala Val Leu
50 55 60
Gln Leu Ile Leu Val Met Asp Gly Tyr Glu Ala Lys Gly Ser Arg Gly
65 70 75 80

<210> 26578
<211> 410
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (15)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26578
Arg Val Glu Glu Thr Glu Gln Pro Val Ile Pro Leu Pro Ser Xaa Val
1 5 10 15
Asn Ser His Lys Glu Phe Leu Leu Ser Ser Asp Lys Pro Asp Ile Leu
20 25 30
Ala Leu Lys Pro Pro Ser Ile Leu Pro Ala Cys Arg Phe Leu Leu Ser
35 40 45
Arg Pro Leu Ser Leu Tyr Met Arg Ser Leu Ala Tyr Arg Asn Glu Thr
50 55 60

```
Trp Arg Ile Pro Gln Val Val Ala Glu Val Gln Lys Ala Gly Phe Pro
65                  70                  75                  80
Leu Thr Thr Phe Asn Trp Ser Thr Tyr Val Gln Met Met Ala Ser Ser
                85                  90                  95
Asp Lys Pro Ser Asp Gln Val Glu Ala Phe Thr Val Phe Glu Arg Lys
            100                 105                 110
Phe Met Pro Asn Phe Pro Gly Trp Asn Asn Leu Arg Arg Gly Tyr Gly
        115                 120                 125
Val Arg Pro Pro Gly Val Pro Ser Thr Ile Asp Val Met Glu Asn Pro
    130                 135                 140
Arg Arg Ala Lys Pro Pro Asn Met Leu Gly Lys Glu Ser Arg Arg Tyr
145                 150                 155                 160
Trp Ser Lys Ile Gln Pro Asp Phe Met Gln Pro Thr Tyr Val Ser Met
                165                 170                 175
Val Tyr Leu Ala Ser Ala Leu Gln Ala Phe Arg Glu Arg Ser Ile Tyr
            180                 185                 190
Asp Gly Gly Leu Glu Val Gly Thr Leu Phe Lys Val Ala Pro Lys Thr
        195                 200                 205
Ile Ala Ala Ile Ala Asp Met Pro Tyr Leu Arg Glu Lys Phe Gln Gly
    210                 215                 220
Val Leu Leu Arg Arg Arg Gln Glu Gln Gly Asp Lys Lys Gly Asp Ser
225                 230                 235                 240
Gly Asp Arg Asp His Phe Val Trp Thr Gly Gly Ile Leu Gly Val Gly
                245                 250                 255
Gly Lys Pro Arg Ser Pro Thr Ala Val Glu Arg Pro Ala Met Glu Ala
            260                 265                 270
Asp Gln Glu Glu Asn Ala Ser Ala Ser Ala Arg Pro Gln Pro Asp Val
        275                 280                 285
Thr Asp Asp Glu Ala Pro Asp Ala Pro Asn Ala Pro Ala Val Glu Ala
    290                 295                 300
Gly Leu Ser Pro Glu Glu Val Ser Ala Pro Asn Ala Lys Ser Ile Asp
305                 310                 315                 320
Pro Gln Asp Gln Phe Asp Ile Glu Ala Glu Ala Leu Leu Gly Ser Arg
                325                 330                 335
Arg Ala Leu Leu Glu Ala Ser Glu Ala Leu Leu Asp Asn Glu His Arg
            340                 345                 350
Ala Ser Ala Asp Glu Val Asp Glu Thr Asp Ile Ser Ser Leu Ile Asp
        355                 360                 365
Asp Leu Ala Asn Pro Asp Glu Asp Ala Pro Lys Ser Ala Asp Gly Arg
    370                 375                 380
Gln Gln Gln Glu Pro Pro Thr Glu His Gln Gly Gln Pro Glu Gln Glu
385                 390                 395                 400
His His Asn Asn Gly Met Ala His Asp Ala
                405                 410
```

<210> 26579
<211> 251
<212> PRT
<213> A.fumigatus

<400> 26579

```
Ile Asp Ser Ile Thr Gly Pro Tyr Ala Ser Ala Val Leu Arg Phe Gln
1               5                   10                  15
Leu Arg Phe Pro Asp Ser Tyr Pro Glu Leu Pro Pro Ile Val Thr Phe
            20                  25                  30
Ser Thr Asp Val Phe His Pro Leu Ile Val Pro Leu Thr Thr Tyr Thr
```

```
        35                  40                  45
Phe Ser Thr Gly Ala Ser Thr Glu Asp Pro Val Ser Ala Thr Asp Glu
    50                  55                  60
Glu Arg Leu Pro Pro Gly Gly Phe Ser Leu Arg His Gly Phe Pro His
65                  70                  75                  80
Trp Phe Gly Arg Ala Arg Lys Thr Gly Arg Gln Ser Thr Gly Ser Ser
                85                  90                  95
Arg Pro Val Ser Val Asn Gly Arg Asn Ala Gly Glu Gly Glu Thr Ala
            100                 105                 110
Ser Thr Asp Gly Pro Ser Ser Pro Ser Ser Asp Gln Pro Thr Gly Ala
        115                 120                 125
Glu Gly Gly Gln Asn Leu Thr Lys Asp Lys Gly Thr Ala Ser Asp Ala
    130                 135                 140
Arg Lys Thr Val Pro Val Ala Val Leu Leu Asn Tyr Ile Arg Ser Thr
145                 150                 155                 160
Phe Asp Asp Glu Asn Val Leu Asp Ser Leu Pro Leu Glu Ala Ala Gly
                165                 170                 175
Asn Pro Ser Ala Trp His Ala Trp Lys Ala His Arg Arg Glu Asn Ser
            180                 185                 190
Glu Ser Ala Thr Ser Asn Ser Lys Arg Gly Ser Pro Gln Ala Arg Leu
        195                 200                 205
Pro Gly Asp Trp His Trp Asp Gly Ile Trp Ala Lys Arg Val Gln Tyr
    210                 215                 220
Glu Ile Glu Ala Ser His Ser Asp Gln Met Leu Phe Gly Asn Ala Ala
225                 230                 235                 240
Arg Gly Ala Thr Asp Glu Met Val Cys Met Arg
                245                 250
```

<210> 26580
<211> 125
<212> PRT
<213> A.fumigatus

<400> 26580

```
Ile Pro Lys Arg Arg Glu His Pro Leu Leu Val Ser Ile Pro Val Pro
1               5                   10                  15
Ile Ala Ser Gln Thr Phe Trp Ile Thr Leu Ile Met Ser Asn Asp Trp
            20                  25                  30
Phe Tyr Arg Tyr Gln Thr Thr Ile Leu Ala Val Val Leu Val Phe Val
        35                  40                  45
Pro Ile Ile Val Val Cys Ser Ile Phe Met Thr Ala Leu Ala Cys Ser
    50                  55                  60
Glu Tyr Trp Ser Thr Arg Arg Gly Cys Ser Phe Ser Tyr Phe Thr Cys
65                  70                  75                  80
Ile Cys Gly Leu Arg Ser Arg Ser Gln Arg Gln Arg Pro Leu Ser Asp
                85                  90                  95
Thr Asp Asp Ala Asn Ser Ser Glu Arg Thr Val Ser Ser Arg Pro Ser
            100                 105                 110
Ala Glu Asn Lys Asn Pro Val Leu Arg Thr Glu Arg Ala
        115                 120                 125
```

<210> 26581
<211> 77
<212> PRT
<213> A.fumigatus

<400> 26581
Leu Gly Phe Tyr Ser Gly Ala Phe Asp Gly Val Ile Ala Ala Cys Ser
1 5 10 15
Arg Phe Pro Pro Met Leu Tyr Ile Gly Leu Thr Ala Phe Phe Ser Gly
20 25 30
Val Thr Cys Ala Gly Asn Pro Ile Leu Asn Ser Arg Pro Ser Cys Pro
35 40 45
Ser Ala Arg Ile Pro Phe Arg Arg Glu Asp Trp Gly Leu Ser Tyr Leu
50 55 60
Ala Trp Asp Val Val Phe Lys Gln Ser Ser Phe Pro Ile
65 70 75

<210> 26582
<211> 139
<212> PRT
<213> A.fumigatus

<400> 26582
Tyr Gly Lys Pro Arg Gly Lys Ser Arg Ala Arg Lys Ala Ala Met Lys
1 5 10 15
Leu Thr Pro Leu Ala Val Glu Gln Leu Arg Lys Leu Leu Ser Gln Pro
20 25 30
Asp Pro Lys Phe Ile Arg Val Gly Val Lys Asn Arg Gly Cys Ser Gly
35 40 45
Leu Ala Tyr His Leu Glu Tyr Val Glu Lys Pro Gly Ala Phe Asp Glu
50 55 60
Val Val Glu Gln Asp Gly Val Lys Val Leu Ile Asp Ser Lys Ala Leu
65 70 75 80
Phe Ser Ile Ile Gly Ser Glu Met Asp Trp Gln Glu Asp Lys Leu Ser
85 90 95
Arg Lys Phe Val Phe Arg Asn Pro Asn Ile Ser Glu Ser Leu Ser Phe
100 105 110
Tyr Thr Ser Leu Pro Arg Tyr Ser Ser Ser Asn Val Glu Ile Thr Glu
115 120 125
Glu Gln Cys Gly Cys Gly Glu Ser Phe Met Val
130 135

<210> 26583
<211> 353
<212> PRT
<213> A.fumigatus

<400> 26583
Leu Val Gln Met Arg Pro Ser Ser Arg Asp Glu Phe Ser Thr Ala Ile
1 5 10 15
Ile Cys Ala Leu Thr Leu Glu Ala Glu Ala Val Glu Glu Leu Phe Asp
20 25 30
Glu Ile Tyr Asp Arg Leu Ser Gly Tyr Tyr Arg Lys Gln Pro Gly Asp
35 40 45
Asp Asn Ala Tyr Ile Asn Gly Arg Ile Gly Asn His Asn Val Val Val
50 55 60
Cys Cys Met Pro Gly Met Gly Lys Gly Asn Ala Ala Ser Val Ala Ser
65 70 75 80
Ser Leu Lys Ile Ser Tyr Gln Arg Ile Asn Leu Ala Leu Val Val Gly
85 90 95
Ile Cys Gly Gly Ala Pro Tyr Pro Ser Ser Gly Gly Glu Ile Phe Leu

```
            100                 105                 110
Gly Asp Val Ile Ile Ser Asp Ser Val Ile Gln Tyr Asp Phe Gly Gly
        115                 120                 125
Gln Tyr Pro Gly Gly Phe Glu Glu Lys Thr Ser Val Lys Asp Ser Leu
    130                 135                 140
Gly Arg Pro Asn Lys Glu Ile Arg Ala Leu Leu Ala Gly Leu Gln Ala
145                 150                 155                 160
Lys Asn Thr Arg Arg Asp Leu Gln Ala Arg Met Leu Arg His Leu Gln
                165                 170                 175
Ala Ile Gln Arg Ser Asn Pro Glu Trp His Trp Pro Arg Ser Ala Asp
            180                 185                 190
Asp Ile Leu Phe Glu Ala Ser Tyr Gln His Lys Tyr Ser Ser Pro Thr
        195                 200                 205
Ser Ser Val Tyr Cys Cys Leu Asp Gly Lys Ser Arg Asp Val Cys Lys
    210                 215                 220
Ser Ala Leu Asp Met Thr Cys Ile His Leu Gly Cys Asp Lys Asn Arg
225                 230                 235                 240
Ile Ser Arg His Arg Cys Asp Ala Glu Lys Cys Ile Pro Ser Ile His
                245                 250                 255
Ile Gly Thr Val Ala Ser Ala Asp Thr Val Met Lys Ser Gly Glu His
            260                 265                 270
Arg Asp Arg Leu Val Lys Ala Asp Asn Val Ile Gly Phe Glu Met Glu
        275                 280                 285
Ser Ala Gly Val Trp Asp Asn Ala Ser Cys Ile Val Ile Lys Gly Val
    290                 295                 300
Cys Asp Tyr Ala Asp Ser His Lys Asn Glu Ala Trp Gln Ala Tyr Ala
305                 310                 315                 320
Ala Ala Thr Gly Ala Ala Thr Ala Lys Ala Phe Leu Glu Tyr Trp Ile
                325                 330                 335
Pro Thr Val Arg Glu Gly Lys Tyr Thr Asn Leu Gly Glu Val Phe Leu
            340                 345                 350
Tyr
```

<210> 26584
<211> 63
<212> PRT
<213> A.fumigatus

<400> 26584

```
Gly Met Tyr Pro Phe Arg Ile Asn Phe Pro Val Val Pro Gly Ser Asp
1               5                   10                  15
Gly Ala Gly Glu Val Val Glu Val Gly Ser Lys Val Thr Gln Phe Lys
            20                  25                  30
Lys Gly Asp Lys Val Val Thr Leu Phe Asn Gln Leu His Gln Tyr Gly
        35                  40                  45
Pro Leu Asp Thr Arg Ser Leu His Gly Arg Val Gln Val Ser Val
    50                  55                  60
```

<210> 26585
<211> 99
<212> PRT
<213> A.fumigatus

<400> 26585

```
Leu Lys Ala Ser Phe Asp His Asn Ile Pro Ser Ile Asp Ser Pro Glu
```

```
1               5                   10                  15
Asn Ser Thr Pro Tyr Val Arg Lys Met Ala Pro Ser Thr Met Lys Gln
            20                  25                  30
Trp Val Val Ala Asp Lys Glu Asn Gly Phe Asp Ser Leu Asn Phe Lys
        35                  40                  45
Glu Gly Pro Val Pro Lys Cys Gly Glu Asn Glu Val Leu Val Lys Leu
    50                  55                  60
Arg Ala Ala Ser Leu Asn Tyr Arg Asp Leu Ile Ile Pro Lys Val Arg
65                  70                  75                  80
Arg Phe Ile Tyr Ala Arg Asp Ser Met Ser Lys Ser Ala Phe Cys His
                85                  90                  95
Ala His Phe
```

<210> 26586
<211> 325
<212> PRT
<213> A.fumigatus

<400> 26586

```
Val Val Asn Asp Asp Gly Pro Pro Ser Asn Lys Ser Ser Pro Tyr Val
1               5                   10                  15
His Ser Leu Val His Thr Leu Gln Ser Ala Gly His Val Val Ser Val
            20                  25                  30
Val Leu Pro His Gln Gln Arg Ser Trp Ile Gly Lys Ala His Leu Ile
        35                  40                  45
Gly Ala Ser Val Arg Pro Thr Tyr Phe Arg Pro Gly Ile Leu His Glu
    50                  55                  60
Asp Asn Gly Thr Ile His Asp Phe Pro Arg Thr Asp Asp Asp Asp Asp
65                  70                  75                  80
Gly Asp Glu Trp Leu Leu Ile Asp Ser Thr Pro Ala Ser Cys Val Gln
                85                  90                  95
Ile Gly Leu Phe His Tyr Phe Gln Glu Arg Gly Pro Val Asp Val Val
            100                 105                 110
Val Ser Gly Pro Asn Tyr Gly Arg Asn Thr Thr Ala Leu Phe Ala Leu
        115                 120                 125
Ser Ser Gly Thr Ile Gly Gly Ala Leu Glu Ala Ala His Cys Gly Lys
    130                 135                 140
Arg Ala Ile Ala Leu Ser Tyr Ala Phe Ser Ser Arg Asn His Asp Pro
145                 150                 155                 160
Val Val Ile Ala Glu Ala Ser Gln His Ser Val Arg Leu Ile Glu Tyr
                165                 170                 175
Leu Cys Glu Asn Trp Ala Glu Gly Val Asp Leu Tyr Asn Ile Asn Val
            180                 185                 190
Pro Leu Glu Pro Gly Met Ser Lys Cys Lys Val Leu Tyr Thr Ser Met
        195                 200                 205
Leu Asp Asn Arg Trp Thr Gly Ser Cys Phe Gln Ala Val Asp Ala Ala
    210                 215                 220
Leu Pro Asp Glu Thr Pro Gln Val Gln Glu Gln Arg Leu Arg Asp Gln
225                 230                 235                 240
Gly Glu Arg Leu Gly Glu Lys Pro Thr Ala Ala Pro Gly Ala Gly Pro
                245                 250                 255
Arg Arg Arg Ile Arg Phe Gln His Lys His Phe Gln Trp Asn Pro Asp
            260                 265                 270
Phe Thr Asp Val Trp Lys Ser Val Glu Ala Ser Gly Pro Gly Asn Asp
        275                 280                 285
```

```
Gly Arg Ala Val Arg Glu Gly Met Thr Arg Tyr Val Cys Ile Leu Asp
    290                 295                 300
Pro Val Ser Tyr Ser Ser Leu Tyr Trp Ser Val Ala Asp Ser Leu Arg
305                 310                 315                 320
Ser Val Leu Pro Leu
                325
```

<210> 26587
<211> 319
<212> PRT
<213> A.fumigatus

<400> 26587

```
Gly Leu Ile Pro Gly Ile Gly Val Met Leu Gly Glu Pro Ser Leu Gly
1               5                   10                  15
Leu Gly Thr Asn Pro Leu Tyr Arg Thr Val Gly Pro Glu Asp Met Leu
            20                  25                  30
Ser Ile Leu Ala Leu Ser Met Pro Ser Phe Thr Ala Leu Leu Gly Asp
        35                  40                  45
Ser Asp Arg Ile Ile Ser Ala Val Ser Gly Ile Ser Ser His Val Ile
    50                  55                  60
Gly Pro Leu Leu Arg Ser Arg Leu Phe Pro Asn Asn Ile Asn Gly Ser
65                  70                  75                  80
Val Met Ser Leu Leu Gln His Ile Ala Lys Val Pro Ala Ala Ala Lys
                85                  90                  95
Ile Trp Lys Lys Asp Ile Ala Asp Ala Phe Asn Asp Pro Arg Phe Phe
            100                 105                 110
Gly Phe Gln Val Glu Leu Val Arg Ser Gly Trp Met Lys Leu Leu Arg
        115                 120                 125
Gln Trp Val Ile Ala Asp Lys Asp Arg Leu Thr Glu Leu Met Ser Arg
    130                 135                 140
Leu Pro Pro Pro Ser Thr Ala Gly Leu Met Phe Gly Val Gly Ala Ser
145                 150                 155                 160
Ala Ala Arg Leu Glu Ala Asp Arg Lys Ala Gln Leu Asn Leu Arg Arg
                165                 170                 175
Ile Ser Leu Leu Ile Leu Ser Ala Asn Asp Asp Tyr Phe Ile Gly Glu
            180                 185                 190
Leu Pro Glu Leu Leu Gln Lys Leu Glu Asp Leu Leu Ala Ala Thr Ser
        195                 200                 205
Ser Ser Ser Pro Ser Ser Thr Thr Arg Ala Glu Ile Phe Met Val Leu
    210                 215                 220
Arg Ala Leu Ala Leu Lys Ser Ser Thr Thr Thr Leu Ala Pro Phe Trp
225                 230                 235                 240
Pro Leu Ile Thr Thr Glu Leu Gln Glu Ala Ile Ser Ser Ile Pro Leu
                245                 250                 255
Gly Ala Gln Gln Glu Val Tyr Asn Ala Tyr Ser Leu Leu Gln Ala Cys
            260                 265                 270
Lys Leu Leu Asp Thr Leu Leu Val Leu Ala Pro Asp Asp Phe Gln Leu
        275                 280                 285
Leu Glu Trp Leu Tyr Val His Asp Thr Ile Asp Ala Val Tyr Pro Pro
    290                 295                 300
Glu His Arg Glu Ser Met Ala Leu Ala Asp Glu Asn Ser Gln Thr
305                 310                 315
```

<210> 26588
<211> 79

<212> PRT
<213> A.fumigatus

<400> 26588
Ser Gln Gly Trp Leu Pro Gln His Tyr Ser Asn Pro Arg Asp Gln Pro
1 5 10 15
Leu Ser Leu Pro Val Lys Ile Ala Gly Ser Thr Ala Asn Asn Ser Ser
20 25 30
Trp Leu Lys Phe Lys Thr Gly Thr Ala Trp Gly Lys Thr Trp Gly Lys
35 40 45
Thr Tyr Pro Leu Gly Ser Phe Leu Phe Arg Ser Met Val Pro Gln Arg
50 55 60
Val Phe Ser Pro Thr Leu Ala Pro Tyr Lys Leu Ser Pro Asn Ser
65 70 75

<210> 26589
<211> 74
<212> PRT
<213> A.fumigatus

<400> 26589
Leu Thr Leu Ser Thr Ala Ser Ser Thr Phe Leu Lys Arg Lys Gly Gly
1 5 10 15
Leu Phe Lys Lys Ala His Glu Leu Ala Val Leu Cys Ser Val Asp Val
20 25 30
Ala Val Ile Ile Phe Gly His Asn Lys Lys Leu Tyr Glu Phe Ser Ser
35 40 45
Cys Asp Met Arg Glu Thr Leu Gly Arg Tyr Gln Tyr Val Arg Ser Leu
50 55 60
His Tyr Pro His Gln Phe Ser Thr Leu Thr
65 70

<210> 26590
<211> 374
<212> PRT
<213> A.fumigatus

<400> 26590
Ser Gly Pro Leu Gln Pro Arg Gly Glu Asp Thr Ile Ser Thr Leu Leu
1 5 10 15
Leu Thr Ala Pro Ser Leu Ser Ala Ala Phe Tyr Leu Pro Gly Val Ala
20 25 30
Pro Thr Ser Tyr Asp Glu Gly Gln Ala Val Pro Leu Tyr Val Asn His
35 40 45
Leu Thr Pro Gly Leu Ala Gln Gln Asp Glu Gln Leu His Ser Val Phe
50 55 60
Ser Tyr Asp Tyr Tyr His Thr Ala Phe His Phe Cys Arg Pro Ala Asp
65 70 75 80
Gly Pro Lys Asp Ile Arg Glu Ser Leu Gly Ser Ile Leu Phe Gly Asp
85 90 95
Arg Ile Gln Thr Ser Pro Phe Glu Leu Phe Met Gly Lys Asn Glu Ser
100 105 110
Cys Lys Ala Val Cys Gly Glu Val Lys Phe Asp Ser Arg Ser Ala Lys
115 120 125
Phe Val Asn Arg Arg Ile Ala Gln Gly Tyr Asn Ile Asn Trp Leu Val
130 135 140

```
Asp Gly Leu Pro Gly Ala Gln Leu Asn Leu Asp Ala Val Thr Gln Ser
145                 150                 155                 160
Lys Phe Tyr Ser Pro Gly Phe Ala Leu Gly Thr Leu Asn Asp Asp Gly
                165                 170                 175
Gln Ala Ile Leu Asn Asn His Tyr Asp Ile Val Ile Asp Tyr His Arg
            180                 185                 190
Val Gly Phe Gly Ser Lys Asp Lys Tyr Arg Val Val Gly Val Leu Val
        195                 200                 205
Gln Pro Ala Ser Arg Arg Asp Ser Lys Val Leu Glu Asp Gly Thr Val
    210                 215                 220
Asp Cys Gly Ser Asp Asn Ala Ala Val Ile Leu Ser Glu Asp Gly Glu
225                 230                 235                 240
Thr Pro Val Thr Trp Thr Tyr Gly Val Tyr Trp Arg Glu Ser Pro Thr
                245                 250                 255
Pro Trp Ala Thr Arg Trp Asp Lys Tyr Leu His Val Tyr Asp Pro Lys
            260                 265                 270
Ile His Trp Phe Ser Leu Ile Asn Ser Ala Val Phe Val Val Phe Leu
        275                 280                 285
Val Gly Met Val Ser Met Ile Leu Leu Arg Ala Leu Arg Lys Asp Ile
    290                 295                 300
Ala Arg Tyr Asn Arg Leu Asp Thr Ile Asn Leu Glu Asp Leu Asp Gly
305                 310                 315                 320
Thr Ser Ala Ala Ile Glu Asp Gly Ile Gln Glu Asp Ser Gly Trp Lys
                325                 330                 335
Leu Val His Gly Asp Val Phe Arg Cys Pro Arg Asp Pro Leu Ile Leu
            340                 345                 350
Ser Val Leu Val Gly Asn Gly Ala Gln Ile Phe Met Met Thr Gly Val
        355                 360                 365
Thr Val Gly Lys Phe Phe
    370
```

<210> 26591
<211> 159
<212> PRT
<213> A.fumigatus

<400> 26591

```
Leu Pro Val Ser Ser Asn Ser Val Ser Val Ser Pro Asp Asp Ser Arg
1               5                   10                  15
Ser Ser Pro Tyr Pro Ser Ser Pro Trp Glu Asn Ser Val Cys Val Leu
            20                  25                  30
Phe Arg Phe Phe Pro Val Arg Ala Ala Cys Ser Ala Ala Lys Cys Val
        35                  40                  45
Leu Val Asp Pro Glu Ala Arg Ala Leu Ala Ala Ser Pro Met Ala Ala
    50                  55                  60
Ser Thr Gln Thr Pro His Ala Asn Ser Thr Ser Ser Leu Ser Ser Ser
65                  70                  75                  80
Ala Arg Arg Ser Thr Pro Arg Ala Ala Ser Ala Ser Glu Arg Thr Ala
                85                  90                  95
Val Cys Thr Ala Met Pro Gly Gly Gly Glu Met Ala Tyr Leu Asn Val
            100                 105                 110
Arg Ser Glu Thr Arg Met Ala Pro Ser Glu Val Ala Trp Asp Val Ile
        115                 120                 125
Leu Gly Arg Glu Thr Arg Asp Phe Trp Ala Thr Ala Arg Ala Arg Glu
    130                 135                 140
Ser Val Pro Trp Val Ser Thr Ala Ser Met Trp Met Gly Phe Gly
```

145 150 155

<210> 26592
<211> 230
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (162)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26592
Lys Ala Gly Ile Trp Gly Trp Asn Asn Phe Phe Gln Gly Leu Lys Val
1 5 10 15
Gly Ile Ile Ile Pro Gln Phe Lys Thr Arg Ser Phe Leu Phe Ser Pro
20 25 30
Arg Phe Ser Gly Val Ser Gly Thr Leu Leu Lys Lys Phe Gly Leu Gly
35 40 45
Phe Ile Leu Leu Pro Ser Pro Leu Tyr Glu Leu Thr Cys Ile Pro Tyr
50 55 60
Leu Pro Asn Gly Ala Pro Arg Ser Phe Pro Trp Phe Leu Glu Gln Glu
65 70 75 80
Leu Arg Pro Ala Ser Tyr Thr Met Gly Ser Ile Ser Pro Glu Lys Ala
85 90 95
Lys Leu Ser Ser Ser Leu Pro Trp Val Glu Thr Pro Leu Val Glu Ser
100 105 110
Leu Gly Leu Ser Arg Ala Gln Gly Cys Arg Ile Phe Leu Lys Leu Glu
115 120 125
Asn Ile Gln Pro Ala Gly Ser Phe Lys Ser Arg Ala Met Ala Asn Arg
130 135 140
Ser Leu Ser His Leu Val Lys Pro Glu Asn Gly Gly Pro Ala Gly Ala
145 150 155 160
Phe Xaa Cys Phe Leu Gly Gly Gln Cys Arg Ser Arg Cys Gly Val Arg
165 170 175
Cys Pro Glu Leu Gly Leu Ser Leu His Arg Gly Cys Ala Pro Leu Asp
180 185 190
Lys Ala Pro Asp Gly Glu Gln Thr Ala Gly Gly Gly Arg Phe Gly Arg
195 200 205
His Pro Val Arg Arg Asp Ile Leu Gly Ser Gly Arg Val Tyr Ala Gly
210 215 220
Ser Asp Asn Glu Gly Arg
225 230

<210> 26593
<211> 422
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (36)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26593
Asn Ser Arg Thr Phe Ser Gln Arg Asp Pro Ser Asn Pro Val Gln Trp

```
1               5                   10                  15
Gln Thr Asp Pro Ser Arg Thr Ser Ser Ser Arg Lys Thr Val Gly Arg
            20                  25                  30
Pro Val His Xaa Tyr Ala Ser Ser Gly Gly Asn Ala Gly Leu Ala Ala
        35                  40                  45
Val Cys Ala Ala Arg Ser Leu Gly Tyr Pro Cys Thr Val Val Val Pro
    50                  55                  60
Leu Ser Thr Lys Pro Leu Met Val Asn Lys Leu Arg Ala Ala Gly Ala
65                  70                  75                  80
Ser Asp Val Ile Gln Tyr Gly Glu Thr Phe Ser Glu Ala Gly Glu Tyr
                85                  90                  95
Met Arg Glu Val Ile Met Lys Ala Asp Asp Gly Asp Ala Gly Thr Asp
            100                 105                 110
Val Val Lys Ile Ala Leu His Pro Phe Asp Asn Glu Pro Ile Trp Glu
        115                 120                 125
Gly Asn Ser Thr Ile Ile Asp Glu Leu Ala Ala Gln Leu Pro Pro Val
    130                 135                 140
Thr Thr Arg Glu Glu Ala Ile Ala Tyr Ser Gly Arg Ala Leu Pro Leu
145                 150                 155                 160
Asp Ala Val Ile Cys Ser Val Gly Gly Gly Gly Leu Leu Asn Gly Leu
                165                 170                 175
Ile Met Gly Leu Glu Arg Arg Arg His Leu Gln Asn Gln Ser Ser His
            180                 185                 190
Tyr Ser Asn Asp Ile Ile Ser Ser Gln Pro Asn Pro Ile His Ile Leu
        195                 200                 205
Ala Val Glu Thr Gln Gly Thr Asp Ser Leu Ala Leu Ala Val Ala Gln
    210                 215                 220
Lys Ser Leu Val Ser Leu Pro Lys Ile Thr Ser Gln Ala Thr Ser Leu
225                 230                 235                 240
Gly Ala Ile Arg Val Ser Glu Arg Thr Phe Lys Tyr Ala Ile Ser Pro
                245                 250                 255
Pro Pro Gly Ile Ala Val His Thr Ala Val Leu Ser Asp Ala Asp Ala
            260                 265                 270
Ala Arg Gly Val Leu Arg Leu Ala Asp Asp Glu Arg Leu Leu Val Glu
        275                 280                 285
Leu Ala Cys Gly Val Cys Val Glu Ala Ala Ile Gly Asp Ala Ala Lys
    290                 295                 300
Ala Arg Ala Ser Gly Ser Thr Ser Thr His Leu Ala Ala Glu Gln Ala
305                 310                 315                 320
Ala Leu Thr Gly Lys Lys Arg Lys Arg Thr Gln Thr Glu Phe Ser Gln
                325                 330                 335
Gly Asp Glu Gly Tyr Gly Asp Asp Arg Leu Ser Ser Gly Glu Thr Glu
            340                 345                 350
Thr Glu Leu Glu Glu Thr Gly Ser Gln Pro Gln Gly His Pro Thr Glu
        355                 360                 365
Asn Thr Leu Ser Pro Leu His Glu Phe Gln Ser Lys Leu Lys Gln Leu
    370                 375                 380
Val Pro Asn Leu Gln Pro Asp Ser Arg Val Val Ile Ile Val Cys Gly
385                 390                 395                 400
Gly Ser Asn Val Thr Ile Asp Met Ala Ala Glu Trp Arg Lys Met Leu
                405                 410                 415
Gln Glu Gly Trp Asp Ala
            420
```

<210> 26594
<211> 354

<212> PRT
<213> A.fumigatus

<400> 26594
Arg Thr Pro Ile Lys Tyr Phe Asp Asn Lys Val Val Cys Ser Leu Ile
1 5 10 15
Glu Asp Lys Arg Pro Pro Gly Val Phe Ala Ala Leu Asn Asp Ala Cys
20 25 30
Ala Thr Ala His Ala Asp Ser Ser Ala Ala Asp Asn Thr Phe Val Gly
35 40 45
Arg Leu Asn Phe Leu Ser Gln Asn Pro Asn Phe Glu Asn Arg Gln Gly
50 55 60
Gln Phe Ile Ile Lys His Tyr Ala Gly Asp Val Ser Tyr Ala Val Ala
65 70 75 80
Gly Met Thr Asp Lys Asn Lys Asp Gln Leu Leu Lys Asp Leu Leu Asn
85 90 95
Leu Val Gly Thr Ser Gly Asn Gln Phe Val His Thr Leu Phe Pro Glu
100 105 110
Gln Val Asn Gln Asp Asp Lys Arg Arg Pro Pro Thr Ala Ser Asp Lys
115 120 125
Ile Lys Ala Ser Ala Asn Asp Leu Val Ala Thr Leu Met Lys Ala Gln
130 135 140
Pro Ser Tyr Ile Arg Thr Ile Lys Pro Asn Asp Asn Lys Ala Pro Arg
145 150 155 160
Glu Tyr Asn Val Gly Asn Val Leu His Gln Ile Lys Tyr Leu Gly Leu
165 170 175
Gln Glu Asn Val Arg Ile Arg Arg Ala Gly Phe Ala Tyr Arg Gln Thr
180 185 190
Phe Asp Lys Phe Val Glu Arg Phe Tyr Leu Leu Ser Pro Lys Thr Ser
195 200 205
Tyr Ala Gly Asp Tyr Thr Trp Thr Gly Asp Ala Glu Ser Gly Ala Arg
210 215 220
Gln Ile Leu Lys Asp Thr Ser Ile Pro Ala Glu Glu Tyr Gln Met Gly
225 230 235 240
Ile Thr Lys Val Phe Val Lys Thr Pro Glu Thr Leu Phe Ala Leu Glu
245 250 255
Ala Met Arg Asp Arg Tyr Trp His Asn Met Ala Ile Arg Ile Gln Arg
260 265 270
Ala Trp Arg Asn Tyr Leu Arg Tyr Arg Thr Glu Cys Ala Ile Arg Ile
275 280 285
Gln Arg Phe Trp Arg Arg Thr Thr Gly Gly Leu Glu Phe Ile Lys Leu
290 295 300
Arg Asp Gln Gly His Gln Leu Leu Asn Gly Arg Lys Glu Arg Arg Arg
305 310 315 320
Met Ser Leu Leu Gly Ser Arg Arg Phe Leu Gly Asp Tyr Ile Gly Val
325 330 335
Gly Asn Lys Gly Gly Pro Gly Glu Met Val Arg Asn Gly Ala Gly Ile
340 345 350
Ser Gly

<210> 26595
<211> 76
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (27)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26595
Gln Thr Asn Arg His Val Tyr Ile Ile Ala Gln Asn Leu Val Asn Asn
1 5 10 15
Gln Leu Val Ile Ser Ser Glu Arg Thr Ile Xaa Ile Gly Ala Phe Lys
20 25 30
Ala Gly Gly Ala Ser Asn Leu Lys Asp Glu Trp Val Ser Met Gly Val
35 40 45
Gly Ser His Lys Asn Leu Thr Leu Leu Val Thr Ala Gly Ser Glu Arg
50 55 60
Val Phe Lys Pro Leu Asp Lys Ala Leu Gly Gly Gln
65 70 75

<210> 26596
<211> 79
<212> PRT
<213> A.fumigatus

<400> 26596
His Tyr Leu Thr Asp Pro Phe Asn Val Ser Leu Arg Gly Pro Ala Cys
1 5 10 15
Lys Ile Leu Glu Pro Asn Pro Cys Cys Phe His Phe Leu Tyr Phe Cys
20 25 30
Phe Cys Phe Gly Ser Pro Ser Tyr Ser Glu Gly Thr Phe Thr Leu Ser
35 40 45
Ser Thr Gly Pro His Phe Thr Cys Glu Pro Asp Glu Gly Asp Asn Cys
50 55 60
Asp Arg Asn Ser Gln Leu His Trp Asp Gly Arg Ser Thr Val Ser
65 70 75

<210> 26597
<211> 62
<212> PRT
<213> A.fumigatus

<400> 26597
Trp Ser Met Pro Ile Arg Arg Leu Lys Ile Leu Arg Asp Met Met Lys
1 5 10 15
Ser Lys Ala Gln Leu Arg Pro Lys Tyr Leu Phe Val Glu Gln Gln Pro
20 25 30
Leu Asp Ser Gly Ile Arg Cys Val Gly Asp Asp Leu Ser Tyr Leu Val
35 40 45
Thr Trp Leu Cys Ser Glu Arg Asp Thr Asp Thr Leu His Asp
50 55 60

<210> 26598
<211> 206
<212> PRT
<213> A.fumigatus

<400> 26598
Trp Met Phe Gly Trp Ile Ile His Pro Phe Ser Cys Val Thr Gly Pro

```
1               5                   10                  15
Asp Met Leu Gln Pro Ser Ser Glu Ser Ser Leu Ala Gly Lys Thr Cys
            20                  25                  30
Leu Val Thr Gly Gly Ala Gly Gly Leu Gly Lys Ala Ile Ala Ser Thr
        35                  40                  45
Phe Leu Ala Ala Gly Ala Asn Val Val Val Cys Asp Val Asn Glu Asp
    50                  55                  60
Arg Leu Gln Gln Thr Ser Ser Glu Leu Gly Glu Thr Asp Arg Leu Lys
65                  70                  75                  80
Thr Val Arg Ala Asp Ile Thr Ser Ala Ser Ala Val Gln Thr Leu Phe
                85                  90                  95
Asp Glu Ile Ile Ala Asp Phe Gly Lys Leu Asp Ile Leu Val Asn Asn
            100                 105                 110
Ala Gly Ile Met Asp Arg Phe Asp Pro Val Gly Asp Leu Asp Glu Ala
        115                 120                 125
Leu Trp Asp Lys Val Ile Gly Val Asn Leu Thr Ala Pro Phe Leu Leu
    130                 135                 140
Ser Lys Leu Ala Val Arg Asn Met Leu Ala Gln Pro Thr Pro Asp Gly
145                 150                 155                 160
Cys Ile Ile Asn Ile Val Ser Val Ala Gly Lys Ala Gly Trp Ala Thr
                165                 170                 175
Gly Met Phe Ser Asn Asp Arg Gly Asn Pro Leu Ala Asn Thr Gln Leu
            180                 185                 190
Gly Ala Ala Tyr Thr Ala Glu Gln Pro Arg Ser Trp Ser Asp
        195                 200                 205
```

<210> 26599
<211> 211
<212> PRT
<213> A.fumigatus

```
<400> 26599
Trp Val Gln Ser Asp Gln Asp Arg Gly Cys Ser Ala Val Tyr Ala Ala
1               5                   10                  15
Pro Asn Trp Val Leu Ala Arg Gly Leu Pro Arg Ser Leu Glu Asn Ile
            20                  25                  30
Pro Val Ala Gln Pro Ala Leu Pro Ala Thr Glu Thr Met Leu Met Ile
        35                  40                  45
His Pro Ser Gly Val Gly Cys Ala Ser Ile Phe Arg Thr Ala Ser Leu
    50                  55                  60
Leu Ser Arg Lys Gly Ala Val Arg Phe Thr Pro Met Thr Leu Ser His
65                  70                  75                  80
Ser Ala Ser Ser Arg Ser Pro Thr Gly Ser Asn Leu Ser Met Ile Pro
                85                  90                  95
Ala Leu Leu Thr Lys Met Ser Ser Phe Pro Lys Ser Ala Ile Ile Ser
            100                 105                 110
Ser Lys Arg Val Cys Thr Ala Leu Ala Glu Val Met Ser Ala Leu Thr
        115                 120                 125
Val Phe Asn Arg Ser Val Ser Pro Ser Ser Glu Glu Val Cys Cys Ser
    130                 135                 140
Arg Ser Ser Leu Thr Ser Gln Thr Thr Thr Phe Ala Pro Ala Ala Arg
145                 150                 155                 160
Lys Val Asp Ala Met Ala Leu Pro Ser Pro Pro Ala Pro Pro Val Thr
                165                 170                 175
Arg Gln Val Leu Pro Ala Ser Glu Leu Ser Asp Asp Gly Trp Ser Ile
            180                 185                 190
```

```
Ser Gly Pro Val Thr His Glu Asn Gly Trp Met Ile Gln Pro Asn Ile
        195                 200                 205
His His Ala
    210
```

<210> 26600
<211> 155
<212> PRT
<213> A.fumigatus

<400> 26600

```
Val Ser Met Pro Ala Leu Ile Ser Leu Cys Ala Arg Asn Leu Glu Asp
1               5                  10                  15
Ser Asp Val Ser Pro Leu Thr Ala Ser Asp Phe Glu Gly Cys Gly Ala
            20                  25                  30
Arg Val Gln Thr Asp Tyr Val Ile His Phe Ser Glu Leu Cys Thr Met
        35                  40                  45
Ile Ser Tyr Ile Val Arg Glu Arg Phe Gly Leu Arg Val Ser Ser Glu
    50                  55                  60
Arg Arg Lys Ala Ala Leu Gln Glu Ala Asp Glu Ala Leu Ala Asn Trp
65                  70                  75                  80
Ser Leu Arg Leu Pro Glu His Leu Arg Leu Arg Ala Ser Asp Met Asp
                85                  90                  95
Pro Trp Ser Ala Met Leu His Leu Thr Tyr Asn Asn Phe Leu Ile Leu
            100                 105                 110
Leu His Arg Pro His Pro Arg Ala Ser Ala Tyr Ser Asp Glu Tyr Gly
        115                 120                 125
Pro His Asp Ala Lys Ile Cys Thr Ala Ala Ala Gly Val Phe Thr Ser
    130                 135                 140
Ile Phe Glu Lys Leu Arg Leu Asn Asp Arg Leu
145                 150                 155
```

<210> 26601
<211> 357
<212> PRT
<213> A.fumigatus

<400> 26601

```
Asn Thr Asp Cys Arg Ile Glu His Lys Lys Lys Arg Leu Ala Val Arg
1               5                  10                  15
Ser Ile Leu Asn Pro Val Pro Ile Arg Cys Arg Pro Pro Ser Thr Ser
            20                  25                  30
Glu His Val Pro Glu Ala Ser Pro Pro Ser Thr Ile Ser Glu Pro Thr
        35                  40                  45
Ala Phe Thr Thr Ala Phe Arg Gly Val Gln Pro Glu Ala Ala Ala Pro
    50                  55                  60
Pro Ala Ser Val Ala Pro Asn Val Gln Ser Lys Ala Gln His Leu His
65                  70                  75                  80
Ser Asn Ser Tyr Ser Gln Thr Ser Pro Gln Ala Gln Glu Cys His Leu
                85                  90                  95
Pro Pro Ala Ser Asp Arg Phe Ala Glu Gln Asp Ala His Ala Asp Phe
            100                 105                 110
Glu Lys Arg Leu Val Lys Leu Ile Asp Asp Glu Glu Gly Ser Gly Pro
        115                 120                 125
Arg Glu Ile Gln Arg Gly Val Arg Ala Ile Tyr Val Gly His Glu Leu
    130                 135                 140
```

```
Ser Asn Met Ser Phe Leu Ile Arg Gln Gln Arg Asp Lys Asp Asp Asp
145                 150                 155                 160
Val Tyr His Phe Ala Gly Ser Glu Ile Pro Arg Arg Gln Leu Lys Thr
                165                 170                 175
Gly His Asp Gln Leu Leu Val Asp Ala Leu Thr Leu Pro Glu Pro Ala
            180                 185                 190
Leu Val Asp Glu Leu Val Gln Ala Tyr Phe Thr His Val Asn Pro Gly
        195                 200                 205
Tyr Pro Ile Val Glu Glu Asp Gln Phe Met Ser Gln Tyr Arg Asn Arg
    210                 215                 220
Asp Pro Ser Asp Pro Pro Pro Ile Leu Leu Leu Gln Ala Ile Leu Leu
225                 230                 235                 240
Val Gly Cys His Val Thr His Pro Lys Glu Glu Arg Asp Ala Leu Lys
                245                 250                 255
Ala Ile Phe Phe Arg Arg Ala Lys Trp Leu Phe Asp Asn Arg Ile Glu
            260                 265                 270
Arg Asn Arg Asp Thr Leu Val Gln Ala Ala Leu Leu Leu Thr Trp His
        275                 280                 285
Ser Asp Ser Pro Asp Asp Asp Val Ser Ala Asn Ala His Tyr Trp Val
    290                 295                 300
Gly Val Ala Ala Arg Ile Ala Thr Gly Leu Gly Met His Arg Asn Pro
305                 310                 315                 320
Val Ser Ser Arg Phe Ala Pro Arg Asp Arg Arg Met Trp Arg Arg Leu
                325                 330                 335
Trp Tyr Ile Leu Val Gln Leu Asp Val Met Val Ser Leu Ser Tyr Gly
            340                 345                 350
Arg Pro Gln Ala Met
        355
```

<210> 26602
<211> 170
<212> PRT
<213> A.fumigatus

<400> 26602

```
Thr Thr Ile Ala Asn Thr Ser Ala Asn Leu Trp Thr Ser Arg Trp Ser
1               5                   10                  15
Val Cys Ser Ala Ala Ala Arg Thr Leu Leu Ser Thr Asn Thr Arg Glu
            20                  25                  30
Gly Arg Ser Arg Leu Glu Glu Pro Ser Arg Gln Arg Gln Lys Gln Arg
        35                  40                  45
Arg Val Gly Glu Lys Gly Glu Arg Glu Arg Pro Pro Glu Arg Arg Pro
    50                  55                  60
Glu Arg Arg Arg Glu Arg Leu Arg Arg Arg Leu Arg Gln Asn Arg Gln
65                  70                  75                  80
Ser Ala Glu Val Leu Leu Thr Lys Pro Met Lys Ser Arg Thr Pro Arg
                85                  90                  95
Arg Pro Glu Met Thr Leu Lys Lys Leu Ser Leu Ser Arg Ile Lys Thr
            100                 105                 110
Leu Gln Val Ser Val Ala Pro Tyr Met Leu Arg Arg His Ala Gly Ser
        115                 120                 125
Gln Ala Met Arg Arg Thr Ile Ser Gln Thr Thr Ala Thr Thr Asp Ser
    130                 135                 140
Gln Ala Leu Arg Thr Thr Asp Gly Thr Arg Gly Val Ile Pro Cys Lys
145                 150                 155                 160
Val Arg Thr Val Pro Gly Thr Thr Glu Leu
```

165 170

<210> 26603
<211> 370
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (349),(355)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26603
Glu Lys Met Ile His Tyr His Arg Thr Thr Pro Leu Pro Pro Pro Lys
1 5 10 15
Glu Val Lys Lys Gly Gly Asn Lys Gly Arg Lys Ser Lys Glu Glu Lys
20 25 30
Asp Lys Glu Glu Glu Asp Asp Asp Glu Glu Asp Glu Glu Glu Lys Lys
35 40 45
Lys Asn Arg Asp Pro Ala Lys Thr Gly Ala Leu Leu Ser Phe Pro Asp
50 55 60
Arg Ala Ala Ala Ile Val Arg Ile Phe His Thr Asn Lys Ser Thr Cys
65 70 75 80
Lys Arg Met Leu Asp Tyr His Cys Lys Tyr Val Ser Glu Phe Val Asp
85 90 95
Val Pro Leu Glu Cys Leu Leu Arg Cys Arg Ala Asn Ile Ile Val Asn
100 105 110
Glu His Lys Gly Gly Gln Ile Lys Thr Gly Arg Ala Val Glu Ala Ala
115 120 125
Ala Lys Thr Glu Ala Gly Gly Gly Lys Arg Arg Thr Gly Lys Ala Thr
130 135 140
Gly Lys Ala Thr Arg Lys Ala Lys Gly Lys Ala Glu Ala Glu Ala Glu
145 150 155 160
Ala Glu Pro Pro Val Gly Gly Gly Ser Ala Asp Glu Ala His Glu Val
165 170 175
Glu Asp Ala Glu Lys Ala Gly Asn Asp Ser Gln Glu Ile Val Ala Val
180 185 190
Gln Asp Gln Asp Thr Ser Gly Gln Arg Gly Pro Leu Tyr Ala Ser Ala
195 200 205
Ala Arg Gly Gln Ser Ser Tyr Ala Gln Asn Asp Gln Ser Asn Tyr Gly
210 215 220
His Asn Gly Gln Ser Ser Ser Ala His Asn Gly Arg His Ser Arg Gly
225 230 235 240
Tyr Ser Met Gln Gly Gln Asp Ser Thr Gly Tyr Asn Arg Val Met Ser
245 250 255
Asn Ala Glu His Asn Gln Gly Met Thr Tyr Thr Gly Gln Tyr Gln Gly
260 265 270
Val Thr Asn Ala Gly His Asn Gln Val Ile Ser Asn His Gly His Val
275 280 285
Pro Gly Met Thr Tyr Thr Gly Gln Tyr Gln Gly Val Thr Ile Ala Gly
290 295 300
His Asn Gln Gly Met Asn Asn Asp Arg His Val Gln Gly Ile Thr Tyr
305 310 315 320
Thr Gly Gln Tyr Gln Gly Val Thr Asn Thr Gly His Ile Gln Ser Met
325 330 335
Thr Tyr Asn Gly Tyr Asn Asn Ile Gly Thr Gly Val Xaa Asn Ala Ser

```
            340                 345                 350
Pro Ile Xaa Arg Cys Leu Arg Ser Asp Pro Glu Val Ile Leu Val Thr
        355                 360                 365
Ala Thr
    370

<210> 26604
<211> 482
<212> PRT
<213> A.fumigatus

<400> 26604
Arg Ile Arg Ser Ala Arg Phe Leu Pro Tyr Thr Val Asn Phe His Asp
1               5                   10                  15
Asn Asp Ser Glu Asp Pro Ala Gly Asp Leu Thr Ser Pro Pro Val Ser
            20                  25                  30
Asn Pro Pro Ser Gln Ala Val Thr Pro Ala Pro Asn Ala Ala Ile Ser
        35                  40                  45
Leu Phe Glu Arg Gln Asn Asp Ala Arg Lys Ala Gly Leu Thr Pro Gly
    50                  55                  60
Ala Thr Thr Asp His Glu Arg Ile Phe Thr Ser Asp Ile Thr Lys Ala
65                  70                  75                  80
Glu Gln Glu Pro Ser Ser Tyr Pro Phe Pro Ala Val Pro Asp Asp Ala
                85                  90                  95
Asn Leu Leu Thr Glu Ser Glu Ala His Ser Pro Ala Trp Gly Ala Thr
            100                 105                 110
Thr Ala Leu Asn Gln Pro Lys Ala Arg Pro Pro Ile Ser Pro Ser Pro
        115                 120                 125
Ser Ile Leu Lys His Gln Glu Pro Thr Val Ser Val Leu Glu Pro Ile
    130                 135                 140
Arg Glu Lys Thr Pro Leu Lys Ile Glu Pro Phe Arg Ser His Pro Pro
145                 150                 155                 160
Asp Lys Ala Glu Asp Arg Ser Arg Lys Thr Ser Phe Ser Lys Ala Glu
                165                 170                 175
Trp Thr Val Glu Thr Ala Glu Gln Gly Asn Gly Gly Leu Arg Asn Ala
            180                 185                 190
Val Arg Ser Ala Thr Asp Ala Gly Gln Leu Glu Asp Lys Val Trp Val
        195                 200                 205
Gly Thr Leu Gly Met Pro Thr Asp Ala Leu Ser Pro His Thr Lys Ala
    210                 215                 220
Ala Ile Ala Glu Lys Leu Glu Asp Glu Tyr Gly Ser Leu Thr Val Tyr
225                 230                 235                 240
Val Ser Asp Gly Asp Phe Asp Gly His Tyr Thr His Phe Cys Lys Thr
                245                 250                 255
Ile Leu Trp Pro Val Phe His Tyr Gln Ile Pro Asp Asn Pro Lys Ser
            260                 265                 270
Lys Ala Tyr Glu Asp His Ser Trp Ile Tyr Tyr Val Lys Asn Thr Pro
        275                 280                 285
Gly Val Arg Gly Ala His Arg Glu Asp Leu Glu Arg Gly Asp Ser Ile
    290                 295                 300
Trp Val Gln Asp Tyr His Leu Leu Leu Val Pro Ala Met Leu Arg Lys
305                 310                 315                 320
Leu Leu Pro Asp Ala Gln Ile Gly Phe Phe Leu His Ile Ala Phe Pro
                325                 330                 335
Ser Ser Glu Val Phe Arg Cys Leu Ala Pro Arg Lys Glu Leu Leu Glu
            340                 345                 350
```

```
Gly Met Leu Gly Ala Asn Leu Ile Gly Phe Gln Thr Asp Glu Tyr Cys
        355                 360                 365
Arg His Phe Leu Gln Thr Cys Ser Arg Ile Leu Cys Val Glu Ala Thr
    370                 375                 380
Asn Glu Gly Leu Glu Leu Glu Asp Arg Phe Val Asn Val Gly Thr Phe
385                 390                 395                 400
Pro Ile Gly Ile Asp Pro Thr Ser Trp Asp Lys Arg Arg Gln Ala Ala
                405                 410                 415
Asp Val Glu Gln Trp Val Lys Thr Ile Ser Glu Arg Tyr Glu Gly Lys
            420                 425                 430
Tyr Leu Ile Val Ser Arg Asp Lys Ile Asp Ser Val Arg Gly Ile Arg
        435                 440                 445
Gln Lys Leu Leu Ser Tyr Glu Leu Phe Leu Asn Thr Tyr Pro Glu Trp
    450                 455                 460
Arg Asn Lys Ala Ser Thr Phe Leu Ala Ala Ile Cys Ala Ile Thr Arg
465                 470                 475                 480
Leu Arg
```

<210> 26605
<211> 78
<212> PRT
<213> A.fumigatus

<400> 26605

```
Leu Thr Ser Ser Ser Arg Val Glu Asn Leu Lys Asp Met Val Leu Tyr
1               5                   10                  15
Arg Phe Gly Ser Thr Gly Val Val Gln Cys Leu Ser Arg Ala Ala Glu
            20                  25                  30
Leu Leu Gly Leu Val Pro Val Phe Pro Val Lys Asn Val His Thr Phe
        35                  40                  45
Ser Ser Gly Ser Gly Asn Ala Val Phe Arg Asp Cys Val Leu Val Lys
    50                  55                  60
Lys Trp Val Leu Leu Gln Ser Asp Ile Asn Glu Val Tyr Asp
65                  70                  75
```

<210> 26606
<211> 85
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (15)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26606

```
Asn Ile Thr Asp Asp Asn Ser Leu Leu Leu Gly Arg Asp Ser Xaa Asn
1               5                   10                  15
His Leu Thr Ser Phe Ile Leu His Thr Asp Tyr Arg Phe Trp Cys Leu
            20                  25                  30
Lys Asn Phe Leu Leu Asn Trp Arg Ser Leu Leu Lys Pro Ser Leu Leu
        35                  40                  45
Gly His Ala Cys Trp Leu Gly Ile Ser Ala Asn Pro Ala Pro Ser Phe
    50                  55                  60
Phe Pro Leu Gln Pro Gly Thr Glu Ile Ser Val Arg Arg Tyr Cys Phe
```

65 70 75 80
Ser Arg Trp Pro Pro
85

<210> 26607
<211> 128
<212> PRT
<213> A.fumigatus

<400> 26607
Asp Ser Leu Ser Tyr Gln Cys Val Cys Ser Asn Gly Ile Ser Pro Asn
1 5 10 15
Thr Ser Glu Tyr Ser Gln Thr Ile Pro Tyr Tyr Leu Cys Thr Glu Ala
20 25 30
Asn Asn Glu Cys Val Ser Arg Cys Ser Glu Ala Asp Ser Ala Cys Gln
35 40 45
Ser Ala Cys Arg Ser Glu His Pro Cys Gly Ala Gln Asn Pro Thr Arg
50 55 60
Tyr Asn Val Thr Thr Thr Ser Ala Thr Ser Asn Pro Thr Asn Asn Pro
65 70 75 80
Ala Thr Thr Thr Thr Leu Ala Ala Phe Thr Gly Glu Ala Thr Asn Lys
85 90 95
Asn Ala Ala Val Arg Ile Ser Pro Val Asp Ile Gly His Val Tyr Gly
100 105 110
Leu Cys Val Val Val Gly Cys Phe Ile Ala Gly Phe Ala Val Leu Leu
115 120 125

<210> 26608
<211> 218
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222>
(47),(79),(126),(127),(128),(129),(130),(131),(132),(137),(138),(139),(141),(142),(143),(145),(149),(150),(156),(157),(161),(162),(164),(166),(167),(170),(171),(174),(178),(190),(192),(195),(196),(197),(210),(215),(216)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26608
Arg Thr Arg Gln Ser Gly Gly Asn Asp Thr Asp Leu Arg Val Arg Leu
1 5 10 15
Val Ala Gln Val Asp Asp Asp Gly Ala Leu Ala Arg Gly Thr Ala Leu
20 25 30
Leu Asp Cys Glu Ala Asp Thr Ala Leu Arg Glu Gly Leu Arg Xaa Gly
35 40 45
Arg Gln Leu Arg Glu Asn Gly Gly Gly Ala Val Glu Val Gly Arg Cys
50 55 60
Gly Val Ala Ala Val Leu Ala Asp Asp Pro Ala Gln Gly Arg Xaa Gly
65 70 75 80
Arg Cys Leu Cys Gly Gly Asp Val Val Ala Val Lys Ala His Ala Cys
85 90 95
Leu Glu Ala Glu Gly Val Ala Gly Arg Glu Ala Gly Glu Pro Asp Leu
100 105 110
Leu Arg Val Gly Gln Lys Glu Leu Ser Asp Leu Ser Trp Xaa Xaa Xaa

```
        115                 120                 125
Xaa Xaa Xaa Xaa Gly Gly Gly Gly Xaa Xaa Xaa Pro Xaa Xaa Xaa Gly
    130                 135                 140
Xaa Pro Gly Arg Xaa Xaa Gly Gly Gly Pro Gly Xaa Xaa Gly Gly Pro
145                 150                 155                 160
Xaa Xaa Gly Xaa Gly Xaa Xaa Ala Gly Xaa Xaa Pro Pro Xaa Pro Gly
                165                 170                 175
Pro Xaa Arg Arg Ala Pro Pro Gly Gly Ala Pro Pro Arg Xaa Pro Xaa
            180                 185                 190
Pro Gly Xaa Xaa Xaa Pro Ala Pro Ala Pro Gly Gly Pro Arg Gly Ala
        195                 200                 205
Pro Xaa Arg Pro Arg Ala Xaa Xaa Pro Pro
    210                 215
```

<210> 26609
<211> 166
<212> PRT
<213> A.fumigatus

<400> 26609

```
Pro Val Val Gly Tyr Thr Gln Gly Gly Ser Asn Ala Asp Val Val Leu
1               5                   10                  15
Ala Asp Ala Tyr Val Lys Gly Ile Ser Asp Gly Ile Glu Trp Glu Ala
            20                  25                  30
Gly Tyr Ala Thr Val Gln Lys Asp Ala Glu Glu Glu Pro Tyr Tyr Trp
        35                  40                  45
Ser Asn Glu Gly Arg Gly Gly Leu Asn Ser Trp Lys Ser Leu Lys Tyr
    50                  55                  60
Ile Pro Val Glu Asp Phe Asp Tyr Val Gly Phe Gly Thr Met Thr Arg
65                  70                  75                  80
Ser Ile Ser Arg Thr Leu Glu Tyr Thr Asn Asn Asp Phe Thr Ile Ser
                85                  90                  95
Gln Met Ala Arg Gly Met Lys Lys Thr Ala Asp Ala Glu Lys Tyr Glu
            100                 105                 110
Ser Thr Ser Gly Tyr Trp Arg Asn Leu Phe Arg Glu Asp Gln Thr Ser
        115                 120                 125
Phe Val Asn Gly Ser Asp Thr Gly Phe Lys Gly Phe Phe Gln Pro Arg
    130                 135                 140
Tyr Leu Asn Gly Thr Trp Gly Ser Gln Val Gly Leu Pro Arg Leu Ala
145                 150                 155                 160
Leu Ala Glu Phe Ala Asp
                165
```

<210> 26610
<211> 247
<212> PRT
<213> A.fumigatus

<400> 26610

```
Leu Asp Ser Ser Phe Val Pro His Asp Met Ala Ala Leu Val Thr Leu
1               5                   10                  15
Leu Gly Gly Pro Asp Arg Tyr Val Gln Arg Leu Asp Tyr Leu His Asp
            20                  25                  30
Lys Gly Ile Thr Tyr Ile Gly Asn Glu Pro Ser Phe Leu Thr Val Phe
        35                  40                  45
Gln Tyr His Tyr Ala Gly Arg Pro Ala Lys Ser Ala Ser Arg Ala His
```

```
    50                  55                  60
Phe Tyr Ile Pro Asn Leu Tyr Phe Asn Pro Thr Pro Ala Gly Leu Pro
65                  70                  75                  80
Gly Asn Asp Asp Ser Gly Ala Met Gly Ser Phe Val Ala Met Ser Met
                85                  90                  95
Met Gly Leu Phe Pro Ile Pro Gly Gln Ser Val Tyr Leu Ile Ser Ala
            100                 105                 110
Pro Phe Phe Glu Val Val Arg Ile Gln Ser Pro Leu Thr Gly Arg Thr
        115                 120                 125
Ala Thr Val Arg Ala Val Asn Phe Asp Pro Thr Tyr Gln Asn Ile Tyr
    130                 135                 140
Ile Gln Ser Ala Thr Leu Asn Gly Lys Pro Tyr Ala Lys Asn Trp Val
145                 150                 155                 160
Asp His Asp Phe Phe Thr Lys Gly Lys Glu Leu Val Leu Val Leu Gly
                165                 170                 175
Arg Asn Glu Ser Arg Trp Gly Thr Ala Glu Glu Asp Arg Pro Pro Ser
            180                 185                 190
Leu Ser Thr Arg Gly Gly Ala Ser Ser Ser Gly Leu Arg Gln Arg Met
        195                 200                 205
Val Asp Phe Asp Pro Ala Ala Leu Gln Phe Gly Glu Tyr Gly His Ala
    210                 215                 220
Arg Arg Arg Arg His Ser Phe Pro Phe Ala Tyr Arg His His Ala Val
225                 230                 235                 240
Ala Lys Glu Phe Thr His Thr
                245
```

<210> 26611
<211> 219
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222>
(3),(4),(9),(21),(22),(23),(26),(27),(28),(41),(44),(45),(48),(49),(52),(54),(57),(58),(62),(69),(70),(74),(76),(77),(78),(80),(81),(82),(86),(87),(88),(89),(90),(91),(92),(93),(140),(171)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26611

```
Gly Gly Xaa Xaa Ala Arg Gly Arg Xaa Gly Ala Pro Arg Gly Pro Pro
1               5                   10                  15
Gly Ala Gly Ala Xaa Xaa Xaa Gly Pro Xaa Xaa Xaa Ala Arg Gly Gly
            20                  25                  30
Ala Pro Pro Gly Gly Ala Arg Arg Xaa Gly Pro Xaa Xaa Gly Gly Xaa
        35                  40                  45
Xaa Pro Ala Xaa Pro Xaa Pro Pro Xaa Xaa Gly Pro Pro Xaa Pro Pro
    50                  55                  60
Gly Pro Pro Pro Xaa Xaa Arg Pro Gly Xaa Pro Xaa Xaa Xaa Gly Xaa
65                  70                  75                  80
Xaa Xaa Pro Pro Pro Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa His Glu Arg
                85                  90                  95
Ser Leu Ser Ser Phe Cys Pro Thr Arg Ser Lys Ser Gly Ser Pro Ala
            100                 105                 110
Ser Arg Pro Ala Thr Pro Ser Ala Ser Arg Gln Ala Cys Ala Phe Thr
        115                 120                 125
```

```
Ala Thr Thr Ser Pro Pro His Arg His Leu Pro Xaa Arg Pro Trp Ala
    130                 135                 140
Gly Ser Ser Ala Arg Thr Ala Ala Thr Pro Gln Arg Pro Thr Ser Thr
145                 150                 155                 160
Ala Pro Pro Pro Phe Ser Arg Ser Trp Arg Xaa Pro Arg Arg Pro Ser
                165                 170                 175
Arg Ser Ala Val Ser Ala Ser Gln Ser Arg Arg Ala Val Pro Arg Ala
            180                 185                 190
Arg Ala Pro Ser Ser Ser Thr Trp Ala Thr Ser Arg Thr Arg Arg Ser
        195                 200                 205
Val Ser Leu Pro Pro Asp Cys Arg Val Arg His
    210                 215
```

<210> 26612
<211> 148
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (41),(73)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26612

```
Ala Leu Ser Val Gln Pro Gly Ala Ser Pro Ala Arg Arg Pro Arg Gly
1               5                   10                  15
Pro Arg Leu Pro Pro Pro Arg Gly Arg His Val Pro Leu Arg Gln Arg
            20                  25                  30
His Leu His Arg Thr Asp Thr Ser Xaa Cys Gly Leu Gly Leu Gly Arg
        35                  40                  45
Arg Gln Gly Pro Pro Arg Pro Arg Asn Gly Gln Leu Gln Arg Arg Arg
    50                  55                  60
His His Ser Pro Ala Ala Gly Val Xaa Arg Glu Asp Pro Leu Ala Ala
65                  70                  75                  80
Pro Cys Arg Leu His Ser Arg Glu Gly Gln Ser Arg Ala Arg Gly Arg
                85                  90                  95
His Arg Arg Arg Pro Gly Arg Arg Val Ala Pro Ala Asp Arg Cys His
            100                 105                 110
Tyr Leu Arg Thr Ala Glu Ser Val Thr Arg Arg Tyr Glu Tyr Arg Tyr
        115                 120                 125
Gly Leu Tyr Gln Glu Arg His Ala Gln Glu Gly Asp Arg Gly Trp Gly
    130                 135                 140
Val Gly Pro Glu
145
```

<210> 26613
<211> 269
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222>
(3),(4),(9),(22),(23),(24),(27),(29),(41),(45),(48),(49),(52),(53),(55),(57),(58),(62),(63),(69),(70),(74),(76),(77),(78),(80),(81),(82),(87),(88),(89),(90),(91),(92),(93),(140),(172)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26613

```
Gly Gly Xaa Xaa Arg Ala Gly Pro Xaa Gly Arg Pro Pro Gly Ala Pro
1               5                  10                  15
Arg Gly Gly Gly Gly Xaa Xaa Xaa Pro Gly Xaa Gly Xaa Pro Gly Gly
            20                  25                  30
Gly Ala Pro Arg Arg Gly Ala Ala Xaa Gly Pro Arg Xaa Gly Gly Xaa
        35                  40                  45
Xaa Pro Arg Xaa Xaa Pro Xaa Pro Xaa Xaa Gly Ala Pro Xaa Xaa Pro
    50                  55                  60
Arg Ala Pro Pro Xaa Xaa Pro Pro Gly Xaa Pro Xaa Xaa Xaa Arg Xaa
65                  70                  75                  80
Xaa Xaa Pro Pro Pro Pro Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Arg Lys
                85                  90                  95
Val Thr Glu Leu Phe Leu Ser Asn Pro Glu Gln Val Arg Leu Ala Gly
            100                 105                 110
Leu Ala Ala Arg Asp Ser Leu Arg Leu Glu Ala Gly Met Cys Leu Tyr
        115                 120                 125
Gly Asn Asp Ile Ser Thr Ala Gln Thr Pro Pro Xaa Ala Ala Leu Gly
    130                 135                 140
Trp Val Val Gly Lys Asp Arg Arg Asp Pro Ala Thr Ala Asn Phe Asn
145                 150                 155                 160
Gly Ala Ala Thr Ile Leu Pro Gln Leu Ala Ser Xaa Ala Lys Thr Leu
                165                 170                 175
Ser Gln Arg Arg Val Gly Phe Thr Val Glu Lys Gly Ser Pro Ala Arg
            180                 185                 190
Glu Gly Ala Ile Val Val Asp Leu Gly Asp Glu Ser His Pro Gln Ile
        195                 200                 205
Gly Val Ile Thr Ser Gly Leu Pro Ser Pro Ser Leu Gly Gly Thr Asn
    210                 215                 220
Ile Ala Met Gly Tyr Ile Lys Asn Gly Met His Lys Lys Gly Thr Glu
225                 230                 235                 240
Val Gly Val Leu Val Arg Asn Lys Val Arg Lys Ala Thr Val Thr Gly
                245                 250                 255
Met Pro Trp Val Glu Ser Lys Phe Tyr Arg Pro Lys Ala
            260                 265
```

<210> 26614
<211> 106
<212> PRT
<213> A.fumigatus

<400> 26614

```
Gly Ser Thr Ala Leu Thr Trp Asn Phe Ser Arg Glu Ser Gly Lys Leu
1               5                  10                  15
Val Lys Asp Leu Ser His Ile Ala Val Thr Phe Gly Arg Pro Glu Lys
            20                  25                  30
Asn Val Ile Ser Ile Glu Met His His Gly Ala Arg Lys Gly Val Ala
        35                  40                  45
Thr Leu Arg Thr Val Arg Thr Leu Ile Asn Asn Leu Ile Ile Gly Val
    50                  55                  60
Thr Arg Gly Phe Lys Tyr Lys Met Arg Tyr Val Tyr Ala His Phe Pro
65                  70                  75                  80
Ile Asn Val Asn Ile Glu Lys Asn Ser Glu Thr Gly Gln Tyr Glu Val
                85                  90                  95
```

```
Glu Ile Arg Tyr Ala Ala His Asn Pro Asn
            100                 105

<210> 26615
<211> 70
<212> PRT
<213> A.fumigatus

<400> 26615
Thr Pro Ile Asp Leu Glu Arg Ile Leu Lys Leu Thr Trp Glu Leu Leu
1               5                  10                  15
Ile Ser His Gly Val Glu Ser Cys Asn Gly Asn Asn Ala Pro Thr Asp
            20                  25                  30
Phe Lys Ser Leu Leu Ser Ser Ile Pro Gly Thr Ser Asn Ser Asn Asn
        35                  40                  45
Asn Tyr Phe Ser Pro Ile Arg Leu Leu Gln Asn Leu Ser Leu Gly Ala
    50                  55                  60
Ser Phe Ile Leu Ser Glu
65                  70

<210> 26616
<211> 71
<212> PRT
<213> A.fumigatus

<400> 26616
Arg Val Val Leu Thr Gly Phe Ala Ile Val Arg Asn Phe Leu Gly Glu
1               5                  10                  15
Lys Ile Val Arg Arg Val Thr Ala Gln Pro Gly Val Glu Val Ala Ile
            20                  25                  30
Ser Ser Asn Val Lys Asp Glu Leu Gln Leu Thr Gly Asn Ser Leu Glu
        35                  40                  45
Ala Val Ser Gln Ser Ala Ala Asp Ile Gln Gln Ile Cys Arg Val Arg
    50                  55                  60
Asn Lys Asp Ile Arg Lys Val
65                  70

<210> 26617
<211> 113
<212> PRT
<213> A.fumigatus

<400> 26617
Asp Arg Leu Tyr Ala Arg Ile Gln Ser Pro His Phe Arg Arg Val Ser
1               5                  10                  15
Gly Met Arg Asn Ile Ser Thr Thr Val Thr Pro Asp Phe Leu Arg Leu
            20                  25                  30
Tyr Asn Ala Asn Ala Leu Leu Ala Val Arg Val Val His Asp Gly Asn
        35                  40                  45
Tyr Leu His Ala Gly Thr Thr Cys Arg Ile Ser Phe Arg Asn Ala Ala
    50                  55                  60
Ala Asp Phe Leu Glu Gly Ala Gly Ala Arg Asp Thr Glu Pro Val Thr
65                  70                  75                  80
Pro Gly Tyr Gly Glu Gly Glu Thr Gln Gly Ser Gln Gly Gly Arg Ala
                85                  90                  95
His Val Asn Ile Thr Thr Leu Gly Glu Gly Ala Asp Met Ala Trp Trp
```

100 105 110

Asp

<210> 26618
<211> 539
<212> PRT
<213> A.fumigatus

<400> 26618

```
Ile His Val Ser Ser Leu Met Pro Ala Ile Ala Ser Pro Ala Thr Asp
1               5                  10                  15
Ala Lys Leu Leu Pro Thr Ala Lys Ala Thr Asn Trp Phe Val Ile Arg
            20                  25                  30
Ala Ile Glu Ser Gly Gly Phe Asn Ala Glu Asn Asp Pro Arg Ala Phe
        35                  40                  45
Glu Ala Leu Leu Lys Val Thr Pro His Val Val Pro Pro Trp Ser Asn
    50                  55                  60
Asn Thr Ser Pro Met Glu Glu Asp Val Glu Ser Leu Thr Leu Gly Gln
65                  70                  75                  80
Leu Tyr Asp Asp Thr Ser Ala Leu Ala Gly Leu Met Glu Tyr Asn Ile
                85                  90                  95
Arg Phe Phe Ala Ser Gln Arg Leu Cys Thr Asp Ala Leu Asp Ala Phe
            100                 105                 110
Ser Trp Leu Gln Glu Val Val Asp Ala Ser Lys Leu Gln Arg Ile Arg
        115                 120                 125
Glu Phe Ser Glu Arg Val Gly Gln Ser Asp Thr Ala Gly Leu Pro Ser
    130                 135                 140
Phe Asp Ala Asn Ser Leu Glu Ser Phe Lys Pro Phe Glu Ser Ser Met
145                 150                 155                 160
Pro Gln Met Ser Ile Val Thr Val Ala Glu Leu Leu Asp Leu Val Thr
                165                 170                 175
Thr Ser Arg Ala Phe Ala Phe Gly Glu Trp Leu Phe Phe Ser Asn Asp
            180                 185                 190
Ile Asp Gly Pro Pro Ile Pro Pro Ser Ala Tyr Gly Asn Gln Ala Leu
        195                 200                 205
Ala Pro Ser Ile Ile Arg Phe Ala Ser Ala Thr Lys Asn Glu Ala Leu
    210                 215                 220
Cys Asn Ser Val Val Arg Ser Leu Ser Gln Pro Leu Ser Leu Asn Thr
225                 230                 235                 240
Met Arg Ala Leu Leu Asn Phe Arg Ile Ala Met Gly Gln Trp Asp Ser
                245                 250                 255
Ala Thr Met Met Leu Glu Tyr Val Arg Asp Tyr Arg Leu Lys Ser Trp
            260                 265                 270
Gly Tyr Ser Asn Val Thr Ala Leu Ala Ala Ala Leu Val Arg Met Asp
        275                 280                 285
His Ala Leu Lys Gln Gln Pro Ser Thr Glu Arg Gln Ser Asp Leu Asp
    290                 295                 300
Arg Ala Lys Asp Leu Leu Leu Arg Leu Leu Asn Gly Glu Phe Asn Glu
305                 310                 315                 320
Ser Cys His Ser Lys Thr Ser Phe Gln Asp Arg Phe Ile His Ser Ile
                325                 330                 335
Arg Arg Val Phe Leu Thr Ile Pro Gly Ser Leu Arg Glu Val Ala Gln
            340                 345                 350
Lys Thr His Leu Lys Tyr Lys Ala Thr Ala Arg Ser Asn Leu Pro Tyr
        355                 360                 365
```

```
Ile Pro Ala Thr Ala Phe His Ala Leu Leu Ser Ala Val Val Asp Thr
    370                 375                 380
His Gly Ser Ala Ala Gly Lys Arg Leu Trp Glu Gln Trp Cys Leu Asp
385                 390                 395                 400
Val Arg Ser Pro Thr Phe Ser Arg Leu Gln Glu Gly Gly Ile Thr Arg
                405                 410                 415
Leu Tyr Leu Gln Arg Glu Arg Asp Pro Arg Lys Gly Asp Pro His Phe
            420                 425                 430
Asp Pro Arg Tyr Phe Ala Gln Thr Gln Lys Lys Ala Val Leu Pro Asn
        435                 440                 445
Pro Asn Thr Val Arg Ile Ile Ala Gln Gln Ala Val Lys Glu Tyr Thr
    450                 455                 460
Glu Phe Asp Glu Ala Arg Arg Arg Gln Gln Ala Asp Gln His Lys Gln
465                 470                 475                 480
Gln Asp Ser Asn Pro Ala Arg Glu Val Val Glu Phe Cys Ile Arg Gln
                485                 490                 495
Phe Gln Ala Phe Arg Val Pro Trp Arg Glu Ile Asn Arg Glu Leu Arg
            500                 505                 510
Gly Leu Val Tyr Arg Met His Arg Glu Lys Lys Lys Glu Arg Lys Lys
        515                 520                 525
Met Gly Arg Asp Gly Ala Ser Thr Pro Asn Lys
    530                 535

<210> 26619
<211> 426
<212> PRT
<213> A.fumigatus

<400> 26619
Cys Asp Trp Leu Thr Phe Ser Ile Glu Ala Gly Asn Tyr Ala Ile Asp
1               5                   10                  15
Ile Phe Lys Arg Ala Gly Glu Thr Ala Gly Gly Val Ala Ser Gly Phe
            20                  25                  30
Phe Gln Glu Leu Gln Asn Val Ala Glu Gln Thr His Arg Gly Trp Gln
        35                  40                  45
Lys Thr Thr Glu Asp Ile Glu Val Pro Glu Trp Leu Gln Lys Ile Leu
    50                  55                  60
Arg Leu Asp Glu Gly Ser His Asp Gly Ser Gly Gly Ser Ser Gly Gly
65                  70                  75                  80
Gly Ser Pro Lys Glu Ser Arg Ala Gly Ala Gly Val Val Gly Val Ala
                85                  90                  95
Ala Gly Ser Ala Phe Gly Tyr Ser Gln Ser Asp Glu Asp Glu Val Arg
            100                 105                 110
His Ala Arg Gln Ile Ala Glu Asp Asp Gln Met Met Leu Leu Thr Arg
        115                 120                 125
Lys Met Ile Glu Ile Arg Asn Ile Leu Gln Thr Val Gly Gln Ser Gly
    130                 135                 140
Thr Leu Thr Leu Pro Ser Ile Val Val Ile Gly Ser Gln Ser Ser Gly
145                 150                 155                 160
Lys Ser Ser Val Leu Glu Ala Ile Val Gly His Glu Phe Leu Pro Lys
                165                 170                 175
Gly Thr Asn Met Val Thr Arg Arg Pro Ile Glu Leu Thr Leu Val Asn
            180                 185                 190
Thr Pro Asn Ala Gln Ser Glu Tyr Gly Glu Phe Pro Ala Leu Gly Leu
        195                 200                 205
Gly Lys Ile Thr Asp Phe Ser Gln Ile Gln Arg Thr Leu Thr Asp Leu
```

```
    210                 215                 220
Asn Leu Ala Val Pro Glu Arg Asp Cys Val Ser Asp Asp Pro Ile Lys
225                 230                 235                 240
Leu Thr Ile Tyr Ser Pro Asn Val Pro Asp Leu Ser Leu Ile Asp Leu
                245                 250                 255
Pro Gly Tyr Ile Gln Val Ala Gly Lys Asp Gln Pro Pro Glu Leu Lys
            260                 265                 270
Gln Lys Ile Ala Asp Leu Cys Asp Lys Tyr Ile Gln Pro Pro Asn Val
        275                 280                 285
Ile Leu Ala Ile Ser Ala Ala Asp Val Asp Leu Ala Asn Ser Thr Ala
    290                 295                 300
Leu Arg Ala Ser Arg Arg Val Asp Pro Arg Gly Glu Arg Thr Ile Gly
305                 310                 315                 320
Val Ile Thr Lys Met Asp Leu Val Asp Pro Glu Arg Arg Phe Ser Ile
                325                 330                 335
Leu Ser Asp Gln Lys Tyr Pro Leu Arg Leu Gly Tyr Val Arg Val Val
            340                 345                 350
Ser Arg Val Pro Gln Asn Thr Ala Leu Phe Ser Arg Val Ser Ala Ile
        355                 360                 365
Ser Leu Met Arg Phe Ser Arg Met Arg Met Pro Thr Phe Arg Leu Ile
    370                 375                 380
Arg Pro Asn Ser Val Leu His Pro Val Tyr Gln Trp Ala Phe Pro Arg
385                 390                 395                 400
Cys Gln Gly Asn Ser Phe Leu Phe Leu Thr Gln His Cys Arg Gln Pro
                405                 410                 415
Asn Pro Val Leu Arg Glu Leu Phe Pro Gln
            420                 425
```

<210> 26620
<211> 376
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (375)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26620

```
Arg Arg Pro Val Thr Asn Phe Val Thr Leu Ser Tyr Arg Leu Pro Arg
1               5                   10                  15
Thr Gly Arg Ser Ala Ile Arg Ser Trp Arg Arg Gln Tyr Ala Asn Gly
            20                  25                  30
Asn Gly Arg Ala Pro Glu Ser Ser Ala Pro Ser Ser Asn Trp Leu Arg
        35                  40                  45
Thr Ala Leu Gly Leu Gly Gly Thr Ala Ala Ala Thr Phe Leu Val Tyr
    50                  55                  60
Thr Phe Ala Thr Thr Arg Ser Asp Gln Leu Glu Ser Ala Ile Glu Ala
65                  70                  75                  80
Lys Thr Val Thr Pro Lys Ile Ala Gln Asp Leu Asp Ser Gln Tyr Val
                85                  90                  95
Gln Glu Lys Lys Ser Leu Lys Ser Pro Gly Val Tyr Leu Trp Gly Asn
            100                 105                 110
Asn Thr Tyr Arg Val Val Asp Pro Thr Ser Lys Glu Ser Val Val Lys
        115                 120                 125
Thr Pro Arg Gln Leu Pro Tyr Phe Glu Gly Gln Val Leu Arg Asp Leu
```

```
    130                 135                 140
Lys Ile Ser Glu Lys Ser Gly Ala Ala Ile Thr Glu Asn Gly Asp Leu
145                 150                 155                 160
Val Gln Trp Gly Lys Gly Tyr Ser Glu Thr Asp Phe Lys Pro Thr Lys
                165                 170                 175
Thr Leu Thr Gly Lys Asp Leu Arg Ser Leu Cys Met Ser Ser Asp Arg
            180                 185                 190
Ile Leu Ala Leu Ala Ser Asn Gly Asn Val Tyr Ser Leu Pro Ile Ala
        195                 200                 205
Lys Asp Asp Gln Glu Ser Gly Arg Lys Pro Lys Glu Gly Ser Trp Phe
    210                 215                 220
Pro Phe Ser Ser Gly Arg Ala Gly Val Ser Tyr Arg Leu Leu Glu Pro
225                 230                 235                 240
Ala Leu Arg Leu Gly Glu Lys Val Thr Ala Ile Ser Gly Gly Leu Gln
                245                 250                 255
His Ala Leu Leu Leu Thr Asn Ser Gly Arg Val Phe Ser Val Ala Ser
            260                 265                 270
Ser Thr Glu Gly Tyr Pro Ser Phe Gly Gln Leu Gly Val Pro Gly Leu
        275                 280                 285
Thr Trp Ser Thr Arg Pro Gln Gly Pro Val Asp Thr Cys His Glu Val
    290                 295                 300
Lys Thr Leu Ser Asn Ser Lys Val Thr Glu Val Ala Thr Gly Asp Tyr
305                 310                 315                 320
His Ser Leu Ala Leu Thr Lys Asp Gly Asn Val Tyr Ala Phe Gly Asp
                325                 330                 335
Asn Ser Phe Gly Gln Leu Gly Ser Glu Phe Asp Pro Ala Gln Pro Phe
            340                 345                 350
Asn Asp Thr Pro Thr Leu Val Pro Leu Lys Leu Phe Tyr Pro Arg Lys
        355                 360                 365
Ser Cys Leu Arg Gln Gly Xaa Glu
    370                 375
```

<210> 26621
<211> 234
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (40)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26621

```
Ser Met Leu Leu Ser Phe His Ala Val His Thr Gly Arg Trp Ser Asn
1               5                   10                  15
Gln Asp Arg Met Ala Gly Ala Gln Asp Leu Asp Arg Pro Phe Leu Ala
            20                  25                  30
Phe Ser Gln Asp Met Pro Pro Xaa Trp Gln Pro Glu Arg Arg Ile Leu
        35                  40                  45
Gln Tyr Pro Leu Pro His Val Tyr Gly Gln Glu Met Asp Ile Tyr Arg
    50                  55                  60
Asp Arg His Val Thr Gln Thr Trp Asn Val Val Arg Gln Val Arg Ile
65                  70                  75                  80
Gln Leu Asn Glu Tyr Leu Val Asp Cys Tyr Glu Thr Leu Asn Ala Val
                85                  90                  95
His Gly Val Asn Gln Leu Ala Ala Ser Glu Ala Ala Leu Ser Asp Ile
```

```
            100                 105                 110
Ala Ala Leu Ser Leu Glu Val Tyr Ala Ser Val Pro Gln Tyr Ala Ser
        115                 120                 125
Tyr Ala Cys Arg Ser Lys Arg Ser Gln Gly Gln Ala Asp Asn Thr Asp
    130                 135                 140
Leu Ser Val Val Ser Gln Lys Gly Cys Asn Lys Val His Thr Pro Ser
145                 150                 155                 160
Glu Leu Leu Asp Cys Tyr Thr Leu Leu Phe Pro Met Tyr Val Ala Ala
                165                 170                 175
Arg Ser Lys Ala Ala Thr Ala Asp Gln Arg Arg Trp Val Ser Tyr Met
            180                 185                 190
Phe Arg Tyr Ile Ser Asp His Phe Gly Ile Arg Asn Ala Leu Leu Leu
        195                 200                 205
Ala Gln Leu Leu Asp Gln Asn Ser Asp Ile Ser Pro Trp Cys Ile Tyr
    210                 215                 220
Ala Met Leu Gly Gly Tyr Gly Phe Ala Ala
225                 230
```

<210> 26622
<211> 265
<212> PRT
<213> A.fumigatus

<400> 26622

```
Asn Thr Met Phe Cys Asn Thr Ser Ile His Ser Leu Glu Val Pro Thr
1               5                   10                  15
Glu Val Ser Ser Arg Ala Arg Met Leu Thr Gly Val Asp Asp Arg Phe
            20                  25                  30
Leu Thr Asp Ser Ile Gly Asn Val Phe Ala Gly Ala Ser Leu Pro Tyr
        35                  40                  45
Gly Met Ala Lys Ala Val Ala Asp Thr Asn Ser Pro Ser Asn Gln Gly
    50                  55                  60
Gly Phe Thr Leu Asp Gly Ser Asn Ile Thr Gly Phe Ser Ser Leu His
65                  70                  75                  80
Asp Ser Gly Thr Gly Gly Asn Pro Ser Leu Gly Asn Phe Pro Leu Phe
                85                  90                  95
Pro Tyr Pro Lys Cys Lys Gly Asp Asp Val Asn Gly Cys Ala Tyr Pro
            100                 105                 110
Lys Lys Glu Arg His Ile Gly Tyr His Ala Asp Ser Val Lys Ala Ser
        115                 120                 125
Pro Gly Tyr Phe Ala Leu Thr Met Asn Ser Gly Ile Lys Val Asp Met
    130                 135                 140
Thr Val Ser His His Thr Ser Leu Phe Arg Phe Gln Phe Pro Thr Asp
145                 150                 155                 160
Gly Ala Ser Ser Pro Leu Ile Leu Leu Asp Leu Thr Asp Leu Ser Asp
                165                 170                 175
Ser Arg Gln Asp Asn Gly Thr Ile Ser Val Asp Ala Ser Thr Gly Arg
            180                 185                 190
Met Thr Gly His Ala Arg Phe Leu Pro Ser Phe Gly Ser Gly Ser Tyr
        195                 200                 205
Val Pro Tyr Phe Cys Val Asp Phe Gln Ser Asn Ser Ala Val Arg Asp
    210                 215                 220
Asn Gly Ile Phe Val Asn Ser Arg Ala Ser Thr Asp Val Lys Glu Leu
225                 230                 235                 240
Arg Ile Ser Arg Asn Ile Lys Gly Tyr Pro Leu Pro Val Ser Gln Leu
                245                 250                 255
```

```
Ala Gly Ser Phe Asn Arg Asn Leu Phe
            260                 265

<210> 26623
<211> 117
<212> PRT
<213> A.fumigatus

<400> 26623
Leu Pro Ser Met Leu Ser Cys Ala Arg Ser Arg Val Ala Ala Phe Ser
1               5                  10                  15
Thr Ala Trp Thr Pro Arg Phe Val Ala Arg Ala Ser Tyr Ser Thr Thr
            20                  25                  30
Met Pro Arg Leu Thr Glu Asn Arg Met Gln Ala Asn Asp Pro Thr Ser
        35                  40                  45
Arg Thr Pro Glu Pro Asn Val Ser Ala Thr Asn Ala Thr Pro Thr Asp
    50                  55                  60
Ser Gln Gly Val Trp Asp Ala Pro Leu Arg Glu Glu Pro Glu Ala Gly
65                  70                  75                  80
Glu Arg Asn Arg Gln Leu Gln Ala Pro Asn Arg Ala Thr Thr Trp Ala
                85                  90                  95
Ala Ser Gln Gln Pro Arg Glu Lys Ala Met Thr Gly Pro Arg Phe Glu
            100                 105                 110
Gln Thr Ile Met Glu
        115

<210> 26624
<211> 82
<212> PRT
<213> A.fumigatus

<400> 26624
Ala Gln Gln Val Ile Arg His Leu Ser Ala Gly Ile Arg Trp Glu Phe
1               5                  10                  15
Thr Asp Ile Glu Glu Thr Val Lys Tyr Tyr Arg Ser His Ser Cys Ile
            20                  25                  30
Tyr Thr Met Leu Lys Cys Thr Cys Leu Ile Leu Glu Asp Cys Thr Gln
        35                  40                  45
Tyr Gln Thr Glu Gly Pro Leu Pro Ala Leu Phe Thr Gly Cys Ala Asn
    50                  55                  60
Cys Cys Leu Val Ala Leu Leu Asp Asn Ser Ser Cys Arg Ile Ser Arg
65                  70                  75                  80
Ile Leu


<210> 26625
<211> 177
<212> PRT
<213> A.fumigatus

<400> 26625
Gly Asn Leu Val Leu Cys Ile Phe Arg Arg Leu Arg Ala Val His Ser
1               5                  10                  15
Thr Leu Ser Pro Ala Leu Met Ser Gln Met Leu Glu Leu Ile Thr Lys
            20                  25                  30
Ala Leu Ala Cys Ala Arg Gln Leu Val Asp Ala Asn Cys Pro Trp Ser
```

```
        35                  40                  45
His Val Ala Asn Val Pro Phe Gln Ala Ile Cys Thr Leu Leu Ala Val
    50                  55                  60
Asp Ser Pro Glu Ser Leu Ser Leu Leu Asp Asp Ala Val Gln Thr Leu
65                  70                  75                  80
Lys Tyr Val Thr Asp Val Tyr Asp Thr Glu Val Leu Arg Glu Ala Tyr
                85                  90                  95
Arg Thr Ala Gly Ser Leu Ile Leu Leu Gln Gln Arg Arg Lys Glu His
            100                 105                 110
Asp Ala Gly Arg Leu Thr Ser Ile Trp Gly Arg His Phe Gly Pro Asp
        115                 120                 125
Asn Asp Thr Met Ser Gln Arg Arg Pro Ser Ile Gln Asp Ser Glu Ser
    130                 135                 140
Phe Arg Asp Leu Val Ala Asp Leu Ser Ser Ser Glu Asn Phe Asp Phe
145                 150                 155                 160
Ala Gln Phe Phe Ile Ala Asp Asn Pro Trp Asn Ala Leu Gly Met Asp
                165                 170                 175
Ser
```

<210> 26626
<211> 80
<212> PRT
<213> A.fumigatus

<400> 26626

```
Ser His Trp Val Ile Pro Gln Ser Arg His Thr Asp Ile His Thr His
1               5                   10                  15
Ile His Thr Asp Asn Gly Arg Glu Met Glu Ala Lys Thr Ala Lys Cys
            20                  25                  30
Asp Asp Thr Gln Phe Asp Lys Ala Asp Asp Ile Pro Leu Ser Ser Asn
        35                  40                  45
Tyr Thr Glu Ile Pro Thr Leu Pro Asn Ser Pro Asp Pro Arg Ser Ser
    50                  55                  60
Lys Ser Gly Met Asp Gly Ile Arg Ala Pro Ser Pro Thr Glu Gln Asn
65                  70                  75                  80
```

<210> 26627
<211> 229
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (49)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26627

```
Gly Gly Asp Ser Thr Thr Leu Gly Thr Pro Pro Thr Asn Asn Pro Ser
1               5                   10                  15
Glu Leu Gln Arg Lys Thr Arg Thr Ile Leu Pro Pro Arg Ile Gln Ser
            20                  25                  30
Trp Tyr Val Leu Val Ala Gly His Gly Leu Leu Ala Ala Met Trp Leu
        35                  40                  45
Xaa Asp Thr Val Lys Gly Ile Asp Glu Gly His Leu Gly Leu Asp Ser
    50                  55                  60
```

```
Arg Arg Glu Ala Arg Thr Ala Met Asp Phe Val Ala Thr Leu Gly Gly
65                  70                  75                  80
Asp Asn Ala Leu Pro Val Gly Ala Ile Ala Gln Arg Ser Cys Lys Gly
                85                  90                  95
Arg Asp Ser Leu Ala Asn Arg Ile Gln Phe Tyr His Asp Ala Val Asn
            100                 105                 110
Glu Ala Ala Phe Leu Thr Glu Pro Trp Thr Leu Val Leu Ile Arg Cys
        115                 120                 125
Phe Ala Lys Ala Ala Tyr Ile Leu Leu Asp Asp Ile Thr Pro Gln Ser
    130                 135                 140
His Gly Ala Arg Pro Asp Asp Pro Ser Glu Tyr Ala Arg Arg Asn Cys
145                 150                 155                 160
Glu Phe Cys Ile Ser Ala Leu Trp Cys Leu Gly Thr Lys Ser Asp Met
                165                 170                 175
Ala Phe Val Ala Ala Arg Ser Leu Ser Lys Leu Leu Asp Thr Arg Leu
            180                 185                 190
Gly Lys Gly Val Asp Gln Phe Cys Ser Val Gly Glu Gly Ala Arg Ile
        195                 200                 205
Pro Ser Met Pro Leu Phe Asp Glu Arg Gly Ser Gly Glu Leu Gly Ser
    210                 215                 220
Val Gly Ile Ser Val
225
```

<210> 26628
<211> 111
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (50)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 26628
Thr Val Gly Ile Leu Pro Arg Leu Glu His His Leu Gln Thr Ile Leu
1               5                   10                  15
Gln Ser Cys Asn Ala Lys Pro Gly Arg Ser Cys Pro Arg Ala Ser Ser
            20                  25                  30
Arg Gly Thr Tyr Trp Ser Gln Gly Met Gly Ser Trp Arg Pro Cys Gly
        35                  40                  45
Trp Xaa Thr Pro Ser Arg Ala Ser Thr Arg Ala Thr Ser Gly Trp Thr
    50                  55                  60
Ala Gly Ala Lys Pro Ala Pro Gln Trp Thr Ser Ser Pro Pro Ser Ala
65                  70                  75                  80
Gly Thr Thr Arg Cys Pro Ser Gly Pro Ser Leu Ser Ala Pro Ala Arg
                85                  90                  95
Gly Gly Thr Pro Trp Pro Thr Ala Ser Ser Ser Thr Thr Thr Pro
            100                 105                 110
```

<210> 26629
<211> 214
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE

<222> (50)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26629
Arg Trp Gly Phe Tyr His Ala Trp Asn Thr Thr Tyr Lys Gln Ser Phe
1 5 10 15
Arg Val Ala Thr Gln Asn Gln Asp Asp Leu Ala Pro Ala His Pro Val
20 25 30
Val Val Arg Ile Gly Arg Arg Ala Trp Ala Leu Gly Gly His Val Ala
35 40 45
Gly Xaa His Arg Gln Gly His Arg Arg Gly Pro Pro Arg Ala Gly Gln
50 55 60
Pro Ala Arg Ser Pro His Arg Asn Gly Leu Arg Arg His Pro Arg Arg
65 70 75 80
Gly Gln Arg Ala Ala Arg Arg Gly His Arg Ser Ala Leu Leu Gln Gly
85 90 95
Ala Gly Leu Pro Gly Gln Pro His Pro Val Leu Pro Arg Arg Arg Glu
100 105 110
Arg Gly Arg Val Ser Asp Gly Ala Val Asp Ala Arg Pro Asp Ser Leu
115 120 125
Phe Arg Gln Gly Gly Val Tyr Ser Ala Arg Arg His His Ala Ala Val
130 135 140
Ala Arg Arg Ala Ala Gly Arg Pro Val Arg Val Arg Pro Ala Glu Leu
145 150 155 160
Arg Val Leu Tyr Leu Gly Ala Val Val Ser Gly Asp Glu Ile Gly His
165 170 175
Gly Val Cys Gly Cys Ala Leu Val Val Glu Ala Ala Gly Tyr Ala Thr
180 185 190
Arg Glu Arg Cys Arg Ser Val Leu Phe Arg Arg Gly Gly Cys Ser Asp
195 200 205
Ser Val His Ala Ala Phe
210

<210> 26630
<211> 62
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (53)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26630
Leu Gly Phe Ser Arg Ser Tyr Gly Tyr Lys Ala Gln Ser Asn Val Ala
1 5 10 15
Gln Ser Phe Ser Gln Lys Gly Thr Arg Asn Phe Ile Lys Leu Gly Ile
20 25 30
Ile Gln Arg Leu Arg Gly Trp Arg Trp Gly Trp Trp Ile Pro Pro Met
35 40 45
Gly Leu Gly Pro Xaa Leu Leu Leu Thr Glu Glu Glu Met Ala
50 55 60

<210> 26631
<211> 166
<212> PRT

<213> A.fumigatus

<400> 26631

```
Asp Ile Thr Ser Leu Phe Met Ala Asp Gln Leu Ala Leu Thr Tyr Ser
1               5                  10                  15
Ile Arg Thr Phe Thr Gly Leu Gly His Thr Lys Glu Leu Tyr Ser Arg
            20                  25                  30
Phe Arg Gln Pro Pro Leu Arg Pro Pro Ala Trp Val Phe Gly Pro Val
        35                  40                  45
Trp Thr Val Leu Tyr Gly Met Met Gly Tyr Ala Ala His His Ala Thr
    50                  55                  60
Ala Ser Thr Thr Leu Leu Thr Pro Ala Thr Ala Val Ala Ser Phe Gln
65                  70                  75                  80
Thr Leu Tyr Thr Thr Gln Leu Val Leu Asn Tyr Leu Trp Met Pro Leu
                85                  90                  95
Phe Phe Gly Ala Arg Lys Pro Gly Trp Ala Leu Ala Asp Ile Val Ala
            100                 105                 110
Leu Gly Gly Thr Val Gly Lys Leu Met Ala Met Trp Trp Asp Phe Asp
        115                 120                 125
Arg Thr Ala Phe Trp Met Met Leu Pro Tyr Ala Gly Trp Leu Cys Phe
    130                 135                 140
Ala Ala Tyr Leu Asn Val Ser Val Gly Trp Leu Asn Asn Trp Asp Phe
145                 150                 155                 160
Asp Ser Arg Asp Gly Arg
                165
```

<210> 26632
<211> 61
<212> PRT
<213> A.fumigatus

<400> 26632

```
Leu Glu Leu Leu Leu Thr Lys Leu Ser Leu Pro Ala His Ser Ile Asn
1               5                  10                  15
His Tyr Asn His Val Phe Ile Gln Leu Tyr Asn Met Ser Asp Pro Ser
            20                  25                  30
Leu Gly Ser Arg Phe Ile Asp Asn Thr Pro Leu Ser Tyr Asp Thr Tyr
        35                  40                  45
Ser Ile Val Ile Glu Ser Ala Ser Leu Ser Leu Arg Arg
    50                  55                  60
```

<210> 26633
<211> 506
<212> PRT
<213> A.fumigatus

<400> 26633

```
Arg Gly Ser Phe Asp Pro Arg Gly Glu Asp Thr Arg Thr Gly Ala Ala
1               5                  10                  15
Phe Val Pro Ile Asp Pro Asp Ala Pro Ile Glu Arg Met Gln Lys Ile
            20                  25                  30
Leu Lys Leu Thr Asn Ala Cys Cys Ile Leu Thr Ser Ala Ser Leu Ala
        35                  40                  45
Glu Gln Thr Arg Ala Lys Ala Pro Ala Arg Val Ala Val Phe Ala Ile
    50                  55                  60
Pro Leu Asp Arg Ser Ala Arg Met Ser Thr Asp Ser Asp Leu Met Pro
```

```
65                  70                  75                  80
Gly Gln Ser Ile Val Ser His Glu Ala Val Tyr Val Leu Phe Thr Ser
                85                  90                  95
Gly Ser Thr Gly Ile Pro Lys Gly Val Val Thr His Ser Ser Met
            100                 105                 110
Lys Ser Ser Leu Lys Ala His Gly Arg Arg Leu Gly Leu Ser Glu Ser
        115                 120                 125
Ser Arg Val Leu Gln Phe Ser Asn His Thr Phe Asp Val Ser Leu Leu
    130                 135                 140
Glu Ile Leu Thr Thr Leu Ala Tyr Gly Gly Cys Val Cys Ile Pro Ser
145                 150                 155                 160
Asp Gly Asp Arg Val Asn Arg Leu Ser Glu Tyr Met Arg Asp Ala Lys
                165                 170                 175
Val Asn Phe Ala Ile Leu Thr Pro Ser Val Ala Gln Ile Leu Ser Pro
            180                 185                 190
Val Ser Val Pro Asp Leu Arg Thr Leu Ala Leu Ala Gly Glu Ala Trp
        195                 200                 205
Gly Gln Glu Ile Val Asn Ile Trp Arg Asp Ser Val Arg Leu Phe Asn
    210                 215                 220
Ala Tyr Gly Pro Thr Glu Ala Thr Ile Leu Ser Ala Ile Gly Glu Val
225                 230                 235                 240
Asp Ala Gln Cys Phe Arg Pro Asn Asn Ile Gly Ser Gly Ser Gly Ala
                245                 250                 255
Leu Cys Trp Val Thr Ser Pro Thr Asp Pro Thr Arg Leu Met Ala Ile
            260                 265                 270
Gly Ala Ala Gly Glu Leu Leu Leu Glu Gly Pro Ile Leu Ala Gln Gly
        275                 280                 285
Tyr Leu Gly Glu Glu Glu Lys Thr Arg Ala Ala Phe Ile Asp Pro Pro
    290                 295                 300
Met Trp Arg Arg Glu Leu Ser Ser His Gly Ala Pro Pro Cys Arg Ser
305                 310                 315                 320
Ser Leu Tyr Arg Thr Gly Asp Leu Ala Arg Tyr Glu Glu Asp Gly Ser
                325                 330                 335
Ile Thr Tyr Leu Gly Arg Met Asp Gly Gln Val Lys Ile Arg Gly Gln
            340                 345                 350
Arg Thr Glu Leu Ser Glu Ile Glu His His Ile Leu Ala Ser Asp Ala
        355                 360                 365
Val Arg Asn Ala Val Val Leu Leu Arg Lys Asn Lys Leu Val Cys Val
    370                 375                 380
Leu Ser Leu Gln Ser Thr Ser Leu Thr Pro Ala Leu Ser Arg Pro Gly
385                 390                 395                 400
Asp Ile Arg Pro Val Ser Asp Asp Asp Arg Asp Ala Ala Leu Arg Ile
                405                 410                 415
Cys Leu Ser Ile Arg Ala Gly Leu Ala Arg Lys Val Pro Glu Tyr Met
            420                 425                 430
Val Pro Asp Leu Trp Val Pro Val Ile Asp Leu Pro Leu Ser Ser Ser
        435                 440                 445
Gly Lys Leu Ala Arg Lys Gly Val Asp Asp Trp Leu Ala Ser Val Asp
    450                 455                 460
Thr Lys His Leu Ile Asn Leu Ser Leu Gln Lys Ile Pro Leu Ser Thr
465                 470                 475                 480
Thr Ser Pro Ser Pro Asn Ile Ala Ser Ser Ser Val Glu Arg Ala Ile
                485                 490                 495
Arg Gln Val Ile Ala Gly Ala Leu Gln Leu
            500                 505
```

<210> 26634
<211> 119
<212> PRT
<213> A.fumigatus

<400> 26634
Asn Glu Ile Arg Arg Ile Ser Gly Gly Asn Ile Thr Asp Ile Lys Arg
1 5 10 15
Trp Trp Gln Pro Asn Thr Leu Gln Leu Cys Ile Thr Gln Leu Glu Ser
20 25 30
Asp Asn Tyr Ser Asp Met Gln Asp Thr Thr Ala Thr Ser Leu Pro Leu
35 40 45
Tyr Leu His Cys Thr Gln Ser Gly Phe Leu Lys Gly Thr Leu Ser Leu
50 55 60
Thr Ser Ser Leu Tyr Trp Pro Leu Thr Phe Gly Ser Gly Leu Met Gly
65 70 75 80
Pro Phe Gly Leu Pro Leu Pro Asn Leu Gln Asp Ala Ser Ala Asn Pro
85 90 95
Val Gln Pro Leu His Gly Trp Phe Pro Phe Leu Leu Ile Phe Thr Gln
100 105 110
His Ser Val Ile Phe Ser Ala
115

<210> 26635
<211> 219
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (12)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26635
Glu Phe Val Pro Thr Phe Asp Pro Arg Thr Lys Xaa Tyr Ser Leu Asp
1 5 10 15
Pro Lys Leu Pro Ser Val Gly Glu Ala Leu Ala Asp Leu Ala Gly Ser
20 25 30
Thr Val Leu Leu Gly Ser Arg Asn Ala Pro Phe Val Gln Phe Phe Asn
35 40 45
Tyr Thr Lys Pro Asp Asn Val Ser Ser Ala Leu Ala Glu Pro Val Ser
50 55 60
Gln Tyr Phe Glu Ala Thr Val Arg Ala Val Gly Tyr Ala Ser Gly Gly
65 70 75 80
Thr Glu Gln Trp Gln Asn Val Phe Tyr Leu Ile Leu Val Phe Ala Phe
85 90 95
Leu Thr Ser Ala Ile Ile Leu Ala Phe Met Leu Phe Glu Val Arg Gly
100 105 110
Arg Gln Ile Thr Asp Phe Thr Glu Pro Gln Asn Leu Phe Ala Leu Ala
115 120 125
Met Asn Ser Pro Ala Thr Ala Gln Leu Gln Gly Ala Cys Gly Ala Gly
130 135 140
Pro Gln Gly Arg Gln Leu Asn Glu Arg Phe Tyr Val Ala Met Glu Glu
145 150 155 160
Glu Asp Glu His Tyr Tyr Ile Arg Thr Lys Ala Glu Glu Asn Val Arg
165 170 175

```
Pro Ala Ser Met Arg Ala Arg Arg Ser Met Ala Ser Met Glu Val Asp
            180                 185                 190
Glu Met Pro Lys Ala Val Ser Pro Ala Met Asp Glu Tyr Arg Arg Leu
        195                 200                 205
Ser Ser Arg Ser Ser Leu Leu Ser Arg Phe Tyr
    210                 215
```

<210> 26636
<211> 157
<212> PRT
<213> A.fumigatus

<400> 26636

```
Leu Cys Asn Leu Trp Met Arg Lys Gly Ser His Asn Leu Arg Ala Gln
1               5                   10                  15
Cys Lys Phe Ser Leu Leu Ile Tyr Thr Ala Gly His Leu Gly Arg Arg
            20                  25                  30
Gly Ala Cys Ala Asn Asp Pro Asp Tyr Gln Leu Pro Trp Ser Thr Cys
        35                  40                  45
Asn Asp Asp Leu Val Asp Leu Phe Ser Thr Ile Gly Lys Val Glu Arg
    50                  55                  60
Ala Glu Ile Gln Tyr Glu Pro Asn Gly Arg Ser Arg Gly Thr Gly Val
65                  70                  75                  80
Val Gln Phe Asp Asn Ala Glu Thr Ala Glu Thr Ala Ile Gly Met Leu
                85                  90                  95
Pro Leu Glu Asn Ile Ile Asp Arg Thr Gln Ala Asn Pro Ser Thr Ala
            100                 105                 110
Lys Phe Thr Gly Tyr Gln Tyr Gly Gly Arg Pro Leu Gly Ile Thr Phe
        115                 120                 125
Val Lys Tyr Leu Asn Val Asp Gln Gly Gln Gly Glu Pro Met Glu Gly
    130                 135                 140
Ala Glu Thr Thr Thr Gly Ile Thr Gln Asp Gln Ile Met
145                 150                 155
```

<210> 26637
<211> 120
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (100)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26637

```
Ala Phe Phe Ser Phe His Ala Arg Arg Ala Asp Lys Gly Ser Gly Ile
1               5                   10                  15
Val Ala Phe Glu Ser Pro Glu Asp Ala Arg Asn Ala Ile Gln Gln Phe
            20                  25                  30
Asn Gly Tyr Asp Trp Gln Gly Arg Thr Leu Glu Val Arg Glu Asp Arg
        35                  40                  45
Phe Ala Gly Ser Gly Pro Gly Phe Gly Gly Arg Gly Gly Tyr Gly Gly
    50                  55                  60
Tyr Gly Arg Gly Gly Phe Gly Gly Arg Gly Gly Phe Ala Gly Arg Gly
65                  70                  75                  80
Gly Phe Gly Gly Gly Gly Phe Arg Gly Gly Tyr Gly Gly Gly Gly Phe
```

```
                85                  90                  95
Gly Gly Pro Xaa Asn Phe Glu Pro Val Ala Ser Val Pro Pro Asn Pro
            100                 105                 110
Phe Thr Asp Phe Ala Thr Ser Gly
        115                 120
```

<210> 26638
<211> 253
<212> PRT
<213> A.fumigatus

<400> 26638

```
Met Leu Asp Lys Met Gly Arg Leu Ser Val Phe Asn Arg Lys Arg Arg
1               5                   10                  15
Ala Ala Asp Gly Thr Thr Pro Ser Ala Gly Ser Asn Glu Ser Leu Ser
            20                  25                  30
Pro Pro Ala Thr Ala Ala Pro Leu Asn Asp Ala Glu Lys Ile Lys Pro
        35                  40                  45
Val Ser Glu Thr Ala Ala Ile Glu Gln Glu Thr Glu Gln Asp Pro Glu
    50                  55                  60
Val Ala Ala Leu Pro Leu Glu Val Arg Gln Leu Val Ser Leu Thr Asp
65                  70                  75                  80
Asp Pro Thr Leu Pro Thr Ile Thr Cys Arg Tyr Phe Leu Leu Ser Leu
                85                  90                  95
Leu Phe Val Val Pro Gly Ala Phe Leu Ser Gln Met Ser His Tyr Arg
            100                 105                 110
Thr Thr Gln Ala Pro Tyr Ser Val Phe Phe Val Gln Ile Ala Cys His
        115                 120                 125
Tyr Val Asp His Phe Leu Ala Arg Trp Leu Pro Ala Trp Thr Ile Arg
    130                 135                 140
Ile Pro Leu Thr Lys Trp Ala Phe Ser Leu Asn Pro Gly Pro Trp Ser
145                 150                 155                 160
Ile Lys Glu His Val Leu Val Thr Leu Thr Ala Ala Ser Gly Ala Thr
                165                 170                 175
Tyr Asn Leu Gly Tyr Ala Pro Ile Ser Met Ala Glu Leu Phe Tyr Gly
            180                 185                 190
Glu Arg Val His Pro Ala Val Ala Ile Phe Phe Met Phe Ala Ile Val
        195                 200                 205
Trp Ile Gly Tyr Ala Leu Ala Ala Ile Ala Arg Gln Ile Leu Leu Tyr
    210                 215                 220
Asp Pro Ala Phe Ile Trp Pro Gln Ala Leu Met Gln Thr Thr Leu Leu
225                 230                 235                 240
Phe Ser Ser Thr Arg Ser Arg His Pro Pro Arg Val Ser
                245                 250
```

<210> 26639
<211> 81
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (28)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26639

```
Gln Arg Arg Leu Leu Gly Ala Pro Glu Gly Ala Phe Gln Gly Ser Phe
1               5                  10                  15
Arg Gly Leu Ala Ser Arg His Pro Asn His His Xaa Gly Lys Leu Ala
            20                  25                  30
Ile Pro Ile Asn Ile Lys His Val Ala Ile Pro His Val Ile Leu Gly
        35                  40                  45
Ala Ile His Gln Leu Ser Asn Ile Ser Leu Phe Gly Gly Asn Pro Ala
    50                  55                  60
Ile Asp Leu Val Asp Asn Asp Val Gly Asp Phe Met Thr His Arg Ser
65                  70                  75                  80
Ser
```

<210> 26640
<211> 60
<212> PRT
<213> A.fumigatus

<400> 26640

```
Gly Pro Leu Arg Leu Gly Phe Ser Ser Glu Gly Val Ile Glu Trp Leu
1               5                  10                  15
Ser Thr Ala Ser Ser Ala Ile Ser His Arg Thr Gly Asp Thr Tyr Ile
            20                  25                  30
Leu Thr Leu Leu Leu Cys Glu Tyr Gly Asn Gly Pro Ser Leu Val Ile
        35                  40                  45
Lys Ile Ser Ala Cys Trp Ile Ser Lys Tyr Gly Cys
    50                  55                  60
```

<210> 26641
<211> 186
<212> PRT
<213> A.fumigatus

<400> 26641

```
Ser Ile Asn Met Ser Lys His Asn Pro Ser Trp Leu Tyr Ser Ile Leu
1               5                  10                  15
Phe Phe Thr Pro Ser Ser Thr Pro Leu Ala His Phe Ser Leu Leu Ser
            20                  25                  30
Asn Ser Pro Leu Asn Lys Pro Gly Asn Thr Leu Phe Ala Phe Ala Cys
        35                  40                  45
Ser Ser Ser Asn Thr Gly Pro Ser His Pro Phe Cys Leu His Ile Thr
    50                  55                  60
Thr Ala Ser Ser Asn Asn Pro Ala Pro Thr Pro Phe Pro Arg Tyr Arg
65                  70                  75                  80
Leu Ser Thr Val His Ala Gln Ile Thr Pro Val Ile Phe Thr Phe Phe
                85                  90                  95
Ser Pro Ala Gly Thr Gly Thr Pro Arg Asn Thr Thr Thr Pro Ile Ile
            100                 105                 110
Leu Ser Ala Asn Phe Val Thr Arg Ile Ser Cys Ser Ser Pro Cys Pro
        115                 120                 125
Arg Ser Leu Gly Leu Val Arg Leu Gly Asn Ser His Ser Pro Phe Pro
    130                 135                 140
Thr Leu Ser Ala Ser Ser Ile Tyr Pro Pro Val Asn Pro Leu Thr Thr
145                 150                 155                 160
Asn Asn Pro Ala Ile Thr His Pro Ala Leu Val Val Pro Met Ser Gly
                165                 170                 175
```

```
Arg Ser Glu Glu Ser Val Tyr Ser Ala Leu
            180                 185

<210> 26642
<211> 192
<212> PRT
<213> A.fumigatus

<400> 26642
Gly Asn Leu Ile Val Met Cys Ala Gly Ala Ile Pro Gly Tyr Trp Met
1               5                   10                  15
Thr Val Ala Thr Val Asp Thr Ile Gly Arg Lys Pro Ile Gln Leu Leu
            20                  25                  30
Gly Phe Ile Ile Leu Thr Ile Val Phe Ile Val Ile Gly Val Ala Tyr
        35                  40                  45
Glu Pro Met Lys Lys Ser His Asn Gly Leu Leu Gly Leu Tyr Val Ile
    50                  55                  60
Ala Gln Phe Leu Phe Asn Phe Gly Pro Asn Ala Thr Lys Phe Ile Val
65                  70                  75                  80
Pro Gly Glu Cys Phe Pro Thr Arg Tyr Arg Ser Thr Ser His Gly Ile
                85                  90                  95
Ser Ala Ala Ser Gly Lys Val Gly Ala Ile Ile Ala Gln Cys Val Phe
            100                 105                 110
Gly Pro Leu Val His Lys Gly Ala Lys Asp Pro Ser Gln Ser Pro Trp
        115                 120                 125
Leu Asn His Val Met Gln Ile Phe Ala Leu Phe Met Leu Cys Gly Cys
    130                 135                 140
Phe Thr Thr Leu Leu Ile Pro Glu Thr Thr Arg Lys Thr Leu Glu Gln
145                 150                 155                 160
Leu Ser Gly Glu Glu Tyr Glu Ser Asp Thr Leu Val Gln Asn Ser Pro
                165                 170                 175
Met Ile Gln Ala Glu Lys Lys Val Asp Asn Ser Ser Ala Ala Asp Val
            180                 185                 190

<210> 26643
<211> 105
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (81)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26643
Arg Gly Lys Pro Arg His Phe Leu Glu Ala Ser Tyr Val Leu Trp Lys
1               5                   10                  15
Arg Ile Val Gly Pro Ser Pro Tyr Leu Ile Leu Pro Asn Tyr Val Tyr
            20                  25                  30
Gln Ile Met Val Val Glu Ala Cys Thr Phe Phe Lys Leu Cys Lys Ser
        35                  40                  45
Phe Phe Ser Ala His Ile Asp Met Asp Tyr Thr Lys Thr Leu Phe Asn
    50                  55                  60
Arg Thr Ile Trp Ala Ile Arg Gly Val Ser Val Ser Ser Asn Asp Leu
65                  70                  75                  80
Xaa Glu Arg Leu Ala Glu Val Leu Ala Gln Met Trp Arg Met Gly Ser
```

```
                85                  90                  95
Thr Pro Ala Thr Glu Ser Ile Arg Tyr
            100                 105

<210> 26644
<211> 109
<212> PRT
<213> A.fumigatus

<400> 26644
Tyr Phe Pro Phe Ser Pro Ala Tyr Leu Lys Asn Pro Thr Asn Pro Asp
1               5                   10                  15
Ser Asn Ser Glu Ser Ser Ala Ser Ser Thr Ala Gly Pro Ala Gly Arg
            20                  25                  30
Thr Ser Ser Ser Thr Pro Gly Leu Pro Ala Asp Pro Ser Leu Ala Ser
        35                  40                  45
Ala Thr Met Ile Pro Gln Gly Ser Leu Gly Val Ala Pro Ala Ser Gly
    50                  55                  60
Val Thr Asn Leu Pro Ser Gly Phe Leu Glu Pro Asn Tyr Glu Val Phe
65                  70                  75                  80
Asp Pro Leu Asn Trp Leu Leu Asp Gly Leu Val Asp Leu Pro Tyr Ser
                85                  90                  95
Tyr Ser Ala Met Ser Gly Met Glu Pro Gln Thr Ile Ala
            100                 105

<210> 26645
<211> 169
<212> PRT
<213> A.fumigatus

<400> 26645
Arg Tyr Arg Gly Asp Thr Met Ser Ala Glu Ser Arg Lys Thr Thr Thr
1               5                   10                  15
Lys Ile Gly Thr Gly Thr Thr Thr Ala Ser Tyr Gln Thr His Arg Pro
            20                  25                  30
Ala Ser Ser Leu Leu Ile Ala Ser Lys Arg Leu Leu Val Lys Pro Ser
        35                  40                  45
Pro Val Pro Gln Thr Ile Thr Pro Asn Val His Pro Ala Ser Ile Thr
    50                  55                  60
Ile Lys Pro Ser Leu Ser Ser Ile Ala Thr Pro Thr Arg Pro Thr Asp
65                  70                  75                  80
Arg Ser Lys Ala His Thr Val Glu Met Asp Leu Ser Gln Pro Pro Gln
                85                  90                  95
Pro Phe Leu Asp Pro Gly Val Trp Glu Arg Met Lys Ala Ala Gly Arg
            100                 105                 110
Asp Ala Ser Arg Gly Pro Ser Ala Glu Arg Glu Glu Gly Glu Glu Glu
        115                 120                 125
Arg Arg Arg Arg Arg Glu Arg Glu Ala Glu Phe Gly Gln Met Ala Val
    130                 135                 140
Arg Gly Arg Met Gly Gly Leu Gly Arg Gln Glu Met Ile Gly Pro Arg
145                 150                 155                 160
Arg Pro Ser Leu Thr Ser Arg Ser Ser
                165

<210> 26646
<211> 117
```

<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (20),(21),(22),(23),(24),(25),(26),(27),(28),(29),(30),(31)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26646
Cys Phe Thr Thr Thr Thr Ile Thr Leu Ser Pro Ser Pro Ala Ala Cys
1 5 10 15
Leu Ala Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Glu
20 25 30
His Cys Lys Asp Tyr Met Ala Asp Tyr Ile Ser Thr Arg Gly Gly Tyr
35 40 45
Leu Glu Asn Pro Ser Ala Thr Ser Asp Cys Thr Phe Cys Thr Ile Ser
50 55 60
Ser Thr Asp Thr Phe Leu Ser Ala Val Ser Ser His Tyr Ser Asp Ala
65 70 75 80
Trp Arg Asn Phe Gly Ile Met Trp Ala Tyr Ile Ile Phe Asn Ile Phe
85 90 95
Ala Ala Val Phe Ile Tyr Trp Leu Ala Arg Val Pro Lys Gly Lys Arg
100 105 110
Thr Lys Gly Ser Thr
115

<210> 26647
<211> 68
<212> PRT
<213> A.fumigatus

<400> 26647
Leu Phe Asp Ala Leu Leu Val Arg Thr Val Gly Ser Phe Leu Phe Ser
1 5 10 15
Phe Pro Phe Leu Phe Leu Thr Phe Leu Thr Val Gln Lys Ser Pro Tyr
20 25 30
Leu Phe Thr Phe His Leu Ser Leu Tyr Ile Asn Phe Arg Phe Leu Val
35 40 45
Ile Ile Pro Leu Val Tyr Phe Val Ala Gly Phe Asn Thr Ser Cys Leu
50 55 60
Ala Val Ser Ser
65

<210> 26648
<211> 61
<212> PRT
<213> A.fumigatus

<400> 26648
Gly His Thr Thr Phe His Val Phe Val Lys Ile Val Leu Ser Ala Leu
1 5 10 15
Ile Pro Lys Arg Val Gly Ala Thr Ile Val Ser Val Cys Gly Pro Gly
20 25 30
Ala Phe Ala Asp Glu Val Arg Ala Ala Ala Arg Asn Asn Ile Gly Lys
35 40 45
Gly Ala Val Val Asp Phe Val Glu Glu Ala Phe Thr Trp

```
    50                  55                  60

<210> 26649
<211> 110
<212> PRT
<213> A.fumigatus

<400> 26649
Gln Thr Gln Asp Val Ala Val Pro Gly Gly Gln Arg Ile Tyr Val Asp
1               5                  10                  15
Pro Arg Gly Ala Leu Arg Phe Thr Thr Ala His Ser Gly Ser Ile Pro
            20                  25                  30
Pro Gly Ser Ser Thr Gly Pro Phe Val His Ser Ala Gly Thr Pro Phe
        35                  40                  45
Gly His Phe Ala Tyr Lys Gly Gln Gly Ala Lys Gly Phe Ile Ala Cys
    50                  55                  60
Pro Lys Ser Asn Gly Thr Ala Thr His Trp Gln Val Tyr Ala Ser Val
65                  70                  75                  80
Ala Asn Val Ala Ser Gly Ala Glu Cys Leu Gly Phe Asn Ala Leu Ala
                85                  90                  95
Val Pro Ser Asn Asp Thr Arg Ala Ala Ala Trp Glu Tyr Ile
            100                 105                 110

<210> 26650
<211> 68
<212> PRT
<213> A.fumigatus

<400> 26650
Pro Ala Val Leu Gln Gly Ala Ser Thr Lys Gln Thr Asn Cys Asn Lys
1               5                  10                  15
Val Thr Pro Cys Asn Asn Lys Glu Thr Tyr Leu Ser Leu Ser Gln Ser
            20                  25                  30
Leu Pro Leu Ser Ala His Lys Pro Ala Thr Val Ser Asn Arg Gln Asn
        35                  40                  45
Pro Gln Thr Ile Pro Thr Glu Thr Gln Ala Gln Ala Tyr Thr Pro Ser
    50                  55                  60
Ala His His Ser
65

<210> 26651
<211> 229
<212> PRT
<213> A.fumigatus

<400> 26651
Pro Ser Gly Pro Val Val Lys Ile Pro Val Leu Phe Ser Leu Leu Thr
1               5                  10                  15
Leu Ala Ser Ala Val Ser Ile Pro Ile Arg Asn Asn Gly His Ser Asn
            20                  25                  30
Ser Tyr Ser Tyr His Thr Ser Asn Ser Thr Lys Phe Ser Val Met Ser
        35                  40                  45
Ala Arg Ser Gly Ser Pro Ile His Leu Leu Pro Met Asn Ala Ala His
    50                  55                  60
Gly Asn Phe Trp Leu Gly Glu Ser Pro Ser Thr Phe Cys Pro Glu Pro
65                  70                  75                  80
```

```
Val Glu Lys Val Ser Gly Cys Pro Pro Gly Thr Thr Thr Arg Phe Ala
                85                  90                  95
Ser Ala Asn Ala Leu Val Arg Pro Ala Leu Tyr Ser Pro Gly Leu Lys
            100                 105                 110
Cys Thr Asp Lys His Arg Thr Ser Pro Ser Pro Ala Ala Ser Ala Ser
        115                 120                 125
Thr Leu Thr Pro Ala Val Pro Ser Ala Ser Pro Pro Leu Thr Arg Ala
    130                 135                 140
Pro Ser Pro Leu Ala Pro Leu Pro Val Pro Leu Ser Thr Ala Pro Ala
145                 150                 155                 160
Arg His Ser Asp Thr Ser Pro Thr Arg Ala Arg Ala Pro Arg Ala Ser
                165                 170                 175
Ser Leu Ala Pro Arg Ala Met Ala Pro Pro Arg Thr Gly Arg Cys Met
            180                 185                 190
Pro Leu Leu Arg Thr Leu Pro Ala Val Arg Asn Val Ser Val Ser Met
        195                 200                 205
Leu Trp Arg Tyr Leu Arg Met Thr Leu Gly Leu Pro Leu Gly Ser Ile
    210                 215                 220
Ser Lys Ser Arg Pro
225
```

Confidential - Subject to Protective Order

<210> 26652
<211> 161
<212> PRT
<213> A.fumigatus

<400> 26652

```
Leu Gly Gly His Arg Phe Ala Trp Leu Pro Gln Leu Leu Thr Phe Cys
1                   5                  10                  15
Ile Leu Ala Gly Ser Ala Ile Pro Gln Phe Asp Leu His Ala Lys Ser
            20                  25                  30
Val Gly Ser Ser Asp Glu Ile Asn Ala Lys Arg Leu Gly Phe Phe Ser
        35                  40                  45
Leu Cys Met Ser Ser Ala Leu Ser Trp Ala Pro Ser Ala Ala Asp Tyr
    50                  55                  60
Tyr Val Tyr Tyr Pro Ser Thr Ile Arg Pro Trp Lys Val Trp Ser Val
65                  70                  75                  80
Thr Thr Ile Gly Gly Cys Gly Ala Met Ile Met Ser Ile Leu Leu Gly
                85                  90                  95
Val Gly Leu Gly Thr Gly Val Ala Ser Asn Ile Arg Trp Gln Ala Leu
            100                 105                 110
Tyr Asp Gly Thr Pro Gly Ser Leu Leu Met Ala Gly Tyr Asp Arg Leu
        115                 120                 125
Gly Ala Phe Gly Lys Ile Cys Gly Phe Ile Asn Val Leu Thr Val Val
    130                 135                 140
Ser Asn Asn Gly Pro Gly Thr Tyr Ser Leu Ala Met Asn Phe Gln Met
145                 150                 155                 160
Leu
```

<210> 26653
<211> 157
<212> PRT
<213> A.fumigatus

<400> 26653

```
Asp Ile Trp Ser Arg Val Pro Arg Pro Ile Phe Thr Ile Ala Ser Thr
1               5                  10                  15
Val Thr Tyr Thr Ala Cys Ala Ile Gly Gly Arg Asp Phe Leu Tyr Gln
            20                  25                  30
Ile Phe Lys Asn Phe Leu Pro Leu Ile Gly Tyr Trp Ile Ile Ile Trp
        35                  40                  45
Phe Thr Ile Ala Val Glu Glu Asp Val Leu Phe Asn Arg Cys Arg Gly
    50                  55                  60
Tyr Tyr Trp Ser Ile Trp Asn Asp Trp Arg Lys Leu Pro Val Gly Val
65                  70                  75                  80
Ala Ala Gly Val Ser Phe Leu Ile Gly Trp Ala Gly Ala Ile Val Gly
                85                  90                  95
Met Val Ser Glu Gly Phe Leu Leu Phe Ser Glu Ala Pro Ala Thr Asp
            100                 105                 110
Pro Cys Leu Leu Thr Ala Arg Ala Pro Asn Arg Thr Lys Ser Ile Thr
        115                 120                 125
Leu Gly Gln Leu Arg Met Arg Gln Gln Glu Asp Val Ile Leu Gly Ser
    130                 135                 140
Gly Ser Val Trp Gly Ser Pro Pro Tyr Leu Phe Leu Leu
145                 150                 155
```

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<210> 26654
<211> 82
<212> PRT
<213> A.fumigatus

<400> 26654

```
Val Met Thr Arg Tyr Phe Met Gly Tyr Tyr Pro Asn Lys Val Cys Cys
1               5                  10                  15
Ser Leu Asn Val Leu Thr Asn Leu Gly Tyr Gly Met Ile Asn Ala Met
            20                  25                  30
Val Gly Gly Gln Ile Leu Ser Lys Leu Ser Gly Gly Thr Val Ser Val
        35                  40                  45
Ile Val Gly Ile Ile Ile Val Ala Leu Gly Ser Ala Ile Met Ala Thr
    50                  55                  60
Phe Gly Met Arg Val Phe His Ile Tyr Glu Arg Tyr Tyr Pro Cys Ala
65                  70                  75                  80
Gln Cys
```

<210> 26655
<211> 68
<212> PRT
<213> A.fumigatus

<400> 26655

```
Arg Ile Pro Pro Phe Phe Arg Gly Ala Cys Asn Arg Pro Met Phe Ala
1               5                  10                  15
Asp Ser Ser Gly Ala Lys Gln Asp Gln Val Tyr Tyr Thr Gly Pro Val
            20                  25                  30
Ala Asn Ala Thr Thr Gly Gly Cys Asp Leu Gly Ile Trp Leu Gly Leu
        35                  40                  45
Gly Phe Thr Ala Ile Ser Phe Pro Ala Leu Arg Leu Leu Glu Leu Gln
    50                  55                  60
Met Leu Gly Arg
65
```

<210> 26656
<211> 64
<212> PRT
<213> A.fumigatus

<400> 26656
Ser Thr Pro Cys His Ile Leu Val Pro Tyr Lys Leu His Tyr Tyr Ile
1 5 10 15
Leu Tyr Ser Leu Gly Pro Met Ile Tyr Ser Thr Ile Phe Ser Ile Leu
20 25 30
Tyr Ser Leu Arg Pro Thr Ala Tyr Val Val Gln Ser Thr Leu Leu Tyr
35 40 45
Met Ser Tyr Ser Thr Pro Tyr Leu Tyr Asn Leu Leu Gln Ser Thr Ser
50 55 60

<210> 26657
<211> 76
<212> PRT
<213> A.fumigatus

<400> 26657
Tyr Met Leu Val Tyr Lys Phe Leu Leu Ser Ile Ser Phe Lys Tyr Ile
1 5 10 15
Tyr Thr Asn Tyr Ser Ile Phe Ile Lys His Ser Ile Thr Ile Leu Leu
20 25 30
Tyr Ile Asp Asn Ile Leu Ile Leu Leu Asn Ser Asn Asn Leu Ile Asn
35 40 45
Asn Phe Leu Lys Gln Leu Gly Lys Leu Phe Lys Tyr Thr Asn Asn Ser
50 55 60
Lys Val Ser Ile Tyr Leu Gly Ile Asn Met Leu Tyr
65 70 75

<210> 26658
<211> 62
<212> PRT
<213> A.fumigatus

<400> 26658
Leu Ile Leu Val Thr Tyr Leu Asp Ile Thr Phe Thr Ile Ser Lys Leu
1 5 10 15
Thr Tyr Phe Thr Arg Asn Pro Ser Pro Asn Tyr Phe Ile Ile Val Lys
20 25 30
Tyr Val Phe Cys Tyr Leu Val Glu Ile Leu Leu Leu Leu Leu Phe Tyr
35 40 45
Pro Ser Met Leu Ser Lys Leu Asn Ser Phe Ile Asn Thr Asn
50 55 60

<210> 26659
<211> 275
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (263),(267),(268)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26659

```
Ala Ser Leu Thr Leu Ala Gly Ser Glu Arg Ala Ser Ala Thr Lys Asn
1               5                  10                  15
Arg Gly Glu Arg Leu Leu Glu Gly Ala Asn Ile Asn Lys Ser Leu Leu
            20                  25                  30
Ala Leu Gly Ser Cys Ile Asn Ala Leu Cys Asp Pro Arg Lys Arg Asn
        35                  40                  45
His Val Pro Tyr Arg Asn Ser Lys Leu Thr Arg Leu Leu Lys Phe Ser
    50                  55                  60
Leu Gly Gly Asn Cys Arg Thr Val Met Ile Val Cys Val Ser Pro Ser
65                  70                  75                  80
Ser Gln His Phe Asp Glu Thr Gln Asn Thr Leu Arg Tyr Ala Asn Arg
                85                  90                  95
Ala Lys Asn Ile Gln Thr Lys Val Thr Arg Asn Val Phe Asn Val Asn
            100                 105                 110
Arg His Val Lys Asp Phe Leu Val Lys Ile Asp Glu Gln Met Asn Leu
        115                 120                 125
Ile Asn Glu Leu Lys Ala Gln Gln Lys Glu Ser Glu Lys Leu Ala Phe
    130                 135                 140
Ala Lys Phe Lys Lys Gln Thr Glu Lys Lys Asp Ala Ala Ile Arg Glu
145                 150                 155                 160
Gly Val Ser Arg Ile Arg Asn Ala Tyr Asp His Ser Leu Leu Glu Arg
                165                 170                 175
Gln Glu Lys Ile Asn Thr Met Ile Lys Leu Lys Gln Val Asn Arg Arg
            180                 185                 190
Ile Gly Met Leu Ser Ser Trp Ile Ala Ala Phe Asp Ala Val Cys Ala
        195                 200                 205
Asn Ser Gly Asn Asp Glu Pro Leu Ser Asn Leu Gln Ala Ile Arg Lys
    210                 215                 220
Thr Ala Gln Gly Ile Leu Leu Glu Leu Glu Gly Ser Arg Gln His Tyr
225                 230                 235                 240
His Gln Arg Leu Ala Lys Asn Asn Trp Asp Arg Ala Met Asn Ser Ala
                245                 250                 255
Val Glu Asn Pro Ile Arg Xaa Phe Ile Arg Xaa Xaa Glu Gly Ser Ser
            260                 265                 270
Val Val Arg
        275
```

<210> 26660
<211> 227
<212> PRT
<213> A.fumigatus

<400> 26660

```
His Ala Gln Arg Val Phe Asp Pro Pro Glu Asp Asn Pro Val Gln Lys
1               5                  10                  15
Phe Ser Arg Ser Val Val Pro Asn Gly Lys Arg Val Lys Asp Gln Thr
            20                  25                  30
Phe Ala Phe Asp Arg Ile Phe Asp Gln Asn Ala Thr Gln Gly Glu Val
        35                  40                  45
Tyr Glu Ala Thr Thr Arg Thr Leu Leu Asp Ser Val Leu Asp Gly Tyr
    50                  55                  60
Asn Ala Thr Val Phe Ala Tyr Gly Ala Thr Gly Cys Gly Lys Thr His
65                  70                  75                  80
```

```
Thr Ile Thr Gly Thr Ala Gln Gln Pro Gly Ile Ile Phe Leu Thr Met
                  85                  90                  95
Gln Glu Leu Phe Glu Arg Ile Glu Glu Arg Lys Gly Glu Lys His Thr
             100                 105                 110
Glu Val Ser Leu Ser Tyr Leu Glu Ile Tyr Asn Glu Thr Ile Arg Asp
         115                 120                 125
Leu Leu Val Pro Gly Gly Ser Lys Gly Gly Leu Met Leu Arg Glu Asp
     130                 135                 140
Ser Asn Lys Ser Val Ser Val Ser Gly Leu Ser Ser His His Pro Gln
145                 150                 155                 160
Asn Val Gln Gln Val Met Asp Met Ile Met Arg Gly Asn Glu Cys Arg
                 165                 170                 175
Thr Met Ser Pro Thr Glu Ala Asn Ala Thr Ser Ser Arg Ser His Ala
             180                 185                 190
Val Leu Gln Ile Asn Ile Ala Gln Lys Asp Arg Asn Ala Asp Val Asn
         195                 200                 205
Glu Pro His Thr Met Ala Thr Leu Ser Ile Ile Asp Pro Cys Gly Lys
     210                 215                 220
Arg Ala Ser
225
```

Confidential Treatment Requested

<210> 26661
<211> 464
<212> PRT
<213> A.fumigatus

<400> 26661

```
Arg Tyr Lys Asn Gln Leu Leu His Gly Cys Gln Asp Pro Asp Cys Arg
1               5                  10                  15
Thr Pro Thr Cys Ala Ser Tyr Arg Arg Arg Val Ser Glu Gly Pro Tyr
            20                  25                  30
Arg Arg Tyr Thr Glu Leu Ser Ala Arg Thr Leu Ala Cys Tyr Leu Ala
        35                  40                  45
Ser Leu Asp Asn Pro Glu Ser Gly Leu Cys Arg Asn Thr Gln Arg Leu
    50                  55                  60
Ser Ser Glu Leu Ser Ser His Asp His Pro Arg Ser Ser Arg Arg Ser
65                  70                  75                  80
Ser Arg Gly Ala Leu Thr Asp Leu Thr Glu Ala Arg Ser Pro Ser Ser
                85                  90                  95
Val Ser Ser Arg Arg Thr Pro Gly Asp Leu Pro Ala Asp Arg Ala Leu
            100                 105                 110
Leu Asn Gln Asp Thr Ala Ser Ala Lys Pro Ser Asp Asn Thr Arg Ile
        115                 120                 125
Gly Ser Asp Ser Tyr Thr Glu Ser Arg Gln Gln Asn Val Ser Ala Pro
    130                 135                 140
Val Asp Gly Asp Ser Ala Thr Gln Arg Met Lys Asp Pro Lys Ser Phe
145                 150                 155                 160
Thr Gln Asn Leu Phe Asp Thr Leu Ser Leu Arg Met Val Glu Trp Leu
                165                 170                 175
Pro Leu Arg Arg Ser Pro Asp Val Leu Asp Ser Asp Ala Asp Arg Leu
            180                 185                 190
Gly Asn Gln Tyr Val Arg Ser Pro Lys Arg Glu Gly Cys Glu His Thr
        195                 200                 205
Asp Thr Thr Val Gly Ser Thr Cys Ala Lys Arg Arg Ala Asn Leu Lys
    210                 215                 220
Asn Lys Ser Ala Arg Val Ala Pro His Thr Pro Ser Ser Gln Asp Ala
```

```
225                 230                 235                 240
Ser Arg Arg Val Pro Arg Val Glu Ser Lys Pro Glu His Gln Val Lys
                245                 250                 255
Arg Ile Ser Leu Val Glu Thr Asp Gln His Gln Gln Ser Pro Arg Thr
            260                 265                 270
Val Lys Glu Gly Lys Ser Arg Leu Asp Leu Arg Pro Ser Arg Lys Leu
        275                 280                 285
Ser Tyr Asn Ser His Leu Glu Thr Asp Ala Ser Val Asn Ile Pro Ser
    290                 295                 300
Pro Pro Ala Leu Lys His Arg Pro Gln Lys His Arg Gly Arg Asn Glu
305                 310                 315                 320
His Leu Asp Gly Ser Phe Thr Gln Ala Gln Arg Lys Lys Lys Glu Arg
                325                 330                 335
Arg Val Ser Trp Asp Ser Ala Lys Phe Leu Asn Asp Thr Gln Asn Gln
            340                 345                 350
Asp Ala Glu Lys Pro Leu Ala Ala Arg Asp Ser His Leu Ala Ser Glu
        355                 360                 365
Thr Gln Ser Ser Asn Asp Asp Gln Leu Asn Phe Lys Ser Pro Tyr Glu
    370                 375                 380
Lys Val Glu Arg Pro Leu Thr Val Gln Thr Leu Ser His Leu Asn Ser
385                 390                 395                 400
Ala Ile Ile Asp Gly Leu Ala Arg Met Met Val Gln Ser Asp Glu Glu
                405                 410                 415
Ala His Arg Trp Arg Asp Glu Leu Arg Tyr Ile Glu Ser Thr Gly Asn
            420                 425                 430
Phe Glu Asn Pro Glu Trp Gln Phe Ala Thr Trp Arg Gln Arg Arg Val
        435                 440                 445
Tyr Ile Phe Leu Ala Gln Ser Val Phe Tyr Ala Leu Gly Ser Thr Asn
    450                 455                 460
```

<210> 26662
<211> 61
<212> PRT
<213> A.fumigatus

<400> 26662

```
Ile Asn Ile Ile Val Pro Lys Ile Asp Asp His Pro Ile Lys Ile Phe
1               5                   10                  15
Tyr Gly Val Leu Arg Tyr Arg Leu Ser Lys Arg Pro Ile Val Pro Thr
            20                  25                  30
Leu Ser Phe Cys Leu Asn Phe Phe Leu Ser Leu Phe Phe Phe Thr Val
        35                  40                  45
Ala Ser Val Gln Ile Leu Ile Gln Leu Ile Asp Gln Arg
    50                  55                  60
```

<210> 26663
<211> 72
<212> PRT
<213> A.fumigatus

<400> 26663

```
Val Asn Val Ser Lys Trp Val Ala Arg Leu His Cys Gly Tyr Gln Gln
1               5                   10                  15
Asp Thr Asp Ser Leu Ser Val Val Leu Asp Gly Thr Ile Gln Thr Leu
            20                  25                  30
Ser Thr Gln Asn Ala Pro Asp Lys Gly Pro Val Arg Gly Leu Leu Phe
```

```
        35                  40                  45
Val Pro Thr Leu Asn Ser Gln Asp Pro Cys Thr Val Phe Thr Thr Gly
    50                  55                  60
Trp Lys Asp Gln Val Ser Trp Asp
65                  70
```

<210> 26664
<211> 87
<212> PRT
<213> A.fumigatus

<400> 26664

```
Asn Tyr Cys Tyr Asn Ser Leu Asn Pro Ser Ser Gln Pro Cys Leu Gln
1               5                   10                  15
Tyr Ile Tyr Asn Leu Asn Met Phe Pro Arg Cys Phe Ala Ser Arg Ala
            20                  25                  30
Thr Leu Thr Ser Arg Pro Ser Thr Leu Thr Pro Phe Pro Ser Thr Leu
        35                  40                  45
Ile Gln Asn Arg Thr Phe Ala Ile Thr Ser Pro Thr Met Thr Arg Leu
    50                  55                  60
Ala Asp Ala Ile Lys Asp Asp His Arg Glu Leu Glu Glu Ala Tyr Asn
65                  70                  75                  80
Lys Ile Leu Ser Ala Lys Thr
                85
```

<210> 26665
<211> 156
<212> PRT
<213> A.fumigatus

<400> 26665

```
Pro Ala Ala Gln Val Leu Thr His Val Pro Phe Thr His Leu Ser Ile
1               5                   10                  15
Leu Tyr Lys Val Ser Glu Cys Trp Val Ser Arg Leu Thr Leu Cys Leu
            20                  25                  30
Phe Tyr Ser Phe Glu Ser Phe Val Leu Ser Pro Gly Glu Glu Lys Val
        35                  40                  45
Glu Val Glu Thr Asp Thr Arg Lys Phe Phe Asn Gln Thr Ser Arg Cys
    50                  55                  60
Lys Ser Thr Thr Thr Asp Leu Met His Leu Gly Ile Pro Ser Ser Ser
65                  70                  75                  80
Ile Phe Thr Phe Asn Lys Glu Asp His Thr Leu Gly Asn Leu Leu Arg
                85                  90                  95
Ser Arg Leu Leu Gln Asn Ser His Val Ile Phe Ala Gly Tyr Lys Val
            100                 105                 110
Cys Pro Pro Met Glu Ala Val Phe Ser Ser Ile Leu Phe Glu Val Leu
        115                 120                 125
Gly Ala Phe Leu Glu Ser Phe Gly Met His Gly Ser Asp Glu Leu Ser
    130                 135                 140
Gln Val Pro His Pro Val Val Pro Lys Val Phe Thr
145                 150                 155
```

<210> 26666
<211> 88
<212> PRT
<213> A.fumigatus

<400> 26666
Pro Arg Thr Thr Ala Phe Glu Gly His Gln Arg Thr Tyr Lys Pro Asp
1 5 10 15
Asn Pro Arg Leu Val Arg Gly Val Leu Cys Thr Lys Leu Pro Arg Gly
20 25 30
Val Ile Arg Arg Leu Trp Ala Ser Val Ser Glu Leu Lys Ile Trp Met
35 40 45
Glu Glu Cys Ser Asn Glu Glu Gly Leu Ser Ser Leu Gly Leu Thr Ile
50 55 60
Lys Met Leu Tyr Gln Ile Gln Ser Phe Ile Ile Tyr Arg Val Phe Thr
65 70 75 80
Ala Gly Leu Glu Gly Ala Ala Gln
85

<210> 26667
<211> 229
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (41)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26667
Pro Glu Ile Phe Trp Phe Glu Ile Asn Ser Glu Leu Phe Gly Ile Val
1 5 10 15
Ser Thr Arg His Leu Gly Leu Arg Arg Pro Tyr Pro Asn Lys Phe Ser
20 25 30
Leu Ser Lys Gln Glu Tyr Lys Leu Xaa Val Asp Cys Ser Leu Val Glu
35 40 45
Pro Arg Gln Gln Glu Gly Ser Phe Ala Ile His Pro Val Val Gln Asp
50 55 60
Trp Cys Phe His Ile Ala Ala Ser Glu Glu Arg Thr Val Gln Leu Tyr
65 70 75 80
Glu Leu Ala Leu Val Ser Val Gly Tyr Thr Val Pro Arg Lys Asp Asp
85 90 95
Arg Glu Tyr Ala Gln Leu Gln Gln Arg Leu Leu Pro His Ala Asp Tyr
100 105 110
Val Ile Gln Arg Glu Lys Tyr Ser Trp Leu Glu Asp Lys Val Ala Val
115 120 125
Trp Arg Ala Leu Ser Arg Leu Gly Asn Leu Tyr Thr Asn Gln Gly Arg
130 135 140
Leu Gln Glu Ala Glu Glu Met Tyr Gln Arg Ala Leu Ala Gly Tyr Glu
145 150 155 160
Lys Ala Leu Gly Pro Asp His Ala Lys Ser Cys Lys Leu Ala Asp Asp
165 170 175
Leu Ala Ser Arg Ala Ser Leu Ser Ala Thr Gln Glu Met Pro Asp Ser
180 185 190
Met Pro Ser Asn Pro Thr Ala Gly Gln Pro Arg Ala Val Ser Ala Leu
195 200 205
Gln Pro Ser Leu Pro Glu Ser Leu Gln Lys Arg His Val Phe Ser Arg
210 215 220
Ile Phe Cys Arg Arg
225

<210> 26668
<211> 64
<212> PRT
<213> A.fumigatus

<400> 26668
Phe Val Asp Asp Lys Lys Ile Met Thr Arg Arg Cys His Gly Ala Ala
1 5 10 15
Ser Gln Ala Gln Lys Asn Glu Phe Asn Gly Ala Gln Asp Val Pro Gly
20 25 30
Gln Val Tyr Cys Glu Val Phe Ala Cys Leu Leu Lys Ala Val Pro Leu
35 40 45
Ile Val Glu Ala Ser Ala Ala Ser Ser Gly Cys Ala Gly Asp Ile Ala
50 55 60

<210> 26669
<211> 96
<212> PRT
<213> A.fumigatus

<400> 26669
Gly Ser Gly Gly Gly Ser Thr Phe Leu Phe Gln Val Ala Leu Ala Leu
1 5 10 15
Leu Lys Leu Asn Glu Gln Gln Leu Leu Thr Thr Cys Ser Thr Pro Ala
20 25 30
Glu Leu Tyr Thr Tyr Ile Asn His Gln Met Thr Asn His Ala Ile Ser
35 40 45
Ile Asp Gly Leu Ile Gln Ala Ser Glu Ala Leu Arg Asn Val Val Arg
50 55 60
Arg Glu Asp Val Val Ala Arg Arg Ala Glu Ala Leu Arg Glu Met Arg
65 70 75 80
Glu Leu Gly Gly Ser Thr Gln Ser Ala Asp Ala Glu Ala Asn Ser Ala
85 90 95

<210> 26670
<211> 500
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (488),(495)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26670
Arg Pro Thr Leu Arg Tyr Pro Val Leu His Pro Val Leu Pro His Ile
1 5 10 15
Ala Ser Ile Ile Pro Gln Ser Leu Ala Cys Asp Leu Leu Asp Val Tyr
20 25 30
Phe Thr Ser Ser Ser Ser Ser His Leu Ser Pro Gln Ser Pro Tyr Val
35 40 45
Val Gly Tyr Ile Phe Arg Lys Gln Ser Phe Leu His Pro Thr Lys Pro
50 55 60
Arg Val Cys Thr Pro Gly Leu Leu Ala Ser Met Leu Trp Val Ala Ala
65 70 75 80

```
Gln Thr Ser Asp Ala Pro Phe Leu Thr Ser Pro Pro Ser Ala Arg Gly
                85                  90                  95
Arg Val Cys Gln Lys Leu Leu Glu Leu Thr Ile Gly Leu Leu Arg Pro
            100                 105                 110
Leu Ile His Gly Pro Ala Pro Gly Glu Thr Ser Pro Asn Tyr Ala Ala
        115                 120                 125
Asn Met Val Ile Asn Gly Val Ala Leu Gly Gly Phe Gly Val Ser Met
    130                 135                 140
Asp Gln Leu Gly Ala Gln Ser Ser Ala Thr Gly Ala Val Asp Asp Val
145                 150                 155                 160
Ala Thr Tyr Val His Leu Ala Thr Val Ile Ser Ala Ser Glu Tyr Lys
                165                 170                 175
Ala Ala Ser Met Arg Trp Trp Thr Ala Ala Trp Ser Leu Ala Arg Glu
            180                 185                 190
Leu Lys Leu Gly Arg Glu Leu Pro Pro Asn Thr Pro His Ala Arg Pro
        195                 200                 205
Asp Ala Glu Arg Asp Gly Asp Pro Asp Ala Asp Leu Ser Lys Arg His
    210                 215                 220
Pro Pro Pro Leu Ile Thr Ser Met Gly His Gly Pro Gly Asn Thr Ile
225                 230                 235                 240
Ile Asn Ile Thr Glu Glu Glu Arg Glu Glu Arg Arg Arg Leu Trp Trp
                245                 250                 255
Leu Leu Tyr Ala Thr Asp Arg His Leu Ala Leu Cys Tyr Asn Arg Pro
            260                 265                 270
Leu Thr Leu Leu Asp Lys Glu Cys Glu Gly Phe Cys Lys Pro Met Asn
        275                 280                 285
Asp Asp Leu Trp Gln Ala Gly Asp Phe Ala Thr Tyr Arg Gln Ala Gly
    290                 295                 300
Pro Pro Val Glu Cys Thr Gly His Ser Met Phe Gly Tyr Phe Leu Pro
305                 310                 315                 320
Leu Met Thr Ile Leu Gly Glu Ile Val Asp Leu Gln Gln Ala Arg Asn
                325                 330                 335
His Pro Arg Phe Gly Leu Ala Phe Arg Asn Ser Ala Glu Cys Glu Ala
            340                 345                 350
Gln Val Leu Glu Ile Ala Arg Gln Leu Asp Val Tyr Ala Gln Ser Leu
        355                 360                 365
Lys Glu Phe Glu Thr Arg Tyr Thr Ser Ser Leu Ala Leu Gly Ala Ala
    370                 375                 380
Glu Thr Glu Ala Ala Met Asp Gly Ser His Pro Asn His Val Ser Pro
385                 390                 395                 400
Ser Gly Arg Ser Ser Ser Thr Val Glu Ser Arg Val Asn Glu Ser Ile
                405                 410                 415
Val His Thr Lys Met Val Val Ala Tyr Gly Thr His Ile Met His Val
            420                 425                 430
Leu His Ile Leu Leu Ala Gly Lys Trp Asp Pro Ile Asn Leu Leu Asp
        435                 440                 445
Asp Asn Asp Leu Trp Ile Ser Ser Glu Ser Phe Val Ala Ala Met Gly
    450                 455                 460
His Ala Val Gly Ala Ala Glu Ala Ala Ala Glu Ile Leu Glu Tyr Asp
465                 470                 475                 480
Pro Asp Leu Ser Cys Thr Pro Xaa Phe Val Ser Gln Pro Ser Xaa Glu
                485                 490                 495
Gly Thr Val Val
            500
```

<210> 26671

<211> 61
<212> PRT
<213> A.fumigatus

<400> 26671
Asn Gln Leu Arg Leu Ile Gly Val Pro Leu Ile Gln Ala Lys Ile Asn
1 5 10 15
Asp Arg Gly Ile Ala Ala Leu Ala Tyr Asn Val Leu Leu Arg Pro Gly
20 25 30
Val Thr Leu Gly Leu Gly Ala Ser Phe Asp Thr Gln Asn Leu Asn Gln
35 40 45
Ala Ala His Lys Val Gly Ala Ser Phe Thr Phe Glu Ala
50 55 60

<210> 26672
<211> 248
<212> PRT
<213> A.fumigatus

<400> 26672
Leu Glu Ala Lys Tyr Val Asp Leu Pro Thr Gly Lys Arg Pro Ile Thr
1 5 10 15
Arg Lys Pro Pro Asp Pro Ser Thr Arg Lys Thr Gly Glu Ala Arg Ser
20 25 30
Met Phe Ser Phe Thr Cys Gly Gln Val Ser Ser Ala Tyr Phe Arg Phe
35 40 45
Leu Phe Met Thr Arg Ile Val Ala His Ser Val Met Leu Ile Leu Cys
50 55 60
Pro His Pro Gly Leu Thr Leu Thr Gln Ala Trp Thr Thr Ala Asn Ala
65 70 75 80
Leu Asp Thr Lys Leu Glu Leu Asp Asn Asn Ile Ala Lys Gly Leu Lys
85 90 95
Ala Glu Ile Leu Thr Gln Tyr Leu Pro Ser Lys Gln Ser Lys Gly Ala
100 105 110
Lys Leu Asn Leu Tyr Phe Lys Gln Pro Asn Leu His Ala Arg Ala Phe
115 120 125
Phe Asp Leu Leu Asn Gly Pro Ser Ala Asn Phe Asp Ala Val Leu Gly
130 135 140
His Glu Gly Phe Leu Val Gly Ala Glu Gly Gly Tyr Asp Val Gln Lys
145 150 155 160
Ala Ala Ile Thr Lys Tyr Ser Ala Ala Val Gly Tyr Ser Val Pro Gln
165 170 175
Tyr Thr Ala Ala Ile Thr Ala Gly Asn Asn Leu Thr Val Phe Ser Ala
180 185 190
Ser Tyr Tyr His Arg Val Asn Gln Gln Val Glu Ala Gly Ala Lys Ala
195 200 205
Thr Trp Asp Ser Lys Ala Gly Asn Ser Val Gly Leu Glu Val Ala Ser
210 215 220
Lys Tyr Arg Leu Asp Pro Ser Ser Phe Ala Lys Ala Cys Arg Ser Val
225 230 235 240
Phe Phe Cys Glu Ile Asn Leu Gly
245

<210> 26673
<211> 90
<212> PRT

<213> A.fumigatus

<400> 26673
Pro Arg Ser Val Leu Asp Ser Gly Ala Thr Arg Thr Glu Cys Leu Val
1 5 10 15
Gly Cys Leu Leu His Asp Ile Phe Pro Glu Lys Phe Phe Tyr Leu Pro
20 25 30
His Thr Ile Ser His Arg Ile Gly Asp Ser Arg His Val Met Thr Tyr
35 40 45
Thr Ile Gly Ala Gly Asn Ala Phe Asn Met Val Leu Ser His Arg Asp
50 55 60
Thr Ser Asp Pro Ala Thr Trp Asp Lys Gln Thr Ala Leu Gln Asp Met
65 70 75 80
Lys Ala Glu Phe Gln Gly Trp Asp Pro Val
85 90

<210> 26674
<211> 81
<212> PRT
<213> A.fumigatus

<400> 26674
Val Ser Phe Cys Val Ser Ile Arg Arg Pro Pro Leu Leu Met Cys Pro
1 5 10 15
His Ser Leu Thr Lys Ile Ile Gly Met Val Glu Lys Thr Ile Lys Trp
20 25 30
Pro Leu Met Ser Gly Ser Leu Leu Thr Arg Trp Asp Arg Gly Gln Val
35 40 45
Val Ile Leu Gly Asp Ala Ala His Ala Met Leu Pro Tyr Met Ser Gln
50 55 60
Gly Arg Met Asp Ala Pro Pro Phe Gly Leu Lys Ser His Leu Pro Val
65 70 75 80
Pro

<210> 26675
<211> 197
<212> PRT
<213> A.fumigatus

<400> 26675
Glu Gln Thr Pro Thr Tyr Pro Ser Asn Cys Leu Gln Phe Ala Lys Thr
1 5 10 15
Leu Glu Gly Ala Leu Pro Asp Val Pro Lys Pro Thr Gly Asn Val Gly
20 25 30
Leu Asn Ile Leu Leu Val Gly Ala Gly Leu Gly Gly Leu Ala Thr Ala
35 40 45
Ile Ala Leu Thr Gln Ala Gly His Lys Val Thr Ile Tyr Glu Gln Thr
50 55 60
Pro Met Leu Gly Glu Val Gly Ala Gly Ile Gln Ile Pro Ser Asn Ser
65 70 75 80
Thr Arg Ile Leu Phe Lys Leu Gly Leu Glu Pro Tyr Leu Lys Pro Tyr
85 90 95
Val Thr Glu Pro Glu Ser Ile Ser Phe Arg Arg Trp Gln Asn Gly Ala
100 105 110
Val Ile Gly Lys Thr Arg Leu Leu Pro Asp Phe Ile Asp Asn Phe Gln

```
        115                 120                 125
Ala Pro Tyr Tyr Val Ile His Arg Ala Asp Phe His Ser Ala Leu Cys
    130                 135                 140
Arg Lys Ala Asn Asp Met Gly Ile Asp Ile Arg Leu Gly Ala Arg Val
145                 150                 155                 160
Val Asp Tyr Asp Pro Val Leu Gly Ser Ile Thr Leu Lys Asp Gly Thr
                165                 170                 175
Ser His Arg Gly Asp Leu Val Val Ala Ala Asp Gly Thr Pro Ser Leu
            180                 185                 190
Cys Tyr Pro Tyr Leu
        195
```

<210> 26676
<211> 64
<212> PRT
<213> A.fumigatus

<400> 26676

```
Ser Ser Pro Thr Ala Ser Ala Asp Phe Pro Ala Ser Ser Ile Lys Glu
1               5                   10                  15
Asp Asp Gly Ile Thr Tyr Tyr Phe Leu Ala Ser Ile Ile Lys Asp Thr
            20                  25                  30
Gln Gln Phe Leu Arg Gln Met Pro Arg Ile Lys Leu Val Leu Val Val
        35                  40                  45
Ala Ser Tyr Gln Ser Thr Thr Ser Asn Ile Trp Ile Arg Pro Gly Pro
    50                  55                  60
```

<210> 26677
<211> 378
<212> PRT
<213> A.fumigatus

<400> 26677

```
Val Gln Ser Ser Ala Asp Thr Tyr Ser Met Val Thr Met Leu Lys His
1               5                   10                  15
Val Leu Leu Ala Thr Ala Ala Ala Phe Leu Val Leu Asn Val Val Ala
            20                  25                  30
Gly Glu Leu Cys Asn Ser Thr Ala Pro Val Val Val His Pro Thr Pro
        35                  40                  45
Pro Gly Val Ser Lys Tyr Asp Ser Phe Ala Val His Val Arg Ser Asn
    50                  55                  60
Ala Glu Lys Thr Gln Glu Tyr Thr Val Gln Pro Phe Leu Val Gln Val
65                  70                  75                  80
Gly Glu Ala Asn Thr Thr Ser Gly Ala Ser Ile Val His Asn Thr Ser
                85                  90                  95
Val Ala Tyr Phe Asp Phe Cys Gly Ser Val Gln Val Ser Leu Thr Ser
            100                 105                 110
Asn Asn Gly Pro Ile His Ser Val Val Val Arg Pro His Ser Tyr Asn
        115                 120                 125
Ile Val Pro Asn Val His Gly Asp Val Val Thr Phe Ser Leu Asp Ser
    130                 135                 140
Pro Lys Asn Val Val Ile Gln Val Asn His Asp Ile Trp Asp Val Leu
145                 150                 155                 160
Thr Leu Leu Thr Asn Pro Ile Glu Thr Glu Met Pro Asn Pro Ser Asp
                165                 170                 175
Pro Gly Val Ile Tyr Phe His Pro Gly Ile Asn Asn Ser Thr Ala Ile
```

```
            180                 185                 190
Thr Thr Asn Lys Ser Leu Leu Ile Pro Pro Gly Thr Thr Val Tyr Val
        195                 200                 205
Ala Ser Gly Ala Thr Ile Thr Leu Pro Ile Ala Phe His Asn Ile Ser
    210                 215                 220
Asp Ala Ser Ile Arg Gly Arg Gly Leu Leu Leu Lys Ala Pro Ile Thr
225                 230                 235                 240
Ile Glu Tyr Ala Ser Arg Ile Ala Val Arg Asp Leu Val Leu Ile Asn
                245                 250                 255
Thr Asn Ile Gly Val Ala Val Ser Ser Asp Val Thr Val Ser Gly Ile
            260                 265                 270
Arg Ser Phe Ser Ile Gly Ala Trp Gly Asp Gly Phe Asp Ser Tyr Cys
        275                 280                 285
Ser Arg Asn Val Leu Val Asp Ser Val Phe Met Arg Asn Ser Asp Asp
    290                 295                 300
Asn Ile Ala Leu Tyr Gln His Arg Asn Asn Trp Ser Gly Asp Ser Ser
305                 310                 315                 320
Lys Leu Thr Ile Gln Asn Ala Val Leu Trp Ala Glu Tyr Ala Thr Pro
                325                 330                 335
Ser Ile Ser Glu His Met Val Ile His Pro Thr Pro Glu Asn Lys Glu
            340                 345                 350
Arg Arg Leu Tyr Gln Glu His Arg Arg Ala Arg Pro Ser Arg Ser Arg
        355                 360                 365
Arg Cys Trp Tyr Gln Gly Met Leu Ala Tyr
    370                 375
```

<210> 26678
<211> 232
<212> PRT
<213> A.fumigatus

<400> 26678

```
Arg Gln Ala Gln Leu Lys Gly Leu Leu Ser Ala Trp Met Gln Asp Ser
1               5                   10                  15
Tyr Ser Pro Phe Glu Met Val Gln Ser Asp Leu Glu Ala Ile Phe Ala
            20                  25                  30
Pro Ala Gln Gly Leu Gln Val Ser Glu Tyr Asn Glu Glu Asn Gln Ser
        35                  40                  45
Gly Leu Val Val Pro Glu Arg Arg Asp Met Lys Asn Glu Leu Cys Thr
    50                  55                  60
Ser Val Phe Pro Leu Leu Val Gly Leu His Ser Gln Asn Ala Leu Pro
65                  70                  75                  80
Ala Leu Leu Phe Asn Tyr Ala Arg Thr Thr Cys Glu Lys Ile Ala Ile
                85                  90                  95
Thr Thr Leu Glu Ile Leu Val Lys Ala Glu Asp Lys Tyr Lys Ser Gly
            100                 105                 110
Ala Ser Trp Arg Gln Lys Met Ala Asp Tyr Glu Lys Tyr Arg Lys Leu
        115                 120                 125
Ala Thr Lys Lys Ala His Thr Asn Glu Lys Ser Lys Lys Lys Gly Asn
    130                 135                 140
Pro Lys Gln Pro Arg Glu Glu Thr Glu Arg Thr Ala Lys Asp Val Glu
145                 150                 155                 160
Glu Asp Asn Ser Pro Phe Lys Arg Phe Asp Pro Gly Arg Pro Leu Glu
                165                 170                 175
Gln Phe Ser Phe Ala Asp Thr Gln Lys Phe Asp Trp Lys Asp Leu Leu
            180                 185                 190
```

```
Glu Glu Ile Glu Ile Met Lys Gly Arg Lys Val Lys Pro Leu Leu Leu
        195                 200                 205
Glu Ala Leu Lys Arg Gly Val Gly Val His His Ala Gly Leu Asn Arg
    210                 215                 220
His Tyr Arg Gln Trp Tyr Glu Met
225                 230
```

<210> 26679
<211> 202
<212> PRT
<213> A.fumigatus

<400> 26679

```
Pro Pro Ser Tyr Glu His Trp Ile Leu Ala Asn Tyr Leu His Ser Val
1               5                   10                  15
Glu Arg Leu Phe Arg Ala Gly Phe Leu Arg Val Val Val Ala Thr Gly
            20                  25                  30
Thr Leu Ala Leu Gly Ile Asn Met Pro Cys Ser Thr Val Val Phe Cys
        35                  40                  45
Gly Asp Ser Val Phe Leu Thr Ala Leu Asn Phe Arg Gln Ala Ala Gly
    50                  55                  60
Arg Ala Gly Arg Arg Gly Phe Asp Leu Leu Gly Asn Val Ile Phe His
65                  70                  75                  80
Gly Ile Pro Arg His Lys Val Tyr Gln Leu Met Ser Ser Arg Leu Pro
                85                  90                  95
Asp Leu Asn Gly His Phe Pro Ile Thr Thr Ser Leu Val Leu Arg Leu
            100                 105                 110
Phe Ile Leu Leu His Asn Ser Lys Asp Ser Pro Tyr Ala Ala Arg Ala
        115                 120                 125
Ile Asn Ser Leu Leu Ser Gln Pro Arg Ile Asn Phe Gly Ser Ala Glu
    130                 135                 140
Ser Lys Asp Arg Val Leu His His Leu Arg Phe Ser Ile Glu Tyr Leu
145                 150                 155                 160
Arg Arg Gln Gly Leu Ile Gly Arg His Gly Glu Pro Ile Arg Leu Ala
                165                 170                 175
Ser Ser Ile Ala His Leu Tyr Tyr Thr Glu Asn Arg Ala Cys Leu His
            180                 185                 190
Gln Pro Ala Ala Arg Thr Thr Leu Val Leu
        195                 200
```

<210> 26680
<211> 65
<212> PRT
<213> A.fumigatus

<400> 26680

```
Arg Phe Ser Ala Ala Asp Ser Tyr Asn Lys Glu His Ser Lys Ile Phe
1               5                   10                  15
Asp Val Pro Tyr Asp Ile Ala Glu Thr Lys Pro Met Leu Asp Gln Leu
            20                  25                  30
His Thr Ser Ser Phe Ser Ser Thr Pro Ala Asp Tyr Arg Ala Thr His
        35                  40                  45
Glu Asp Arg Phe Pro Gln Ile Leu Ala Thr Ser Met Val His Leu His
    50                  55                  60
Cys
65
```

<210> 26681
<211> 284
<212> PRT
<213> A.fumigatus

<400> 26681
Arg Phe Leu Gly His Val Leu His Ile Cys Thr Ser Pro Thr Ser Leu
1 5 10 15
Leu Pro Ala Glu Glu Ser Ser Tyr Ser Gln Thr His Cys Ala Met Ala
20 25 30
Thr Gln Ser Ser Thr Glu Leu Pro Gln Ile Asn Met Thr Thr Ala Glu
35 40 45
Pro Thr Ser Ala Asn Lys Arg Thr Tyr Pro Trp Val Lys Leu Pro His
50 55 60
Pro Tyr Leu Thr Ser Tyr Ala Ile His Val Val Ser Glu Ser Thr Pro
65 70 75 80
Arg Val Leu Gln Leu Arg Leu His Asp Asp Gln Lys Gly Gln Ala Leu
85 90 95
Pro Glu Pro Leu His Ser Ala Ser Leu Thr Tyr Thr Asp Ile Ala Phe
100 105 110
Asp Glu Ala Ala Gln Glu Ile Pro Asp Asn Asp Asn Ser Pro Trp Ala
115 120 125
Arg Ser Arg Arg Ala Pro Gly Thr Ser Phe His Trp Thr Gly Gln Glu
130 135 140
Pro Pro Thr Leu Gly Gln Ile Trp Asn Val Ile His Ala Leu Phe Leu
145 150 155 160
Thr Tyr Pro Gln His Glu Ile Val Arg Leu Asp Leu Asn Gly Ser Gly
165 170 175
Lys Asp Ile Ile Arg Asp Glu Cys Leu Arg Thr Gly Leu Ala Val Pro
180 185 190
Phe Pro Ser Pro Arg Val Pro Phe Gly Thr Glu Asn Arg Ala Ser Glu
195 200 205
Thr Asp Thr Leu Ile Leu Leu Arg Ser Ala Phe Trp Gln Arg Ala Gly
210 215 220
Ser Pro Val Gly Pro Arg Pro Ile Trp Ala Val Asp His Gly Ile His
225 230 235 240
Gly Leu Leu Arg Pro Ser Gly Ser Ser Tyr Pro Pro Leu Ala Gln Asn
245 250 255
Tyr Glu Phe Ser Met Lys Phe Pro Ser Glu Arg Ile Tyr Thr Arg His
260 265 270
Pro Arg Pro Pro Ala Arg Asn Gln Pro Gln Asp His
275 280

<210> 26682
<211> 155
<212> PRT
<213> A.fumigatus

<400> 26682
Cys Ser Pro Ser Ile Val Thr Arg Thr Leu Ser Gly Leu Phe Leu Glu
1 5 10 15
Ile Ala Val Ala Ile Ser Thr Ala Val Ala Asn Asn Trp Ser Cys Ser
20 25 30
Thr Thr Arg Phe Thr Ser Pro His Arg Ser Ser Trp Asp Ala Glu Lys
35 40 45

```
Leu Asn Pro Leu Arg Ala Ile Ser Ala Ala Arg Cys Phe Pro Ser Thr
    50                  55                  60
Arg Thr Ser Arg Gly Ser Glu Pro Ala Thr Ala Ala Ile Pro Arg Cys
65                  70                  75                  80
Thr Ser Gly Arg Pro Lys Val Ala Phe Ser Leu Ala Thr Thr Ile Ser
                85                  90                  95
Gln Leu Ala Thr Ile Ser Lys Pro Pro Pro Arg Gln Tyr Pro Leu Thr
            100                 105                 110
Ala Ala Met Ile Gly Leu Leu Pro Arg Arg Arg Gly Arg Pro Ala Asn
        115                 120                 125
Pro Gly Ala Val Ile Ser Leu Val Ile Pro Arg Ala Leu Arg Ser Phe
    130                 135                 140
His Ser Met Gly Cys Ile Val Ser Cys Phe Pro
145                 150                 155
```

<210> 26683
<211> 169
<212> PRT
<213> A.fumigatus

<400> 26683

```
Gly Lys Gln Leu Thr Ile His Pro Ile Glu Trp Asn Asp Leu Asn Ala
1               5                   10                  15
Arg Gly Ile Thr Asn Glu Met Thr Ala Pro Gly Leu Ala Gly Leu Pro
            20                  25                  30
Arg Arg Arg Gly Ser Lys Pro Ile Ile Ala Ala Val Asn Gly Tyr Cys
        35                  40                  45
Leu Gly Gly Gly Phe Glu Met Val Ala Asn Cys Asp Ile Val Val Ala
    50                  55                  60
Ser Glu Asn Ala Thr Phe Gly Leu Pro Glu Val Gln Arg Gly Ile Ala
65                  70                  75                  80
Ala Val Ala Gly Ser Leu Pro Arg Leu Val Arg Val Leu Gly Lys Gln
                85                  90                  95
Arg Ala Ala Glu Ile Ala Leu Ser Gly Leu Ser Phe Ser Ala Ser Gln
            100                 105                 110
Leu Glu Arg Trp Gly Leu Val Asn Arg Val Val Glu His Asp Gln Leu
        115                 120                 125
Leu Ala Thr Ala Val Glu Ile Ala Thr Ala Ile Ser Arg Asn Ser Pro
    130                 135                 140
Asp Ser Val Arg Val Thr Met Glu Gly Leu His Tyr Gly Arg Asn Gly
145                 150                 155                 160
His Leu Asn Asp Ala Ala Gly Arg Tyr
                165
```

<210> 26684
<211> 231
<212> PRT
<213> A.fumigatus

<400> 26684

```
Ile Gln Ser Gln Thr Val Tyr Cys Ile Ser Asp Leu Gln Thr Thr Thr
1               5                   10                  15
Met Ser Thr Glu Ala His Ser Thr Val Gln Gly Cys Leu Val Ser Phe
            20                  25                  30
Pro Thr Pro His Ile Leu Val Leu Thr Leu Asn Arg Pro Glu Lys Arg
        35                  40                  45
```

```
Asn Cys Ile Ser Leu Ala Thr Ser Ala Glu Ile Gln Arg Leu Trp Thr
    50                  55                  60
Trp Phe Asp Thr Gln Pro Ala Leu Tyr Val Ala Ile Ile Thr Gly Thr
65                  70                  75                  80
Gly Glu Ser Phe Cys Ala Gly Ala Asp Leu Lys Gly Thr Leu Leu Leu
                85                  90                  95
Ser Leu Phe Asp Gly Asn Ile Ser Ile Leu Arg Lys Thr Thr Asp Asn
            100                 105                 110
Thr Ser His Arg Met Glu Arg Pro Gln Arg Ala Trp Tyr His Gln Arg
        115                 120                 125
Asn Asp Ser Pro Arg Val Ser Arg Pro Pro Ser Pro Thr Arg Gln Gln
    130                 135                 140
Thr Asn His Cys Cys Arg Gln Arg Ile Leu Ser Arg Gly Arg Leu Arg
145                 150                 155                 160
Asp Gly Ser Gln Leu Arg Tyr Arg Gly Gly Gln Arg Glu Arg His Leu
                165                 170                 175
Trp Ser Pro Arg Ser Ala Thr Arg Asn Arg Arg Arg Arg Arg Leu Ala
            180                 185                 190
Pro Ser Ala Gly Pro Arg Ala Gly Lys Thr Ala Ser Ser Arg Asp Arg
        195                 200                 205
Ser Glu Arg Val Glu Leu Phe Cys Val Pro Ala Arg Ala Val Gly Ala
    210                 215                 220
Gly Glu Pro Arg Gly Gly Ala
225                 230
```

<210> 26685
<211> 134
<212> PRT
<213> A.fumigatus

<400> 26685

```
Val His Leu Pro Ser Arg Ser Asp Gly Leu Glu Leu Val Ala Lys Ile
1               5                   10                  15
Lys Ala Arg Gln Ile Ala Ser Asn Leu Gln Leu Leu Glu Ser Thr Cys
            20                  25                  30
Lys Thr Ile Val Thr Arg Leu Leu Ile Gln Gly Ala Leu Gly Arg Phe
        35                  40                  45
Tyr Asn Gly Asn Ser Ser Asp Ser Asn Trp Thr Ser Ser Val Thr Asp
    50                  55                  60
Val Gln Ser Ala Leu Gly Ser Asn Asn Tyr Met Asp Leu Tyr Gln Val
65                  70                  75                  80
Ile Ile Phe Ser Arg Asn Gly Gln Gly Asp Arg His Gly Leu Leu Asn
                85                  90                  95
Val Thr Ala Lys Asp Ile Ala Glu Ile Ala Leu Pro Tyr Thr His Pro
            100                 105                 110
Asp Gly Thr Ala Val Met Leu Gly Glu Glu Gly Arg Leu Thr Pro Thr
        115                 120                 125
Gly Val Glu Gly Asn Ala
    130
```

<210> 26686
<211> 180
<212> PRT
<213> A.fumigatus

<400> 26686

```
Cys Ile Gly Leu Arg Ile Ala Thr Ser Gly Gly Ile His Leu Leu Pro
1               5                  10                  15
Cys Pro Ala Lys Gly Thr Asn Lys Trp Cys Cys Ser Ile Asn Gly Thr
            20                  25                  30
Asp Cys Cys Asp Asn Ala Ala Thr Val Ser Ile Gly Thr Ile Tyr Gly
        35                  40                  45
Tyr Thr Ser Ile Ser Ala Ser Ser Ala Ser Ser Ser Thr Ser Thr Ala
    50                  55                  60
Thr Gly Thr Gly Thr Ile Ala Thr Thr Thr Val Thr Thr Thr Ala Ala
65                  70                  75                  80
Ala Gly Asn Gly Thr Glu Val Cys Ser Asp Ser Ser Ser Lys Ala Thr
                85                  90                  95
Ala Val Gly Ala Gly Ile Gly Ala Gly Leu Gly Thr Cys Leu Val Ala
            100                 105                 110
Thr Leu Phe Ala Leu Trp Phe Gln Arg Arg Met Tyr Gln Lys Lys Leu
        115                 120                 125
Gln Gln Thr Ser Gly Tyr Ala Gly Tyr Ser Pro Ala Ser Met Ala Tyr
    130                 135                 140
Ala Gln Ser Gly Tyr Ser Asn Pro Ser Ser Gly Val Arg Arg Asn Val
145                 150                 155                 160
Ser Glu Leu Gln Ser Asn Gln Glu Val Ile His Glu Ala Asp Gly Gln
                165                 170                 175
Glu Thr Arg Lys
            180
```

<210> 26687
<211> 409
<212> PRT
<213> A.fumigatus

<400> 26687

```
Phe Glu Arg Tyr Arg Arg Thr Ser Arg Asn Lys Ile Ser Pro Glu Glu
1               5                  10                  15
Glu Gln Ala Ile Pro Glu Ala Tyr His Tyr Ser Thr Met Gly Asp Phe
            20                  25                  30
Val Met Arg Ser Gln Leu Asp Ala Tyr Asp Pro Arg Leu Pro Gly Thr
        35                  40                  45
Gly Met Phe Asp Leu Lys Thr Arg Ala Val Val Ser Ile Arg Met Asp
    50                  55                  60
Val Arg Asn Phe Glu His Gly Leu Gly Tyr Glu Ile Arg His Arg Phe
65                  70                  75                  80
Gly Gly Tyr Glu Ser Tyr Glu Arg Glu Phe Phe Asp Met Ile Arg Ala
                85                  90                  95
Ala Phe Leu Lys Tyr Ser Leu Gln Val Arg Ile Gly Arg Met Asp Gly
            100                 105                 110
Ile Phe Val Ala Phe His Asn Val Glu Arg Ile Phe Gly Phe Gln Tyr
        115                 120                 125
Val Ser Leu Ser Glu Met Asp Gln Thr Leu His Gly Gln Ser Asp Thr
    130                 135                 140
Ser Leu Gly Asp Thr Glu Phe Gln Leu Ser Leu Ala Leu Trp Asn Lys
145                 150                 155                 160
Ile Leu Asp Lys Ala Thr Ala Lys Phe Pro Lys Arg Ser Leu Arg Phe
                165                 170                 175
His Phe Glu Thr Arg Asp Ala Gln Thr Pro Phe Met Tyr Ile Phe Ala
            180                 185                 190
Glu Pro Val Thr Asp Asp Glu Ile His Ala Ile Gln Thr Lys Asn Gln
```

```
        195                 200                 205
Glu Lys Ile Glu Ala Tyr Gln Arg Arg Ile Leu Asn Leu Pro Thr Lys
    210                 215                 220
Glu Arg Ile Lys Pro Lys Pro Thr Ala Ala Pro Ser Glu Leu Lys Ala
225                 230                 235                 240
Gly Ser Gln Pro Ala Thr Leu Ala Lys Asp His Thr Ala Glu Ser Ser
                245                 250                 255
Asp Lys Lys Lys Gly Ser Ser Gln Lys Ile Ser Thr Thr Ser Asp Val
            260                 265                 270
Asp Gln Glu Thr Pro Ala Thr Ser Glu Gly Ser Pro Ala Ser Gly Ser
        275                 280                 285
Pro Asp Ala Pro Ala Glu Asp Ala Gln Glu Ala Pro Arg Glu Leu Leu
    290                 295                 300
Ala Met Thr Leu Ile Val Lys Asn Lys Met Asn Gly Tyr Tyr Val Glu
305                 310                 315                 320
Arg Pro Thr Asn Phe Thr Ala Ser Asp Lys Trp Thr Val Gln Trp Glu
                325                 330                 335
Leu Thr Glu Val Lys Gln Pro Gln Ala Gln Ser Leu Tyr Thr Ala Cys
            340                 345                 350
Gln Asn Arg Arg Ala Lys Ala Leu Glu Ile Arg Gly Glu Gly Glu Thr
        355                 360                 365
Gly Val Ala Ala Asn Val Tyr Ile Arg Lys Leu Arg Glu Ile Ala Lys
    370                 375                 380
Gln Gly Arg Glu Phe Arg Gln Lys Glu Asp Glu Leu Asp Lys Lys Gln
385                 390                 395                 400
Gly Ile Val Val Leu Asp Gly Ala Val
                405
```

<210> 26688
<211> 144
<212> PRT
<213> A.fumigatus

<400> 26688

```
Thr Leu Glu Lys Thr Ser Ser Ala Ala Ala Glu His Phe Leu Arg Val
1               5                   10                  15
His Ser Ser Ser Gly Ser Ser Pro Asn Ser Glu Ser Ser Ile Ser Pro
            20                  25                  30
Ser Leu Arg Ser Ser Ser Ser Ser Ser Pro Ala Ala Val Ser Pro Leu
        35                  40                  45
Ala Cys Ala Pro Asp Leu Glu Arg Ser Lys Arg Ala Ala Phe Asp Leu
    50                  55                  60
Ala Asn Trp Gly Leu Arg Ser Ser Ser Arg Ser Ser Ser Ser Ala Ser
65                  70                  75                  80
Ser Pro Ser Pro Asp Arg Arg Ile Ala Ser Ser Ser Ser Tyr Thr Met
                85                  90                  95
Leu Arg Ser Ser Thr Gly Thr Ile Phe Gly Met Cys Gly Ala Lys Gly
            100                 105                 110
Cys Cys Ser Phe Ala Cys Ser Pro Ala Thr Ser Gln Asn Ser Ala Ala
        115                 120                 125
Ser Ser Ala Ser Ser Gly Ser Ser Ala Leu Phe Cys Cys Met Met Ile
    130                 135                 140
```

<210> 26689
<211> 701
<212> PRT

<213> A.fumigatus

<220>
<221> UNSURE
<222> (456)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26689

```
Leu Thr Lys Leu Phe Phe Val Phe Arg Phe Asp Arg Ser Leu Phe Lys
1               5                  10                  15
Arg His Pro Pro Pro Asp Tyr Val Asn Tyr Ile Thr Tyr Phe Phe Cys
            20                  25                  30
Thr Pro Gln Ile Pro Pro Ala Val Gly Met Asp Asp Asp Thr Tyr Asn
        35                  40                  45
Leu Val Arg Phe Ala Ala Ala Met Asn Leu Lys Thr Lys Ile Arg Val
    50                  55                  60
Ala Tyr Asn Thr Ile Ser Gln Pro Ser Leu Ala Tyr Ile Arg Ser Ala
65                  70                  75                  80
Thr Leu Ala Gly Leu Arg Asp Ser Asn Leu Gln Val Arg Asn Ser Ala
                85                  90                  95
Gly Ser Ile Ile Thr Glu Leu Leu Gln Gln Ala Gly Leu Leu Ala Trp
            100                 105                 110
Pro Glu Val Leu His Glu Leu Leu Ser Leu Val Glu Asn Ala Ser Gly
        115                 120                 125
Asp Val Pro Val Leu Ala Gln Glu Ala Ala Met Ser Ala Leu Ala Lys
    130                 135                 140
Val Cys Glu Asp Asn Arg Lys Val Leu Asp Arg Asp Tyr Glu Gly Gln
145                 150                 155                 160
Arg Pro Leu Asp Val Ile Ile Pro Lys Leu Met Asp Phe Thr Ser Ser
                165                 170                 175
Gly Ser Pro Arg Val Arg Ser Met Ala Leu Ser Thr Ile His Val Phe
            180                 185                 190
Leu Pro Ser Arg Pro Gln Ala Leu Ile Ala Ser Leu Asp Leu Phe Leu
        195                 200                 205
Ser Gln Leu Phe Gln Leu Ala Ser Asp Thr Asp Thr Asp Val Arg Arg
    210                 215                 220
Met Val Cys Gln Thr Phe Ala Gln Leu Val Asp Phe Ala Pro Glu Lys
225                 230                 235                 240
Leu Val Pro His Met Glu Gly Leu Val Asn Tyr Ile Ile Met Gln Gln
                245                 250                 255
Asn Asn Ala Glu Asp Pro Glu Leu Ala Leu Asp Ala Ala Glu Phe Trp
            260                 265                 270
Leu Val Ala Gly Glu Gln Ala Lys Leu Gln Gln Pro Leu Ala Pro His
        275                 280                 285
Met Pro Lys Ile Val Pro Val Leu Leu Arg Ser Met Val Tyr Asp Glu
    290                 295                 300
Asp Asp Ala Ile Arg Leu Ser Gly Glu Gly Asp Asp Ala Glu Leu Glu
305                 310                 315                 320
Asp Arg Glu Glu Asp Leu Arg Pro Gln Phe Ala Lys Ser Lys Ala Ala
                325                 330                 335
Arg Leu Asp Leu Ser Lys Ser Gly Ala Gln Ala Asn Gly Asp Thr Ala
            340                 345                 350
Ala Gly Glu Asp Asp Asp Asp Asp Leu Ser Glu Gly Glu Ile Glu Asp
        355                 360                 365
Ser Glu Phe Gly Asp Asp Pro Glu Asp Glu Trp Thr Leu Arg Lys Cys
    370                 375                 380
```

```
Ser Ala Ala Ala Leu Asp Val Phe Ser Asn Val Tyr His Gln Pro Ile
385                 390                 395                 400
Phe Glu Ile Ile Leu Pro Tyr Leu Lys Glu Thr Leu Arg His Glu Gln
                405                 410                 415
Trp Pro Gln Arg Glu Ala Ala Val Leu Thr Leu Gly Pro Val Ala Asp
            420                 425                 430
Gly Cys Met Asp Ala Val Thr Pro His Leu Pro Glu Leu Val Pro Thr
        435                 440                 445
Leu Ile Ser Leu Leu Thr Asn Xaa Gln Pro Val Val Arg Gln Ile Thr
    450                 455                 460
Cys Trp Cys Leu Gly Arg Tyr Ser Glu Trp Ala Ser His Leu Ala Asp
465                 470                 475                 480
Pro Leu Glu Arg Ala Arg Phe Phe Glu Pro Met Met Glu Gly Ile Leu
                485                 490                 495
Arg Arg Met Leu Asp Gly Asn Lys Lys Val Gln Glu Ala Ala Ala Ser
            500                 505                 510
Ala Phe Ala Ser Leu Glu Glu Lys Ser Asp Ala Asn Leu Ile Pro Tyr
        515                 520                 525
Cys Glu Pro Ile Leu Arg Gln Phe Val Gln Cys Phe Gly Lys Tyr Lys
    530                 535                 540
Asp Arg Asn Met Tyr Ile Leu Tyr Asp Cys Val Gln Thr Leu Ala Glu
545                 550                 555                 560
Cys Val Met Gly Glu Leu Ala Lys Pro His Leu Val Asp Ile Leu Met
                565                 570                 575
Pro Ala Leu Ile Asp Arg Tyr Asn Lys Val Thr Asp Gln Ser Arg Glu
            580                 585                 590
Leu Phe Pro Leu Leu Glu Cys Leu Gly Tyr Ile Ala Ala Ala Tyr Gly
        595                 600                 605
Asp Thr Phe Ala Pro Phe Ala Pro Pro Leu Phe Gln Arg Cys Thr Lys
    610                 615                 620
Ile Ile Tyr Glu Asn Leu Gln Glu Tyr Ile Ala Ser Val Asn Asn Gln
625                 630                 635                 640
Ala Ile Asp Glu Pro Asp Lys Asp Phe Leu Val Thr Ser Leu Asp Leu
                645                 650                 655
Leu Ser Ala Ile Ile Gln Ala Ile Asp Pro Gln Lys Ser Gly Glu Leu
            660                 665                 670
Val Ala Thr Ser Gln Pro Arg Phe Phe Asp Leu Leu Cys Phe Cys Met
        675                 680                 685
Glu Asp Pro Asn Tyr Glu Val Arg Gln Ser Ser Cys Leu
    690                 695                 700
```

<210> 26690
<211> 76
<212> PRT
<213> A.fumigatus

<400> 26690

```
His Ile Phe Leu Leu Arg Ser Ser Ile Gly Arg Ile Lys Ala Phe Lys
1               5                   10                  15
Pro Thr Gln Asp Arg Pro Phe Val Leu Gly Leu Pro Thr Gly Ser Ser
            20                  25                  30
Pro Glu Ile Ile Tyr Arg Thr Leu Val Gln Arg His Arg Thr Gly Glu
        35                  40                  45
Ile Ser Phe Lys Asn Val Val Thr Phe Asn Met Val Ser Pro Pro Arg
    50                  55                  60
Trp His Tyr His Asp Ser Leu Tyr Ala Ala Ile Cys
```

65 70 75

<210> 26691
<211> 64
<212> PRT
<213> A.fumigatus

<400> 26691
Ser Thr Gln Asp Glu Tyr Val Gly Leu Pro Arg Asp His Pro Glu Ser
1 5 10 15
Tyr His Ser Phe Met Tyr Lys His Phe Phe Ser His Val Asp Ile Pro
20 25 30
Pro Gln Asn Ile Asn Ile Leu Asp Gly Asn Ala Pro Asp Leu Ala Ala
35 40 45
Glu Cys Ala Ser Tyr Phe Phe Thr Pro Gly Arg Ser Tyr Ala Tyr Gly
50 55 60

<210> 26692
<211> 261
<212> PRT
<213> A.fumigatus

<400> 26692
Thr Arg Thr Leu Pro Pro Arg Gly Glu Asp Tyr Arg Asp Arg Leu Ser
1 5 10 15
Phe Leu Phe Gln Arg Leu Ala Val Val Gly Thr Ser Val Phe Ala Ile
20 25 30
Ala Gly Asp Trp Gly Ala Asn Asn Asn Ile Ile Asp Gly Gln Pro His
35 40 45
Val Gly Trp Pro Gly Ser Asp Pro Trp Val Thr Cys Val Gly Gly Thr
50 55 60
Val Val Gly Asn Val Arg Ser Ser Gly Ala Phe Thr Glu His Ala Trp
65 70 75 80
Ser Asp Arg Asp Asn Pro Asp Ser Gln Phe Thr Ile Asp Gly His Leu
85 90 95
Gly Val Thr Gly Gly Gly Met Ser Arg Val Phe Ala Thr Pro Pro Tyr
100 105 110
Gln Leu Ser Ser Gly Ile Ser Ala Val Thr Asp Cys Asn Gly Glu Arg
115 120 125
Trp Thr Gly Gly Arg Phe Ile Pro Asp Ile Thr Gly Met Val Gly Phe
130 135 140
Arg Gly Phe Ile Val Asn Gly Lys Arg Asn Tyr Phe Ile Gly Thr Ser
145 150 155 160
Cys Ser Thr Pro Leu Tyr Ala Gly Leu Phe Ala Ala Leu Ala Ser Ala
165 170 175
Leu Gly Gly Gly Gly Glu Gly Gly Val Leu Phe Gly Pro Leu Asn Thr
180 185 190
Val Leu Tyr Gln Ile Asp Arg Gly Val Tyr Arg Asp Ile Thr Phe Gly
195 200 205
His Asn Asp Ser Gly Asp Met Pro Ala Cys Ala Tyr Phe Ala Ala Gly
210 215 220
Glu Gly Tyr Asp Thr Val Ser Gly Leu Gly Ser Val Asp Gly Arg Arg
225 230 235 240
Met Leu Glu Glu Leu Arg Arg Ile Tyr Trp Pro Lys Thr Lys Gly Phe
245 250 255
Gly Cys Phe Arg Asn

260

<210> 26693
<211> 89
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222>
(2),(10),(11),(13),(21),(23),(26),(30),(32),(33),(34),(38),(42),(43),(44),(51)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26693
Lys Xaa Gly Gln Pro Arg His Ala Lys Xaa Xaa Ile Xaa Pro Pro Thr
1 5 10 15
Thr Ile Gln Pro Xaa Ile Xaa Ser Gly Xaa Trp Gly Gly Xaa Asn Xaa
20 25 30
Xaa Xaa Ser Gly Ala Xaa Trp Gly Arg Xaa Xaa Xaa Cys Gly Ile Phe
35 40 45
Ala Arg Xaa Ile Lys Pro Lys Lys Gly Asp Tyr Val Tyr Pro Phe Ser
50 55 60
Leu Met His Thr Ser Ala Ile Leu Ser Arg Ile Ile Phe Thr Thr Ser
65 70 75 80
Ser Tyr Leu Gln Thr Met Ala Arg Gly
85

<210> 26694
<211> 208
<212> PRT
<213> A.fumigatus

<400> 26694
Val Val Leu Trp Pro Val Arg Cys Tyr Asn Asp Phe Ser Asp Ser Phe
1 5 10 15
Gly Leu Arg Ser Tyr Thr Gly Met Ala Leu Val Trp Leu Tyr Ser Arg
20 25 30
Gln Ile Pro Arg Ala Leu Leu Pro Phe Ser Val Tyr Ser Val Phe His
35 40 45
Val Ala Thr Tyr Thr Arg Ala His Leu Ile Pro Thr Leu Gln Pro Pro
50 55 60
Ser Gln Gly Ala Thr Ser Val Thr Ser Pro Ser Thr Pro Gly Ser Pro
65 70 75 80
Arg Pro Ala Ala Lys Gln Ser Pro Leu Ala Asp Thr Ile Gly Arg Phe
85 90 95
Val Lys Gln Tyr Tyr Asp Ala Ser Met Asp Leu Val Ala Gly Leu Glu
100 105 110
Met Ala Leu Leu Phe Arg Leu Val Val Ser Leu Leu Thr Phe Ser Lys
115 120 125
Gly Ser Ile Val Leu Phe Ile Leu Tyr Leu Ala Phe Phe Arg Ala Arg
130 135 140
Tyr Ser Gln Ser Ser Phe Val Gln Gln Ala Val Arg His Phe Thr Ala
145 150 155 160
Arg Val Asp Ala Ser Val Ser His Gln Ser Thr Pro Pro Ala Val Arg
165 170 175
Gln Gly Trp Glu Gln Phe Lys Asn Val Val Arg Gln Gly Tyr Glu Ile

```
            180                 185                 190
Thr Asp Val Gly Arg Tyr Thr Ser Gly Ala Ala Val Lys Lys Pro Gln
        195                 200                 205

<210> 26695
<211> 80
<212> PRT
<213> A.fumigatus

<400> 26695
Cys Ser Arg Val Trp Leu Leu Arg Pro Arg Leu Pro Thr Gln Gln Asp
1               5                   10                  15
Arg Pro Gly Ala Glu Gln Arg Ser Arg Val His Asp Gly Arg Glu Ala
            20                  25                  30
Ser Leu Pro Ala Arg Leu Ser Ala Asp Pro Thr Arg Lys Trp Leu Cys
        35                  40                  45
Pro Trp Ser Arg Ile Arg Tyr Thr Asp His Gln Ser Thr Arg Leu Ala
    50                  55                  60
Arg Gln Leu Tyr Gly Pro Pro Asp Asp Gly Leu Val Gly Asn Arg Ser
65                  70                  75                  80

<210> 26696
<211> 328
<212> PRT
<213> A.fumigatus

<400> 26696
Leu Gly Leu Tyr Arg Asp Lys Ile Ile Thr Gly Ser Arg Asp Arg Thr
1               5                   10                  15
Ile Arg Val Trp Asp Ala His Tyr Pro Trp Pro Cys Arg Lys Ile Ile
            20                  25                  30
Gly Pro Pro Pro Gly Glu Ile Ser Ser Ile Gly Gln Val Asn Asn Pro
        35                  40                  45
Thr Gln Gln Ser Ser Gly Lys Pro Pro Phe Leu Thr Ile Cys Pro Pro
    50                  55                  60
Pro Thr Leu Ala Ala Gly Ile Val Thr Pro Ile Asp Gln Ser Ser Asp
65                  70                  75                  80
Tyr His Ser Ala Ser Ile Leu Cys Leu Gln Phe Asp Glu Glu Ile Met
                85                  90                  95
Val Thr Gly Ser Ser Asp Tyr Thr Cys Ile Val Trp Asp Ile Lys Asn
            100                 105                 110
Asp Tyr Arg Pro Ile Arg Arg Leu Glu Gly His Arg Ala Gly Val Leu
        115                 120                 125
Asp Val Cys Phe Asp Asp Arg Tyr Ile Val Ser Cys Ser Lys Asp Thr
    130                 135                 140
Thr Ile Cys Val Trp Asp Arg Gln Thr Gly Ala Leu Val Lys Lys Leu
145                 150                 155                 160
Leu Gly His Arg Gly Pro Val Asn Ala Val Gln Leu Arg Gly Asp Leu
                165                 170                 175
Val Val Ser Ala Ser Gly Asp Gly Val Ala Lys Leu Trp Asn Ile Thr
            180                 185                 190
Ser Gly Leu Cys Val Arg Glu Phe Ser Ser Lys Asp Arg Gly Leu Ala
        195                 200                 205
Cys Val Glu Phe Ser Asp Asp Ala Arg Thr Ile Leu Thr Gly Gly Asn
    210                 215                 220
Asp Gln Ser Ile Tyr Gln Phe Asp Ala Asn Thr Ala Glu Met Val Arg
```

225 230 235 240
Glu Leu Lys Gly His Ala Gly Leu Val Arg Ser Leu His Leu Asp Ser
245 250 255
Met Asn Gln Arg Ile Val Ser Gly Ser Tyr Asp Met Ser Val Lys Val
260 265 270
Phe Asp Ala Gln Thr Gly Glu Leu Ser Ile Asp Leu Pro Gly Trp Thr
275 280 285
Thr Ser Trp Met Leu Ser Val Lys Ser Asp Tyr Arg Arg Ile Val Ala
290 295 300
Thr Ser Gln Asp Ser Arg Ala Val Ile Met Asp Phe Gly Tyr Gly Leu
305 310 315 320
Asp Gly Ile Glu Leu Leu Glu Glu
325

<210> 26697
<211> 64
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (44)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26697
Ala Thr Thr Thr Leu Phe Arg Leu Phe Arg His Ser Ser Ile Lys Leu
1 5 10 15
Glu His Cys Pro Ile Leu Glu Leu Arg Asn Tyr Asp Phe Phe Ile Thr
20 25 30
Ala Pro Arg Leu Ser Ala Asp Glu Glu Gly Cys Xaa Val Lys Ala Phe
35 40 45
Pro Asn Tyr Asp Ile Lys Val Ile Leu Met Tyr Ser Lys Pro Leu Ser
50 55 60

<210> 26698
<211> 171
<212> PRT
<213> A.fumigatus

<400> 26698
Glu Val Lys Arg Lys Thr Gln Leu Trp Pro Pro Thr Ser Cys Ala Gln
1 5 10 15
Gln Ser Asp Pro Thr Ser Ser Asp Ser Ser Thr Ser Gly Thr Thr Ala
20 25 30
Pro Ser Ala Ser Thr Val Ser Met Ser Cys Ile Ala Asn Thr Lys His
35 40 45
Gln Arg His Asn Gln Thr Arg His Gln Ser Ser Pro Arg Thr Val Ser
50 55 60
Gln Gln Asp Leu Pro Leu Ile Thr Gly Val Leu Ser Pro Ser Pro Ser
65 70 75 80
Ser Thr Pro Ser Thr Lys Lys Ser Gly Ile Phe Ala Asp Ser Gln Thr
85 90 95
Ile Lys Gly Ser Lys Ala Asp Lys Arg Ala Ser His Asn Val Ile Glu
100 105 110
Lys Arg Tyr Arg Thr Asn Met Asn Ala Lys Phe Thr Thr Leu Glu Asn
115 120 125

```
Val Ile Thr Thr Cys Arg Asn Lys Gln Lys Ala Ser Thr Ile Arg Pro
    130                 135                 140
Cys Ser Met Lys Lys Cys Glu Ile Leu Thr Ser Ala Ile Lys Cys Ile
145                 150                 155                 160
Gln Asp Leu Glu Glu Arg Asn Arg Arg Ser Glu
                165                 170
```

<210> 26699
<211> 444
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (436),(439),(441),(442),(443)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26699

```
Ala Gln Gly Lys Pro Ser Pro Ser Gln Leu Leu Pro Ser Ser Thr Ser
1               5                   10                  15
Ala Thr His Arg Ser Ser Gly Thr Ser Thr Tyr Glu Trp Asn Gly His
            20                  25                  30
Ile Glu Trp Arg Asp Ile Ser Lys Leu Glu Ser Ala Ser Leu Glu Ala
        35                  40                  45
Ala Leu Leu Ala Ala Trp Ala Leu Thr Ile Ser Gly Tyr Thr Arg Ser
    50                  55                  60
Asp Asp Val Ile Phe Gly Glu Leu Leu Leu Glu Gln Asp Ser Ser Gly
65                  70                  75                  80
Leu Asp Ser Thr Ser Asp Lys Ala Ala Pro Val Val Val Pro Arg Arg
                85                  90                  95
Leu Gln Ile Ala Glu Asp Met Ser Ile Ala Glu Leu Met Arg Lys Thr
            100                 105                 110
Gln Glu Arg Leu Val Ala Ala Ser Pro Phe Gln Arg Ala Gly Leu Gln
        115                 120                 125
Arg Ile Arg Asn Val Ser Ala Asp Thr Ser Arg Ala Cys Ser Phe Asn
    130                 135                 140
Asn Leu Phe Cys Phe Thr Arg Phe Asp Cys Lys Val Gln Thr Leu Ala
145                 150                 155                 160
Leu Ala Tyr Pro Leu Gly Ile Phe Cys Ile Val Ala Asn Ser Glu Leu
                165                 170                 175
Gln Leu Ser Ala Cys Tyr Asp Glu Gln Ile Leu Ser Ala Pro Gln Val
            180                 185                 190
Glu Arg Ile Leu Val Gln Phe Ala Arg Tyr Val Glu Tyr Leu Lys Ala
        195                 200                 205
Asp Leu Arg Ser Gln Glu Thr Ile Gly Asp Met Ala Leu Arg Lys Asn
    210                 215                 220
Gln Thr Ser Tyr Leu Ser Ser Pro Glu Thr Val Tyr Trp Arg Lys Tyr
225                 230                 235                 240
Leu Ala Asp Val Glu Ser Cys Val Phe Pro Ser Leu Asn Pro Asp Gly
                245                 250                 255
Glu Arg Ser Gly Phe Ser Ser Ala Lys Leu Ala Ile Glu Asn Leu Ala
            260                 265                 270
Asp Leu Arg Arg Leu Cys Gln Lys Ile Glu Val Thr Glu Asp Ile Val
        275                 280                 285
Leu Gln Leu Val Trp Gly Leu Val Leu Arg Cys Tyr Thr Gly Ser Glu
    290                 295                 300
```

```
Glu Val Cys Tyr Gly Tyr Tyr Gln Ala Ser Pro Gln Pro Glu Gly Ser
305                 310                 315                 320
Lys Tyr Leu Lys Val Leu Pro Ser Arg Phe Leu Leu Lys Asp Asp Ser
                325                 330                 335
Asp Leu Glu Ser Ile Ala Gln Gln Arg Lys Ser Glu Leu Asp Glu Ala
            340                 345                 350
Met Glu His Pro Ile Ser Gln Ile Glu Leu Gln Leu Glu Leu Gly Leu
        355                 360                 365
Asp Trp Tyr Ser Leu Leu Asn Thr Val Phe Lys Phe Asp Arg Phe Ala
    370                 375                 380
Glu Leu Pro Asn Asp Asn Asn Ser Thr Leu Asp Leu Leu Asn Asp Thr
385                 390                 395                 400
Glu Lys Gly Ile Trp Thr Ile Val Val Asn Pro Arg Phe Ser Phe Val
                405                 410                 415
Ser Ala Asp Ile Leu Cys Leu His His Gly Ala Gly Arg Ile Arg Ala
            420                 425                 430
Cys Val Gln Xaa Ile Gln Xaa Phe Xaa Xaa Xaa Pro
        435                 440
```

<210> 26700
<211> 130
<212> PRT
<213> A.fumigatus

<400> 26700

```
Tyr Ile Tyr Thr Pro His Asn Arg Lys Met Thr Cys Asn Val Asp Lys
1                 5                  10                  15
Tyr Asn Glu Val Asp Pro Asn Arg Asn Asp Met Ala Val Thr Gln Leu
            20                  25                  30
Ala Pro Pro Leu Ser Leu Phe Pro Asp Gly Leu Lys Thr Thr Gly Gln
        35                  40                  45
His Pro Pro Leu Tyr Glu His Leu Gln Pro Phe Glu Arg Phe Pro Lys
    50                  55                  60
Glu Ile Thr Gly Pro Thr Val Trp Thr Ala Asp Glu Tyr Arg Ala His
65                  70                  75                  80
Pro Glu Lys Trp Thr His Arg Phe Thr Pro Glu Glu Leu Asp Glu Leu
                85                  90                  95
Ser Arg Ala Gly Asp Glu Phe Ile Asn Ser Lys Ile Pro Leu Thr Gly
            100                 105                 110
Ile Ser Lys Val Pro Ser Leu Pro Pro Pro Ala Pro Phe His Cys Pro
        115                 120                 125
Thr Arg
    130
```

<210> 26701
<211> 100
<212> PRT
<213> A.fumigatus

<400> 26701

```
Lys Asn Phe Pro Leu Pro Thr Leu Ser Ala Tyr Leu Leu Ala Leu Arg
1                 5                  10                  15
Asp Glu Leu Leu Asn Gly Arg Gly Phe Ile Leu Phe Lys Gly Leu Pro
            20                  25                  30
Val Gln Thr Trp Gly Asn His Lys Ser Ala Val Val Tyr Met Gly Leu
        35                  40                  45
```

```
Gly Thr Tyr Leu Gly Tyr Phe Val Ser Gln Asn Ser Arg Gly His Val
    50                  55                  60
Leu Gly His Val Lys Asp Leu Gly Glu Asp Pro Ser Gln Ile Asp Lys
65                  70                  75                  80
Val Arg Ile Tyr Arg Thr Asn Ala Arg Tyr Leu Pro Arg Pro Arg His
                85                  90                  95
Ala Pro Lys Ser
            100
```

<210> 26702
<211> 179
<212> PRT
<213> A.fumigatus

<400> 26702

```
Tyr Asn His Asn Tyr Gln Ser Lys His Leu Ser Thr Pro Ile Pro Val
1               5                   10                  15
Pro Thr Lys Cys Arg Asn Asn Asn Arg Lys Thr Pro Pro Asn Pro Val
            20                  25                  30
Thr Gly Ser Glu Asn Ser Asn His Ile Thr Ser Thr Ala Pro Asn Ser
        35                  40                  45
Ser Thr Glu Tyr Pro Thr Ser Arg Lys Arg Arg Arg Glu Asn Arg Met
    50                  55                  60
His Leu His Ile Ala Ile Phe Asp Leu Asp Val Pro Val Pro Thr Val
65                  70                  75                  80
Tyr Thr Thr Arg Gly Leu Tyr Ser Ser Gln Phe Thr Arg Leu Leu Ala
                85                  90                  95
Ala Ala Ala Ala Arg Leu Ser Gln Ser Gln Ser Leu Ala Pro Gly Lys
            100                 105                 110
Glu Ile Thr Ile Arg Thr Ser Ser Tyr Asp Val Ile Gly Gly Ile Phe
        115                 120                 125
Pro Pro Ala His Leu Leu Gln Arg Ser Pro Pro Gly Ala Gly Gly Lys
    130                 135                 140
Glu Arg Ile Asp Gly Ile Leu Leu Thr Gly Ser Ser Ala Ser Val Tyr
145                 150                 155                 160
Arg Ala Asp Ser His Pro Trp Met Leu Leu Thr Ser Glu Arg Glu Gly
                165                 170                 175
Gly Ala Gln
```

<210> 26703
<211> 90
<212> PRT
<213> A.fumigatus

<400> 26703

```
Lys Asn Ala Lys Leu Ser Phe Ile Thr Asp Phe Val Tyr Ser Glu Gly
1               5                   10                  15
His Ala Ile Lys Asn His Leu Ala Ser Thr Ser Ile Ala Val Arg Ala
            20                  25                  30
Leu Thr Gly His His Lys Trp Ile Leu Ser Gly Thr Pro Val Pro Lys
        35                  40                  45
Gln Val Leu Leu Leu Leu Ile Ser Arg Tyr Gln Ser Ala Asn Arg Thr
    50                  55                  60
Thr Thr Ala Ser Ser Leu Ser Ser Ile Arg Thr Ser Ile Ser Trp Ser
65                  70                  75                  80
```

```
Ile Gln Thr Arg Met Ile Thr Val Ser Ser
                85                  90

<210> 26704
<211> 80
<212> PRT
<213> A.fumigatus

<400> 26704
Ser Pro Asp Glu Phe Asp His Leu Gly Ser Val Pro Gln Asp Asn Leu
1               5                   10                  15
His Asp Thr Glu Leu Leu Gln Thr Leu Asn Asn Val Asp Ala Thr His
            20                  25                  30
Ser Ala Leu Ser Thr Val Tyr Lys Asp Val Thr Asn Ser Val Leu Leu
        35                  40                  45
Thr Met Leu Asp Asp Leu Ala Leu Pro Val His Ile Ile Arg Ile His
    50                  55                  60
Phe Met Lys Gln Asn Ser Thr Asp Arg Ser Tyr Gln Cys Pro Thr Arg
65                  70                  75                  80

<210> 26705
<211> 225
<212> PRT
<213> A.fumigatus

<400> 26705
Gln Trp Cys Leu Ser Ser Trp Gly Gly Pro Tyr Val Glu Leu Cys Met
1               5                   10                  15
Ser Pro Ser Gln Phe Ser Lys Ser Lys Glu Thr Ala Asp Pro Ala Arg
            20                  25                  30
Pro Lys Ala Thr Arg His Gly Lys Arg Ala Ser Met Val Ser Ser Met
        35                  40                  45
Arg Arg Gly Pro Ser Ser Arg Arg Thr Ser His Pro Arg Thr Tyr Phe
    50                  55                  60
Met Asn Thr Pro Val Lys Pro Ser Thr Arg Val Glu Thr Asp Gln Tyr
65                  70                  75                  80
Ser Phe Lys Ala Tyr Leu Ala Arg Trp Met Gly Asp Val Ala Gln Leu
                85                  90                  95
Ala Pro Trp Thr Arg Asp Thr Ile Ala Thr Arg Leu Arg Ala Ser Ala
            100                 105                 110
Thr Ala Ala Ala Ala Gln Cys Val Gly Gly Lys Thr Gly Thr Tyr Cys
        115                 120                 125
Gly Gly Met Arg Trp Thr Thr Gly Glu Tyr Asp Gly Thr Thr Gly Val
    130                 135                 140
Gly Gln Gln Leu Ser Ala Leu Glu Val Val Gln Ala Asn Leu Tyr Asn
145                 150                 155                 160
Thr Val Ala Gly Pro Leu Thr Thr Ser Thr Gly Gly Thr Ser Lys Arg
                165                 170                 175
Asn Ser Ala Val Glu Arg Gly Ser Ser Glu Arg Ile Ala Val Ser Asp
            180                 185                 190
Asp Ser Ser Ile Val Thr Met Ala Asp Arg Val Val Ala Trp Val Ala
        195                 200                 205
Thr Gly Gly Leu Gly Val Leu Leu Gly Gly Tyr Leu Tyr Leu Val Val
    210                 215                 220
Thr
225
```

<210> 26706
<211> 287
<212> PRT
<213> A.fumigatus

<400> 26706
Trp Pro Ala Asp Asn Ile Lys Glu Val Ala Ser Gln Leu Ala Trp Asp
1 5 10 15
Leu Val Ser Phe Tyr Thr Gly Asn Asn Thr Gly Asp Val Pro Gly Asn
20 25 30
Leu Pro Ala Pro Tyr Tyr Trp Trp Glu Ala Gly Ala Phe Phe Gly Thr
35 40 45
Leu Val Asn Tyr Trp Arg Tyr Thr Gly Asp Asp Thr Tyr Asn Asn Ile
50 55 60
Thr Met Gln Ala Ile Leu His Gln Ala Gly Thr Gly Asp Phe Met Pro
65 70 75 80
Ser Asn Gln Thr Arg Thr Glu Gly Asn Asp Asp Gln Ala Phe Trp Ala
85 90 95
Phe Thr Ala Leu Met Ala Ala Glu His Asn Phe Pro Asn Pro Pro Glu
100 105 110
Asp Ser Pro Ser Trp Leu Ala Met Ala Arg Ala Val Phe Asn Glu Gln
115 120 125
Ile Ala Arg Trp Asp Asp Gln Ala Cys Gly Gly Gly Leu Lys Trp Gln
130 135 140
Ile Phe Pro Phe Asn Asn Gly Tyr Thr Tyr Arg Asn Ser Ile Ser Asn
145 150 155 160
Gly Gly Leu Phe Asn Ile Ala Ala Arg Leu Ala Arg Tyr Thr Gly Asp
165 170 175
Ala Thr Tyr Ala Glu Trp Ala Asn Lys Val Trp Asp Trp Val Thr Glu
180 185 190
Thr Gly Leu Ile Gly Pro Glu Tyr Tyr Val Phe Asp Gly Thr Tyr Glu
195 200 205
Ser Asp Asn Cys Ser Ala Leu Asn Arg Val Glu Trp Thr Tyr Asn Asn
210 215 220
Gly Val Phe Leu His Gly Ala Ala His Met Trp Asn Tyr Val Cys Leu
225 230 235 240
Leu Val Ser Ser Pro Arg Ala Lys Arg Arg Leu Thr Leu Pro Asp Pro
245 250 255
Arg Gln Leu Val Met Glu Ser Ala His Arg Trp Ser Pro Arg Cys Ala
260 265 270
Glu Asp Leu Pro Leu Ala Glu Gln Val Ile Arg Glu Arg Thr Leu
275 280 285

<210> 26707
<211> 132
<212> PRT
<213> A.fumigatus

<400> 26707
Leu Cys Ser Gly Phe Ser Leu Ser Asn Ile Gly Asn Tyr Phe Val Ser
1 5 10 15
Thr Tyr Thr Pro Val Phe Cys Ala Phe Tyr Asn Leu Asp Leu Leu Leu
20 25 30
Gly Ser Gly Asp Gln Lys Phe Pro Pro Asp Val Ser Pro Asp Asp Leu
35 40 45

Glu Lys Leu Ala Asn Gly Asp Pro Thr Thr Ala Glu Leu Ser Val Lys
50 55 60
Phe Arg Asp Ala Leu Phe Arg Thr Leu Pro Gln Asn Pro Gly Cys Ser
65 70 75 80
Gln Val Asn Thr Ser Pro Asn Thr Phe Leu Ser Leu Glu Lys Gly Thr
85 90 95
Pro Glu Gln Phe Gly Asn Lys Phe Ser Ala Arg Val Gln Ile Trp Gly
100 105 110
Lys Leu Pro Asp Phe Ile Ser Pro Glu His Tyr Tyr Lys Trp Lys Glu
115 120 125
Lys Thr Phe Pro
130

<210> 26708
<211> 77
<212> PRT
<213> A.fumigatus

<400> 26708
Met Glu Glu Arg Gly Ser Ser Phe Ser Leu Lys Arg Asp Cys Val Leu
1 5 10 15
Asn Arg Ile Lys Gly Glu His Leu Ile Leu Asp Phe Tyr Thr Pro Tyr
20 25 30
Thr Tyr Cys Lys Ala Ala Ala Leu Ile Ser Trp Met Ile Asp Thr Ser
35 40 45
Leu Val Thr Leu Val Pro Cys Ser Asp Lys Asp Lys Ser Thr Thr Ala
50 55 60
Ser Glu Ile Ala Ser Lys Ala Ala Val Ala Gly Ser Leu
65 70 75

<210> 26709
<211> 63
<212> PRT
<213> A.fumigatus

<400> 26709
Asp Thr Cys Arg Val Asn Val Ala Gly Lys Leu Asp Ile Val Cys Phe
1 5 10 15
Asp Lys Thr Gly Thr Leu Thr Glu Asp Gly Leu Asp Val Leu Gly Val
20 25 30
Arg Thr Val Thr Gln Asp Leu Arg Ser Ala Pro Leu Asp Val Ser Tyr
35 40 45
Arg Cys Val Leu Thr Lys Thr Ile Gln Ile His Arg Ser Lys Thr
50 55 60

<210> 26710
<211> 80
<212> PRT
<213> A.fumigatus

<400> 26710
Val Pro Ile Glu Leu Gly Val Leu Arg Asn Phe Glu Phe Val Ser Glu
1 5 10 15
Leu Arg Arg Ala Ser Val Val Val Arg Gln Phe Gly Asp Gly Gly Ala
20 25 30
Thr Phe Phe Val Lys Gly Ala Pro Glu Ser Leu Lys Thr Ile Cys Leu

```
        35                  40                  45
Pro Asp Ser Cys Gln Ser Thr Thr Met Thr Thr Val Leu Ser Val Tyr
    50                  55                  60
Ile Glu Pro Asn Glu Leu Thr Met Leu Asp Ser Thr Thr Arg Phe Arg
65                  70                  75                  80
```

<210> 26711
<211> 141
<212> PRT
<213> A.fumigatus

<400> 26711

```
Gly Glu Ser Val Pro Val Ser Lys Ile Pro Leu Thr Asp Asp Ala Leu
1               5                  10                  15
Lys Tyr Leu Asn Leu Ser Thr Pro Ser Val His Pro Asn Val Ala Lys
            20                  25                  30
His Phe Leu Phe Ser Gly Thr Lys Val Ile Arg Ala Arg Arg Pro His
        35                  40                  45
Ser Val Asp Asp Gly Glu Ala Ile Ala Leu Ala Val Val Val Arg Thr
    50                  55                  60
Gly Phe Ser Thr Thr Lys Gly Ala Leu Val Arg Ser Met Leu Phe Pro
65                  70                  75                  80
Lys Pro Ser Gly Phe Lys Phe Tyr Lys Asp Ser Phe Arg Tyr Ile Thr
                85                  90                  95
Val Met Gly Val Ile Ala Ala Phe Gly Phe Ile Ala Ser Phe Val Asn
            100                 105                 110
Phe Val Arg Leu Gly Val Ser Leu Ala Gln Gly Met Ile Gln Gly Leu
        115                 120                 125
Ser Leu His Cys Thr Ala Phe Leu Ala Phe Asn His Cys
    130                 135                 140
```

<210> 26712
<211> 134
<212> PRT
<213> A.fumigatus

<400> 26712

```
Gly Leu His Leu Leu Met Tyr Leu Ile Asp Val Cys Ser Leu Arg Gln
1               5                  10                  15
Tyr Arg Phe Thr Asp Leu Lys Pro Asp Leu Ala Ser Leu Ala Ser Thr
            20                  25                  30
Ser Ser Ser Cys Ile Gly Ala Ser Val Gly Pro Gln Gln His Lys Asn
        35                  40                  45
Ile Val His Ala Met Ala Thr Cys His Ser Leu Arg Val Val Asp Gly
    50                  55                  60
Glu Leu Met Gly Asp Pro Leu Asp Val Lys Met Phe Gln Phe Thr Gly
65                  70                  75                  80
Trp Ser Tyr Glu Glu Asn Gly Ser Glu Ser Ile Glu Pro His Gly Pro
                85                  90                  95
Lys Tyr Glu Thr Ile Met Pro Pro Ile Ala Arg Pro Pro Asn Gln Ile
            100                 105                 110
Ser Asp Leu Ser Gly Gln Ile Gly Thr Ser Gln Thr Val Ser Phe Pro
        115                 120                 125
Pro Pro Glu Lys Ser Thr
    130
```

<210> 26713
<211> 89
<212> PRT
<213> A.fumigatus

<400> 26713
Gln Cys Trp Thr Val Pro His Asp Phe Asp Asp Leu Leu Ser Phe Tyr
1 5 10 15
Thr His Lys Gly Tyr Arg Val Ile Ala Cys Ala Gly Arg Tyr Glu Pro
20 25 30
Lys Leu Ser Trp Met Arg Ala Gln Lys Leu Thr Arg Glu Leu Val Glu
35 40 45
Arg Asp Leu Glu Phe Ile Gly Phe Ile Ile Phe Glu Asn Lys Leu Lys
50 55 60
Ser Ser Thr Thr Gly Thr Ile Ala Glu Leu Ser Asn Ala Gly Ile Arg
65 70 75 80
Asn Val Met Cys Thr Gly Asp Asn Ile
85

<210> 26714
<211> 78
<212> PRT
<213> A.fumigatus

<400> 26714
Ala Tyr Ile Ala Gln Leu Ser Trp His Leu Ile Ile Val Arg Ala Leu
1 5 10 15
Asp Leu Ile Thr Ile Val Val Pro Pro Ala Leu Pro Ala Thr Leu Thr
20 25 30
Ile Gly Thr Asn Leu Ala Leu Ser Arg Leu Lys Gly His Lys Ile Phe
35 40 45
Cys Ile Ser Pro Gln Arg Phe Glu Leu Leu Ser Ile Cys Cys His Ile
50 55 60
Tyr Ser Leu Arg Tyr Leu Gln Gly Glu Arg Cys Arg Gln Ala
65 70 75

<210> 26715
<211> 79
<212> PRT
<213> A.fumigatus

<400> 26715
Leu Thr Thr Val Arg Lys Ala Asn Gly Leu Gln Thr Phe Trp Cys Ala
1 5 10 15
Phe Asp Glu Lys Gly Cys Ser Ala Ile Ser Lys Leu Ser Tyr Asp Asp
20 25 30
Thr Arg Thr Ala Gln Phe Arg His Glu Leu Lys Ile Pro Glu Asn Ser
35 40 45
Glu Phe Tyr Trp Tyr Leu Lys Ser Val Ser Phe Glu Leu Val Met Cys
50 55 60
Cys Ala Pro Tyr Val Asp Phe Ser Gly Gly Gly Lys Leu Thr Val
65 70 75

<210> 26716
<211> 138
<212> PRT

<213> A.fumigatus

<400> 26716

```
Ile Leu Tyr Val Phe Leu Ile His Gly Asp Ala Thr Leu Leu Gln Gly
1               5                  10                  15
Asp Gly Asn Gly Leu Pro Arg Ala Asp Thr His Glu Gln Gly Leu Asp
            20                  25                  30
Thr Asp Asn Ala Gly Gly Asn Ile Leu Ala Asp Asp Leu Leu Ala Glu
        35                  40                  45
Ala Leu Ser Gly Gly Thr Leu His Gln Gln His Gly Gly Ser Thr Val
    50                  55                  60
Gly Asp Leu Arg Gly Val Thr Gly Val Asp Gly Thr Ile Leu Gly Glu
65                  70                  75                  80
Ser Gly Thr Asn Leu Ala Glu Gly Leu Gly Gly Asp Ala Val Thr Asp
                85                  90                  95
Ala Ile Val Gly Leu Asp Gly Asn Gly Leu Leu Leu Thr Gly Leu Gly
            100                 105                 110
Ile Ser Pro Leu Asp Leu Glu Arg Asn Asn Leu Leu Val Glu Glu Thr
        115                 120                 125
Gly Leu Leu Ser Leu Asp Gly Leu Leu Val
    130                 135
```

<210> 26717
<211> 202
<212> PRT
<213> A.fumigatus

<400> 26717

```
Arg Gln Ser Gly Lys Lys Ala Arg Met Leu Ile Asn Val Arg Pro Gly
1               5                  10                  15
Arg Pro Gly Ala Val Thr Glu Phe Ser Glu Leu Leu Glu Ser His Pro
            20                  25                  30
Glu Ser Ala Asn Cys Lys Val Pro Met Gly Val Leu Ser Glu Gln Met
        35                  40                  45
Ala Lys Asp Arg Asn Ile Ser Arg Ala Val Gln Asp Ala Phe Ala Ala
    50                  55                  60
Ser Ser Tyr Gln Lys Ala Val Lys Ala Gln Lys Ala Gly Leu Phe Asn
65                  70                  75                  80
Glu Glu Ile Val Pro Leu Gln Val Lys Trp Thr Asp Pro Lys Thr Gly
                85                  90                  95
Glu Glu Lys Thr Ile Thr Val Lys Ala Asp Asp Gly Ile Arg Asp Gly
            100                 105                 110
Ile Thr Pro Glu Ser Leu Gly Lys Ile Arg Pro Ala Phe Ala Lys Asp
        115                 120                 125
Gly Ser Ile His Ala Gly Asn Ala Ser Gln Ile Ser Asp Gly Ala Ala
    130                 135                 140
Ala Val Leu Leu Met Lys Arg Ser Thr Ala Glu Arg Leu Gly Gln Lys
145                 150                 155                 160
Ile Ile Gly Lys Tyr Val Ala Ala Ser Val Val Gly Val Lys Pro Leu
                165                 170                 175
Leu Met Gly Ile Gly Pro Trp Lys Ala Ile Pro Val Ala Leu Glu Lys
            180                 185                 190
Gly Gly Ile Thr Met Asp Glu Glu Asp Ile
        195                 200
```

<210> 26718

<211> 284
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (233)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26718
Glu Gln Leu Asn Ser Ser Gln Asn Gln Thr Asp Val Glu Phe Leu Lys
1 5 10 15
Phe Leu Gln Asp Ala Tyr Arg Phe Val Leu Lys His Ala Gln Met Ile
20 25 30
Asn Met Ala Pro Leu Gln Val Tyr Cys Ser Gly Leu Ala Phe Ser Pro
35 40 45
Thr Asp Ser Ile Val Arg Arg Ile Phe Asn Asn Lys Gln Pro Ser Trp
50 55 60
Leu Pro Val Leu Pro Gln Val His Lys Ser Trp Ser Ala Glu Leu Gln
65 70 75 80
Thr Leu Glu Gly His Ser Ser Trp Val Ser Ser Val Ala Phe Ser Pro
85 90 95
Asp Gly Gln Arg Ile Val Ser Gly Ser Asp Asp Asn Thr Ile Lys Leu
100 105 110
Trp Asp Ala Gln Thr Gly Ser Glu Leu Gln Ser Leu Gln Gly His Ser
115 120 125
Asp Ser Val His Ser Val Ala Phe Ser Pro Asp Gly Gln Arg Ile Val
130 135 140
Ser Gly Ser Asp His Asn Thr Ile Lys Leu Trp Asp Ala Gln Thr Gly
145 150 155 160
Ser Glu Leu Arg Ser Leu Glu Gly His Ser Asp Trp Val His Ser Val
165 170 175
Ala Phe Ser Pro Asp Gly Gln Arg Ile Val Ile Tyr Gly Ser Lys Ile
180 185 190
Arg Leu Trp Asp Ala Gln Thr Gly Ser Glu Leu Gln Ser Leu Gln Ser
195 200 205
His Ser Asp Tyr Val Thr Tyr Ala Phe Leu Gly Asn Phe Arg Val Glu
210 215 220
His Lys Gln Gly Ser His Ile Ser Xaa Glu Ser Ser Trp Val Cys Phe
225 230 235 240
Arg Gly Glu Arg Val Ile Trp Leu Pro Pro Glu Leu Arg Glu Pro Ser
245 250 255
Cys Arg Ala Ile Asn His Asp Ile Leu Ala Pro Gly Tyr Leu Asn Gly
260 265 270
Leu Val Leu Ile Ile Arg Phe Arg Ala His Ser Asp
275 280

<210> 26719
<211> 105
<212> PRT
<213> A.fumigatus

<400> 26719
Pro Ser Val Leu Met Ile Val Leu Thr Asn Arg Glu His Ser Leu Lys
1 5 10 15
Met Ser Phe Val Asn Val Gly Thr Gln Ser Gly Asp Ser Thr Asn Asn

```
            20                  25                  30
Thr Pro Val Ile Asn His Gly Ser Ala Pro Val Leu Ala Ser Val Phe
        35                  40                  45
Ser Glu Pro Phe Gln Val Phe Ser Ala Lys Lys Phe Pro Gly Val Ile
    50                  55                  60
Glu Ser Thr Gln Leu Ser Lys Cys Phe Ala Leu Gln Gly Ile Lys Ile
65                  70                  75                  80
Pro Ile Arg Lys Asp Gly Val Lys Gly Pro Arg Gly Arg Gly Gly Asp
                85                  90                  95
Gly Asp Asp Asp Ala Asp Asp Tyr Glu
            100                 105
```

<210> 26720
<211> 91
<212> PRT
<213> A.fumigatus

<400> 26720

```
Thr Ile Tyr Thr Gly Glu Met Leu Ser Gly Pro Thr Ile Trp Thr Asn
1               5                   10                  15
Pro Gln Ala Ser Tyr Tyr Pro Pro Tyr Tyr Ala Gly Gly Gln Met Pro
            20                  25                  30
Pro Ala Gly Met Ser Pro Ala Gln Gln Pro Val Pro Ala Gly Pro Gly
        35                  40                  45
Gly Met Phe Thr Arg Asn Leu Ile Gly Ser Leu Ser Ala Ser Ala Phe
    50                  55                  60
Arg Leu Thr Asp Pro Asp Asn Lys Ile Gly Val Trp Phe Ile Leu Gln
65                  70                  75                  80
Asp Leu Ser Val Arg Thr Glu Gly Thr Phe Arg
                85                  90
```

<210> 26721
<211> 72
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (8)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26721

```
Ser Pro Ala Arg Ser Pro Ser Xaa Leu Gln Tyr Val Val Gln Ser Ala
1               5                   10                  15
Pro Ala Phe Leu Arg Asp Leu Asn Pro Gly Cys Phe Tyr Val Phe Cys
            20                  25                  30
Gly Tyr Ile Tyr Pro Gln Ser Glu Thr Thr Lys Tyr Lys Val Thr Arg
        35                  40                  45
Asp His Gln Arg Glu Leu Gln Ala Tyr Gly Glu Tyr Thr Ser Asn Lys
    50                  55                  60
Ala Lys Leu Gln Ser Met Asp Ser
65                  70
```

<210> 26722
<211> 96
<212> PRT

<213> A.fumigatus

<400> 26722
Ser Cys Leu Ser Thr Ser Tyr Ile Tyr Cys Ser Val Leu Ser Arg Val
1 5 10 15
Leu Arg Ile Ser Leu Thr Leu Arg Phe Ser Ser Glu Tyr Glu Val Ala
20 25 30
Leu Val Glu Glu His Glu Leu Thr Ala Gly Pro Leu Ser Leu Leu Gln
35 40 45
Thr Ala Thr Arg Thr His Thr Gln Val Leu Ile Ser Cys Arg Asn Asn
50 55 60
Arg Lys Leu Leu Ala Arg Val Lys Ala Phe Asp Arg His Cys Asn Met
65 70 75 80
Val Leu Glu Asn Val Lys Glu Met Trp Thr Glu Lys Pro Lys Gly Gly
85 90 95

<210> 26723
<211> 373
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (38),(266),(332)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26723
Gly Ile Pro Ala Gly Thr Glu Ala Asp Thr Thr Gly Phe Phe Leu Leu
1 5 10 15
Leu Asn Glu Leu Lys Gln Glu Met Pro Ala Gly Lys Thr Val Ser Val
20 25 30
Thr Ala Pro Ala Ser Xaa Trp Tyr Leu Gln Tyr Phe Pro Ile Glu Ala
35 40 45
Leu Ser Leu Val Val Asp Tyr Val Val Tyr Met Thr Tyr Asp Leu His
50 55 60
Gly Gln Trp Asp Tyr Ile Asn Lys Tyr Ala Thr Pro Gly Cys Pro Ser
65 70 75 80
Tyr Asp Gln Gly Leu Gly Asn Cys Leu Arg Ser His Val Asn Leu Thr
85 90 95
Glu Thr Ile Asn Ser Leu Ser Met Ile Thr Lys Ala Gly Val Pro Ser
100 105 110
Asn Met Ile Val Val Gly Val Ser Ser Tyr Gly Arg Ser Phe Lys Met
115 120 125
Ser Thr Pro Gly Cys Trp Thr Glu Gln Cys Thr Tyr Thr Gly Pro Asp
130 135 140
Ser Gly Ala Tyr Pro Gly Arg Cys Thr Asn Thr Ser Gly Tyr Ile Ala
145 150 155 160
Asp Tyr Glu Ile Arg Glu Ile Ile Arg Gln Asn Pro Thr Val Gln Glu
165 170 175
Leu Trp Asp Ala Ser Ser Tyr Ser Asn Ile Val Val Phe Asn Asp Thr
180 185 190
Glu Trp Val Ala Tyr Met Asp Glu Asp Asn Lys Ala Thr Arg Lys Ala
195 200 205
Leu Tyr Pro Gly Leu Ala Phe Leu Gly Thr Ala Asp Trp Ala Val Asp
210 215 220
Leu Gln Ser Glu Thr Gly Gly Gly Ser Gly Ser Asn Pro Asn Ser Ser

```
225                 230                 235                 240
Ser Gly Gly Thr Ile Tyr Val Asn Pro Asp Ile Trp Asn Ser Ala Ala
                245                 250                 255
Pro Val Val Thr Ala Pro Pro Arg Ala Xaa Leu Ile Trp Pro Pro Met
            260                 265                 270
Pro Leu Ser Thr Pro Thr Thr Ile Thr Phe Leu Pro Trp Asn Asn Thr
        275                 280                 285
Ile Ser Tyr Ser Ser Leu Thr Arg Ala Gln Thr Leu Cys Leu Thr Ala
    290                 295                 300
Gln Pro Arg Arg Ser Pro Arg Thr Ser Ile Asn Ser Trp Leu Thr Val
305                 310                 315                 320
Ile Thr Ile Pro Pro Cys Glu His Thr Leu Ala Xaa Pro Pro His Ser
                325                 330                 335
Leu Ala Leu Ser Leu Ser Leu Ser Leu Ser Leu Ser Leu Ser Leu Leu
            340                 345                 350
Ser Leu Ser Pro Pro Leu Gln Gly Arg Gly Val Thr Cys Pro Leu Met
        355                 360                 365
Asp Ala Ser Leu Pro
    370
```

<210> 26724
<211> 75
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (14),(25)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26724

```
Thr Ile Arg His Leu Met Ser Gly Gly Ser Pro Leu Pro Xaa Asn Ala
1               5                   10                  15
Val Ser Thr Ser Asn Ser Cys Ala Xaa Pro His His Leu Glu Lys Thr
            20                  25                  30
Cys Val Leu Ser Pro Pro Phe His Val Thr Arg Ser Pro Ala Ser Leu
        35                  40                  45
Asn His Leu Val Thr Ser Leu Lys Lys His Phe Leu Leu Phe Ser His
    50                  55                  60
Ala Thr Leu Phe Leu Leu Leu Ser Leu Arg Arg
65                  70                  75
```

<210> 26725
<211> 64
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (17)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26725

```
Tyr Leu Glu Leu Arg Gly Ala Cys Gly Asp Cys Ser Ser Pro Arg Ile
1               5                   10                  15
Xaa His Leu Ala Pro His Ala Ser Ile Tyr Ala His Asn His Tyr Val
```

```
            20                  25                  30
Ser Ser Val Glu Gln His His Leu Val Leu Gln Pro Asn Thr Arg Thr
        35                  40                  45
Asn Thr Leu Ser Asp Gly Thr Thr Ser Thr Phe Pro Ala Tyr Val Tyr
    50                  55                  60
```

<210> 26726
<211> 328
<212> PRT
<213> A.fumigatus

<400> 26726

```
Arg Ser Pro Ser Arg Ala Glu Trp Arg Ser Ser Asp Leu Leu Ser Val
1               5                   10                  15
Arg Pro Gln Pro Leu Ser Phe Gly Met Ala Ser Pro Arg Glu Ile Thr
            20                  25                  30
Asp Leu Ser Arg Gln Arg Pro Asp Pro Lys Asn Lys Thr Val Leu Ala
        35                  40                  45
Pro Pro Lys Asp Leu Arg Met Val Ala Gly Asn Pro Met Asp Arg Lys
    50                  55                  60
Phe Lys Gly Thr His Glu Ala Glu Ala Arg Ser Tyr Ala Cys Leu Asp
65                  70                  75                  80
Tyr Asn Gly Pro Ala Lys Pro Glu Thr Asn Gly Phe Pro Asn Tyr Asn
                85                  90                  95
Cys Pro Asn Gly Leu Arg Ser Gln Val Phe Phe Pro Ser Cys Trp Asn
            100                 105                 110
Gly Val Asp Tyr Asp Ser Pro Asp His Lys Ser His Met Ala Tyr Pro
        115                 120                 125
Ile Asp Ser Tyr Asn Ser Gly Ala Cys Pro Glu Ser His Pro Ile Lys
    130                 135                 140
Ile Val Ser Ile Phe Ile Glu Val Ile Trp Lys Thr Glu Ala Phe Ala
145                 150                 155                 160
Asp Met Trp Tyr Gly Asp Ser Gln Pro Phe Val Trp Ser Asn Gly Asp
                165                 170                 175
Lys Thr Gly Tyr Gly Leu His Ala Asp Phe Val Asn Gly Trp Asp Val
            180                 185                 190
Pro Val Leu Gln Glu Ala Leu Asp Thr Cys Asp Asp Met Gly Gly Asp
        195                 200                 205
Ile Arg Asn Cys Gln Val Leu Lys Leu Tyr Asp Asp Ala Ile Thr Glu
    210                 215                 220
Gly Cys Leu Leu Glu Pro Ser Ile Asp Glu Lys Leu Asp Gly Trp Leu
225                 230                 235                 240
Asp Ala Leu Pro Gly Cys Asn Pro Val Gln Pro Gly Pro Asp Asp Ala
                245                 250                 255
Val Pro Val Lys Asn Cys Ala Ala Pro Gly Ile Gly Glu Pro Gln His
            260                 265                 270
Tyr Tyr Thr Asp Val Thr Lys Glu Leu Gly Trp Ala Trp Ile Gly Cys
        275                 280                 285
Ala Arg Asp Tyr Ile Asn Phe Glu His Ile Leu Ala Glu Ser Ser Ser
    290                 295                 300
Ser Ser Asp Asp Met Thr Val Gln Lys Cys Thr Gln Thr Trp Gln Lys
305                 310                 315                 320
Gly Gly Val Tyr Leu Cys Arg Gly
                325
```

<210> 26727

<211> 114
<212> PRT
<213> A.fumigatus

<400> 26727
Asp Val His Leu Cys Pro Gly His Leu Ser Cys Ile Ala Trp Asn Ser
1 5 10 15
Cys Leu Pro Ser Trp Gly Phe Trp Asn Ala Gln Gln Gln Tyr Gln Ser
20 25 30
Thr Pro Tyr Ala Arg Leu Ala Asp Ile Tyr Gly Phe Ile Ala Val Tyr
35 40 45
Pro Glu Ser Pro Gln Gly Ala Trp Asp Ala Ala Ser Ser Glu Ser Leu
50 55 60
Val His Glu Gly Gly Gly Thr Ser Gln Ser Ile Ala Asn Met Ala Lys
65 70 75 80
Tyr Val Leu Asn Thr Tyr Ser Ala Asp Ala Ser Lys Val Tyr Val Ser
85 90 95
Gly Val Ser Ser Gly Gly Thr Met Ala Val Ser Asn Pro His Leu Gln
100 105 110
Ser Ile

<210> 26728
<211> 126
<212> PRT
<213> A.fumigatus

<400> 26728
Leu Asn Asn Gly Pro Met Gln Asn Thr Met Ala Gly Thr Tyr Pro Asp
1 5 10 15
Val Phe Lys Gly Val Ile Ile Tyr Ser Ala Gly Ser Ala Ser Asn Ile
20 25 30
Arg Ser Met Tyr Pro Gly Tyr Thr Gly Thr Tyr Pro Lys Ile Gln Ile
35 40 45
Tyr Leu Gly Ser Glu Asp Thr Val Ile Gly Ser Ala Ala Phe Asn Thr
50 55 60
Thr Leu Ala Ala Trp Ala Ser Val Leu Arg Tyr Asp Thr Thr Pro Asp
65 70 75 80
Glu Leu Leu Ala Asn Thr Pro Arg Arg Arg Trp Thr Thr Tyr Val Leu
85 90 95
Gly Asp Lys Leu Asp Gly Ile Trp Ala Glu Gly Val Gly His Pro Val
100 105 110
Pro Ile Gln Gly Asp Glu Asp Ile Lys Trp Trp Gly Phe Ala
115 120 125

<210> 26729
<211> 151
<212> PRT
<213> A.fumigatus

<400> 26729
Arg Ser Ile Ser Met Met Ser Leu Leu Thr Leu Leu Ala Thr Thr Leu
1 5 10 15
Pro Tyr Leu Met Cys Tyr Ala Ser Pro Leu Ile Lys Arg Ala Thr Leu
20 25 30
Thr Glu Val Thr Asn Phe Gly Gly Asn Pro Ala Ser Ile Arg Met Tyr

```
        35                  40                  45
Ile Phe Val Pro Asp Thr Leu Ala Ala Ser Pro Gly Ile Val Val Ser
    50                  55                  60
Leu His Gly Ala Ser Gly Thr Leu Asn Asn Asn Thr Asn Leu Arg His
65                  70                  75                  80
Thr Gln Asp Ser Pro Ile Tyr Met Ala Leu Leu Pro Ser Thr Leu Ser
                85                  90                  95
Leu Pro Lys Gly Leu Gly Met Gln Leu Arg Ala Ser Leu Leu Tyr Thr
            100                 105                 110
Lys Ala Glu Ala Leu Ala Ser Gln Leu Arg Ile Trp Pro Asn Met Ser
        115                 120                 125
Ser Ile Pro Thr Ala Leu Met Gln Ala Arg Tyr Met Tyr Arg Val Cys
    130                 135                 140
His Pro Val Val Leu Trp Leu
145                 150
```

<210> 26730
<211> 82
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (79)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26730

```
Asp Met Met Ile Val Gly Cys Lys Leu Ala Gln Glu Ala Val Gln Lys
1               5                   10                  15
Leu Thr His Asn Leu Leu Arg Val Ser Lys Gln Ala Met Tyr Val Phe
            20                  25                  30
Lys Asn Lys Asp Leu Trp Leu Leu Val Arg Leu Thr Arg Phe Met Tyr
        35                  40                  45
Gly Tyr Val Thr Trp His Leu Ser Ser Lys Arg Cys Arg Met Asn Glu
    50                  55                  60
Ile Cys Leu His His Gly Ala Glu Arg Ile Asp Val Pro His Xaa Gly
65                  70                  75                  80
Gly Gly
```

<210> 26731
<211> 115
<212> PRT
<213> A.fumigatus

<400> 26731

```
Asp Ser Tyr Ser Ser Pro Ala Ser Ala Pro His Ala Pro Ser Leu Pro
1               5                   10                  15
Trp Ser Leu Pro His Glu Asp Arg Ser Pro Gln Pro Gln Thr Gly Ser
            20                  25                  30
Ala Arg Cys Pro Pro Thr His Ala Pro Leu His Arg Pro Arg Tyr Pro
        35                  40                  45
Asp Pro Ala Asn Pro Pro Pro Arg Val Gln Glu Glu Ser Ala Pro Gly
    50                  55                  60
Gln Ala Ser Ala His Ser Pro Leu Ala Pro Ala Gln Ser Gln Thr Pro
65                  70                  75                  80
```

```
Leu Pro Pro His Thr Thr Ala Pro Asn Ser Cys Pro Gly Ser Asp Glu
                85                  90                  95
Ser Glu His Ala Ser Pro Ala Thr Asp Pro Ser Ala Glu Pro Ala Ser
            100                 105                 110
Ser Gly Pro
        115
```

<210> 26732
<211> 167
<212> PRT
<213> A.fumigatus

<400> 26732

```
Ile Arg Thr Cys Gln Ser Gly His Arg Ser Val Gly Gly Thr Ser Val
1               5                  10                  15
Val Arg Thr Val Ile Ser Pro Ser Thr His Gly Leu His Ser Thr Ser
            20                  25                  30
Ala Thr Gly Thr Leu Ser Phe Trp Pro Gly Thr Thr Ala Val Pro Asn
        35                  40                  45
Leu Thr Gly Ala His Phe His Phe Thr Ala Gln Val Ala His Pro Ser
    50                  55                  60
Arg Leu Ser Ala Arg Val Leu Ser Gly Ala Ser Cys Trp Ile Ser Gly
65                  70                  75                  80
Pro Val Gly Thr Leu Asn Ala Asn Ala Asp Glu Tyr Ala Asn Leu Gln
                85                  90                  95
Tyr Phe Ala Gly Glu Ala Phe Ile Gly Gln Ala Thr Asn Trp Ala Gly
            100                 105                 110
Leu Arg Arg Lys Trp Trp Pro Pro Asp Gly Trp Leu Gln Arg Ser Cys
        115                 120                 125
Cys Gly Ala Asp Thr Thr Ser Thr Gly Gly Trp Ala Asp Gly Glu Gly
    130                 135                 140
Ala Ser Gly Val Ala Gln Lys Gly Cys Glu Ser Gly Arg Arg Ser Thr
145                 150                 155                 160
Thr Arg Asp Leu Arg Leu Gln
                165
```

<210> 26733
<211> 374
<212> PRT
<213> A.fumigatus

<400> 26733

```
Ala Leu Arg Leu Asp Pro Ser Ala Arg Cys Gly Glu Asp Arg Leu Pro
1               5                  10                  15
Val Ser Val Arg Leu Pro Pro Pro Ser Pro Leu Gln Leu Pro Ile Ala
            20                  25                  30
Ala Asn Lys Cys Ser Asn Met Tyr Met Ala Glu Asp Tyr Asn Ser Pro
        35                  40                  45
Gln Ser Val Tyr Trp Ser Leu Lys Ser Leu Val Val Leu Leu Leu Pro
    50                  55                  60
Asp Ser His Pro Phe Trp Ala Thr Pro Glu Ala Pro Ser Pro Ser Ala
65                  70                  75                  80
Gln Pro Pro Val Glu Val Val Ser Ala Pro Gln Gln Leu Leu Cys Asn
                85                  90                  95
His Pro Ser Gly Gly His His Phe Leu Leu Asn Pro Ala Gln Phe Val
            100                 105                 110
```

```
Ala Trp Pro Met Lys Ala Ser Pro Ala Lys Tyr Cys Lys Phe Ala Tyr
        115                 120                 125
Ser Ser Ala Phe Ala Phe Ser Val Pro Thr Gly Pro Leu Ile Gln Gln
    130                 135                 140
Leu Ala Pro Asp Ser Thr Leu Ala Leu Ser Arg Asp Gly Cys Ala Thr
145                 150                 155                 160
Trp Ala Val Lys Trp Lys Cys Ala Pro Val Arg Phe Gly Thr Ala Val
                165                 170                 175
Val Pro Gly Gln Lys Asp Arg Val Pro Val Ala Glu Val Glu Trp Arg
            180                 185                 190
Pro Trp Val Asp Gly Glu Ile Thr Val Arg Thr Thr Leu Val Pro Pro
        195                 200                 205
Thr Asp Arg Trp Pro Asp Trp His Val Arg Ile His Arg Ile Gln Gly
    210                 215                 220
Arg Asn Leu Glu Arg Leu Tyr Ala Val Glu Gly Gly Phe Ala Ile Glu
225                 230                 235                 240
Arg Val Pro Lys Gly Asn Val Gln Thr Pro Gly Arg Glu Arg Ile Leu
                245                 250                 255
Pro Ala Leu Glu Gly Glu Asp Trp Leu Asp Gln Asp Ile Gly Val Gly
            260                 265                 270
Glu Gly Val His Val Ser Glu Asp Ser Val Leu Ile Leu Ser Ala Ala
        275                 280                 285
Gly Ala Ser Gly Leu Arg Gly Ala Ala Thr Met Ala Arg Thr Glu His
    290                 295                 300
Glu Ala Leu Lys Pro Asp Ser Asn Thr Asn Leu Met Ala Gln Arg Thr
305                 310                 315                 320
Leu Ile Pro Val Val Arg His Gly Leu Leu Asp Gly Asp Arg Gln Glu
                325                 330                 335
Ala Val Leu Val Thr Ala Val Phe Ala Val Ala Ser Pro Gln Asp Gln
            340                 345                 350
Ser Arg Arg Ser Leu Arg Ala Arg Trp Met Asp Tyr Pro Arg Glu Ala
        355                 360                 365
Ser Ser Ile Leu Leu Glu
    370
```

<210> 26734
<211> 207
<212> PRT
<213> A.fumigatus

<400> 26734

```
Glu Asp Asn Glu Lys Lys Gln Ser Lys Ala Gln Arg Ala Ala Glu Ala
1               5                   10                  15
Ala Gln Ala Glu Ala Glu Ala Arg Arg Ala Glu Lys Leu Arg Glu Thr
            20                  25                  30
Glu Ala Asn Leu Ala Asp Leu Ser Lys Leu Val Thr Glu Pro Ile Lys
        35                  40                  45
Lys Arg Lys Ser Arg Lys Gln Lys Ser Ala Arg Asp Ala Glu Asp Ser
    50                  55                  60
Asp Phe Gly Asp Glu Asp Ala Leu Thr Ala Lys Glu Ala Glu Glu Lys
65                  70                  75                  80
Ala Arg Gln Lys Arg Ser Leu Arg Phe Tyr Thr Ser Gln Leu Ala Gln
                85                  90                  95
Lys Ala Asn Lys Arg Asn Ala Ala Gly Arg Asp Ala Gly Gly Asp Ala
            100                 105                 110
Asp Leu Pro Tyr Arg Glu Arg Leu Lys Asp Arg Gln Ala Arg Leu Asn
```

```
        115                 120                 125
Ala Glu Ala Glu Lys Arg Gly Lys Gln Arg Pro Asp Lys Met Glu Gln
    130                 135                 140
Leu Gly Gly Asp Ser Asp Glu Glu Asp His Arg Leu Ala Lys Glu Ile
145                 150                 155                 160
Arg Gly Glu Gly Ala Gly Thr Asp Asp Asp Glu Tyr Tyr Asp Met Val
                165                 170                 175
Ala Ala Arg Ser Lys Gln Lys Lys Asp Glu Lys Lys Ala Arg Ala Glu
            180                 185                 190
Ala Tyr Ala Ala Ala Ala Arg Glu Gly Gly Arg Val Glu Ile Gln
        195                 200                 205
```

<210> 26735
<211> 79
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26735
Glu Val Gly Pro Xaa Gly Lys Arg Ala Ile Thr Tyr Gln Ile Glu Lys
1 5 10 15
Asn Lys Gly Leu Ala Pro Lys Arg Asn Lys Asp Ser Arg Asn Pro Arg
 20 25 30
Val Lys Lys Arg Lys Lys Phe Glu Glu Lys Lys Lys Lys Leu Gly Ser
 35 40 45
Ile Arg Gln Leu Tyr Lys Gly Gly Glu Gly Pro Gly Gly Tyr Gly Gly
 50 55 60
Glu Leu Thr Gly Ile Lys Lys Asn Leu Val Lys Ser Val Lys Leu
65 70 75

<210> 26736
<211> 227
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (85)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26736
Thr Pro Lys Pro Arg Asn Val Val Ser Lys Asp Gln Thr Arg Trp Ser
1 5 10 15
Ser Leu Ala Ala Thr Val Met Arg Lys Thr Ile Gly Trp Pro Arg Arg
 20 25 30
Ser Gly Ala Lys Gly Pro Glu Pro Thr Met Thr Asn Ile Thr Ile Trp
 35 40 45
Ser Arg Pro Ala Pro Ser Arg Arg Arg Thr Lys Arg Arg Arg Ala Gln
 50 55 60
Arg Leu Met Arg Pro Gln Pro Ala Lys Val Asp Ala Trp Arg Ser Asn
65 70 75 80
Arg Arg Leu Gly Xaa Thr Ala Asn Val Pro Ser Pro Thr Arg Ser Arg
```
```

```
                85                  90                  95
Arg Ile Arg Val Leu Arg Arg Ser Ala Ile Arg Ile Leu Ala Thr Pro
            100                 105                 110
Val Ser Arg Arg Gly Arg Ser Ser Lys Arg Arg Arg Arg Ser Ser Ala
        115                 120                 125
Val Ser Ala Ser Phe Ile Arg Glu Val Lys Val Leu Val Ala Thr Val
    130                 135                 140
Val Asn Leu Leu Val Ser Arg Arg Thr Trp Ser Arg Val Ser Ser Tyr
145                 150                 155                 160
Arg Pro Arg Ser Leu Leu Phe Gly Tyr Met His Tyr Gly Arg Ser Leu
                165                 170                 175
Cys Ser Leu Asn Tyr Gly Leu Ala Cys Thr Tyr Ile Phe Ser Leu Met
            180                 185                 190
Ile Tyr Thr Phe Gln Phe Leu Thr Phe Tyr Phe Pro Pro Ala Pro Pro
        195                 200                 205
Ser Phe Pro Arg Tyr His Gln Ile Leu Asn Lys Ile Leu Gly Ile Arg
    210                 215                 220
Lys Gln Lys
225
```

Sequence Listing

<210> 26737
<211> 146
<212> PRT
<213> A.fumigatus

<400> 26737

```
Gln Ser Phe Ile Ser Pro Glu Gly Glu Ile Val His His Arg Arg Lys
1               5                   10                  15
Leu Lys Pro Thr His Val Glu Arg Ser Ile Trp Gly Asp Ser Gln Thr
            20                  25                  30
Asp Ser Leu Lys Thr Val Val Asp Ser Pro Phe Gly Lys Ile Gly Gly
        35                  40                  45
Leu Asn Cys Trp Glu His Leu Gln Pro Leu Leu Arg Tyr Tyr Glu Tyr
    50                  55                  60
Glu Gln Gly Val Gln Ile His Val Ala Ser Trp Pro Ala Met Phe Pro
65                  70                  75                  80
Met Thr Lys Ser Val Pro Trp Gly Phe Cys Ala Thr Gly Asp Gly Ser
                85                  90                  95
Lys Leu Ala Ser Gln Phe Met Ala Ile Glu Gly Gln Thr Phe Val Leu
            100                 105                 110
Ala Cys Thr Gln Ile Leu Thr Lys Glu Asn Leu Ala Lys Gln Asn Leu
        115                 120                 125
Val Glu Glu Gly Ile Ile Gln Val Val Arg Thr Ser Tyr Pro Ile Ser
    130                 135                 140
Asp Ile
145
```

<210> 26738
<211> 65
<212> PRT
<213> A.fumigatus

<400> 26738

```
Ser Ser Asp Pro Thr Val Val Pro Leu Val Glu Ala Pro Pro Pro Gly
1               5                   10                  15
Val Glu Cys Ile Leu Gln Ala Asp Ile Asp Leu Gln Asn Ile Asp Tyr
```

```
            20                  25                  30
Ala Lys Ala Met Ala Asp Pro Val Gly His Tyr Ser Arg Pro Asp Leu
        35                  40                  45
Leu Gln Leu Arg Val Asn Lys Thr Ala Ala Lys Cys Val Val Asp Met
    50                  55                  60
Glu
65
```

<210> 26739
<211> 224
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (212)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26739

```
Cys Asn Pro Thr Asp Glu Asn Ser Thr Pro Leu Val Ser Met Thr Pro
1               5                   10                  15
Ala Ala Ala Pro Ala Pro Ala Tyr Gln Gly Gln Gly Pro Glu Tyr Ala
            20                  25                  30
Pro Val Ile Asn Pro Met Ala Met Pro Pro Pro Pro Pro Pro Tyr Leu
        35                  40                  45
Gln Pro Phe Ile Pro Ile Phe Thr Asp Gln Leu Pro Ser Ile Pro His
    50                  55                  60
Ser Pro Ser Leu Ala His Ser Phe Cys Asp Thr Leu Ala Phe Ala Met
65                  70                  75                  80
Leu Pro Thr Tyr Pro Ile Pro Pro Leu His Leu Pro His Pro Asp His
                85                  90                  95
Ser Phe Thr Asn Thr Asn Gly Asn Asn Ser Asn Thr Asn Pro Arg Pro
            100                 105                 110
Arg Thr Thr Phe His Pro Arg Lys Pro Ser Ser Ser Asp Gln Thr Gln
        115                 120                 125
Gln Asn Pro Arg Phe Ser Pro Arg Arg Thr Ile Phe Ile Gln Asn Leu
    130                 135                 140
Ser Pro Thr Thr Thr Pro His Asp Leu Asp Leu Phe Leu Gln Asp Ala
145                 150                 155                 160
Gly Thr Ile Glu Gln Cys Glu Asn Ala Leu Asn Pro Asp Thr Gly Arg
                165                 170                 175
Cys Lys Gly Phe Ala Arg Val Thr Phe Arg Ser Ala Asp Glu Ala Lys
            180                 185                 190
Arg Ala Ile Ala Leu Leu Lys Asn Gly Val Phe Ser Trp Arg Arg Lys
        195                 200                 205
Ser Gly Leu Xaa Met Ile Gly Val Gly Tyr Phe Pro Pro Gly Gln Gly
    210                 215                 220
```

<210> 26740
<211> 155
<212> PRT
<213> A.fumigatus

<400> 26740

```
Leu Gln Leu Gln Arg Gln Pro Gln Leu Thr Arg Ala Arg Ala Gln Ser
1               5                   10                  15
```

```
Met His Arg Ser Ser Thr Gln Trp Pro Cys Pro Leu Leu His Pro Pro
            20                  25                  30
Ile Ser Asn Pro Ser Ser Pro Ser Ser Pro Thr Asn Cys Arg Ala Ser
        35                  40                  45
Pro Thr His His Pro Trp Pro Thr Leu Ser Ala Thr Leu Ser Pro Ser
    50                  55                  60
Pro Cys Ser Pro His Thr Leu Phe Leu Arg Tyr Thr Phe Leu Thr Pro
65                  70                  75                  80
Thr Thr Pro Ser Pro Thr Pro Thr Ala Thr Thr Ala Thr Pro Thr Pro
                85                  90                  95
Asp Gln Glu Pro Pro Ser Thr His Ala Asn Pro Gln Ala Ala Thr Lys
            100                 105                 110
Pro Asn Lys Ile Leu Ala Ser Ala Pro Ala Ala Gln Ser Ser Ser Lys
        115                 120                 125
Thr Leu Ala Gln Gln Pro Pro Arg Thr Thr Leu Thr Ser Ser Ser Lys
    130                 135                 140
Met Pro Ala Gln Ser Ser Ser Ala Arg Met Pro
145                 150                 155
```

<210> 26741
<211> 95
<212> PRT
<213> A.fumigatus

<400> 26741

```
Val Phe Arg Arg Thr Tyr Gln Glu Tyr Leu Ser Leu Ala Pro Tyr Leu
1               5                   10                  15
Lys His Val Ile Gln Ile Phe Tyr Leu Asp Thr Ser Gln Pro Phe Ser
            20                  25                  30
Ile Leu Tyr Met Ala Leu Ser Ile Asp Leu Pro Gln Leu Ser Ser Thr
        35                  40                  45
Ile Ile Leu Ser Leu Asn Asp Gln Gln His Gln Thr Arg Gln Tyr Ser
    50                  55                  60
Thr Ser Pro Ala Ser Leu Thr Ile Ile Leu Tyr His Pro His Ser Leu
65                  70                  75                  80
Gly Leu Cys Ile Thr Ser Ser Cys Val Ser Gln Glu Ala Thr Ile
                85                  90                  95
```

<210> 26742
<211> 200
<212> PRT
<213> A.fumigatus

<400> 26742

```
Leu Gln Asn Ser Arg Lys Glu Gln Arg Arg Glu Glu Val Leu Lys Asn
1               5                   10                  15
Leu Asp Glu Lys Lys Ala Ala Lys Ala Lys Arg Ala Ala Thr Lys Gln
            20                  25                  30
Val Ser Ala Asp Gly Val Gln Asp Met Pro Gly Ser Glu Phe Phe Ala
        35                  40                  45
Gly Asp Asp Lys Gln Thr Asp Ser Thr Gln Thr Ser Arg Arg Ala Ser
    50                  55                  60
Ile Ala Ile Gln Pro Gln Asn Ala Met Gly Ile Thr Pro Ala Thr Ser
65                  70                  75                  80
Glu Asp Leu Leu Pro Ser Asp Leu Pro Ala Thr Gln Leu Leu Pro Leu
                85                  90                  95
```

```
Pro Glu Val Pro Ser Ser Tyr Pro Leu Phe Ala His Leu His Ala Glu
            100                 105                 110
Gly Tyr Tyr Leu Ser Pro Gly Leu Arg Phe Gly Cys Gln Tyr Leu Ala
        115                 120                 125
Tyr Pro Gly Asp Pro Leu Arg Phe His Ser His Phe Leu Val Val Ser
    130                 135                 140
Ala Glu Trp Asp Glu Glu Ile Asp Leu Met Asp Ile Ile Val Gly Gly
145                 150                 155                 160
Arg Leu Gly Thr Gly Val Lys Lys Gly Phe Leu Leu Gly Gly Ala Glu
                165                 170                 175
Glu Lys Asp Gly Asp Ser Ser Asn Glu Ala Gly Ser Asn Val Arg Thr
            180                 185                 190
Phe Ser Ile Glu Trp Ala Gly Met
        195                 200
```

<210> 26743
<211> 138
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (7),(18)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26743

```
Asn Gly Thr Ser Leu Asp Xaa Thr Leu Gln Asp Leu His Asn Ser Val
1               5                   10                  15
Leu Xaa Arg Ala Glu Glu Phe Pro Ser His Thr Met His Gly His Ser
            20                  25                  30
Phe Ser His His Ser Ile Pro Ser Gly Leu Ser His His Gly Leu Pro
        35                  40                  45
Ala Met Pro Ile Pro Gln Tyr Gln Ala Ile Tyr Asp Asn Asn Ile Glu
    50                  55                  60
Asn His Leu Pro Glu His Val Leu Asp Asp Asn Glu Asn Ser Glu Thr
65                  70                  75                  80
Gly Ala Lys Lys Lys Lys Gly Ser Asn Ser Ser Leu Ala Asn Asp Asn
                85                  90                  95
Glu Leu Arg Lys Leu Leu Arg Gln Tyr Glu Gly Tyr Ser Leu Lys Gln
            100                 105                 110
Met Ala Ala Glu Val Leu Lys His Glu Gly Ala Gly Gly Lys Ala Glu
        115                 120                 125
Lys Val Lys Gln Val Phe Ala Met Ile Trp
    130                 135
```

<210> 26744
<211> 140
<212> PRT
<213> A.fumigatus

<400> 26744

```
Ser Gly Lys Arg Thr Arg Val Ser His Cys Tyr Arg Gln Glu Ile Trp
1               5                   10                  15
Tyr Leu Trp Met Leu Arg Leu Lys Glu Asn Cys Arg Lys Ser Ser Gly
            20                  25                  30
Ser Val Arg Arg Asp Arg Val Tyr Cys Cys Tyr Ala Glu Lys Cys Gly
```

```
        35                  40                  45
Thr Glu Arg Val Ser Val Leu Asn Pro Ala Ser Phe Gly Lys Leu Val
    50                  55                  60
Arg Ile Ile Phe Pro Asn Val Gln Thr Arg Arg Leu Gly Val Arg Gly
65                  70                  75                  80
Glu Ser Lys Tyr His Tyr Val Asp Leu Thr Val Ile Glu Glu Lys Gln
                85                  90                  95
Gln Lys Pro Pro Pro Leu Asn Pro Gln Val Ser Ser Ile Thr Asn Gly
            100                 105                 110
Gln Ile Gly Gly Thr Ile Glu Asn Lys Phe Asp Gly Thr Met Gln Lys
        115                 120                 125
Arg Phe Cys Gln Tyr Ile Leu Asp Ser Pro Gly Arg
    130                 135                 140
```

<210> 26745
<211> 71
<212> PRT
<213> A.fumigatus

<400> 26745

```
Lys Ser Gly Ser Lys Tyr Leu Ala Asp Leu Val Ile Thr Ala Gly Gln
1               5                   10                  15
Thr Ser Thr Glu Arg Val Lys Asp Val Phe Thr Gly Arg Lys Phe Ser
            20                  25                  30
Gly Ser Pro Val Phe Leu Ile Ser Ala Asn Phe His Ser Pro Ala Ile
        35                  40                  45
Ser Ala Ser Ser Ala Ala Val Thr Leu Gly Asp Tyr Ile Asp Leu Leu
    50                  55                  60
Asp Ser Arg Leu Pro Ser Val
65                  70
```

<210> 26746
<211> 64
<212> PRT
<213> A.fumigatus

<400> 26746

```
Arg Asn Val Gly Asn Thr Ile Phe Leu Gly Leu Gly Ala Ser Gly Gln
1               5                   10                  15
Pro Ser Ser Lys Pro Trp Gly Trp Leu Lys Ser Leu Thr Ser Ile Val
            20                  25                  30
Ser Phe Phe Ile Gly Ala Leu Ile Phe Ser Asn Val Thr Arg Arg Thr
        35                  40                  45
Gly Ala Arg Arg Arg Gly Thr Leu Phe Thr Ser Phe Met Val Gln Thr
    50                  55                  60
```

<210> 26747
<211> 360
<212> PRT
<213> A.fumigatus

<400> 26747

```
Leu Leu Ser Ala Leu Ser Ala Pro Gly Glu Asp Phe Ile Leu Leu Glu
1               5                   10                  15
Ile Ser His Val Leu Thr Asp Ala Val Ser Ile Asp Ile Ile Trp Arg
            20                  25                  30
```

```
Asp Leu Gln Leu Ala Tyr Glu Gly Ala Leu Thr Thr Ser Lys Ala Pro
        35                  40                  45
Arg Tyr Ser Arg Phe Val Ser Tyr Leu Gln Gly Thr Ser Gln Lys Asp
    50                  55                  60
His Met Ala Tyr Trp Leu Lys Phe Leu Lys Asp Ala Glu Pro Cys Phe
65                  70                  75                  80
Phe Pro His Leu Gly Thr Gly Asn Gln Lys Gly Ala Thr Arg Ala Val
                85                  90                  95
Ser Val Thr Ile Ser Arg Ala Met Thr Asp His Ile Arg Gln Phe Cys
            100                 105                 110
Ala Ser Leu Gln Ile Thr Val Ala Asn Leu Ile Gln Val Met Trp Ser
        115                 120                 125
Met Val Leu Arg Ser Tyr Thr Gly Met Asp Asp Val Ser Phe Gly Tyr
    130                 135                 140
Ile Thr Ser Gly Arg Asp Leu Pro Leu Asp Gly Ile Asp Asp Leu Val
145                 150                 155                 160
Gly Pro Leu Ile Ser Met Met Ile Ser Arg Val Arg Tyr Thr Pro Ser
                165                 170                 175
Met Lys Val Ala Asp Val Ile Lys Gln Val Gly Gln Asp Thr Val Ala
            180                 185                 190
Ser Met Ala His Gln His Cys Ser Leu Ala Ala Ile His Arg Glu Val
        195                 200                 205
Gly Leu Lys Ser Arg Ser Leu Phe Asn Thr Val Leu Thr Val Val Arg
    210                 215                 220
Pro His Ser Thr Gln Ser Ile Asp Ser Ser Leu Gln Leu Thr Gln Ile
225                 230                 235                 240
Ala Ser Ser Ala Gly Thr Ser Glu Phe Asp Val Val Leu Glu Val Ser
                245                 250                 255
Asp Ser Gly Val Glu Leu Asp Thr Thr Leu Ala Tyr Ser Glu Ser Ala
            260                 265                 270
Leu Arg Ser Glu Asp Ala Thr Asn Leu Ser His Ala Ile Val Cys Ala
        275                 280                 285
Leu Asn Trp Ile Ile Ala His Pro Glu Ser Leu Val Asp His Leu Ser
    290                 295                 300
Leu Cys Ser Pro Asp Leu Ile Ser Gln Met Thr Ala Met Asn Asn Ala
305                 310                 315                 320
Ser Pro Gly Val Gly Val Ala Ala Val Ser Ala Arg Thr Tyr Leu Leu
                325                 330                 335
Ala Cys Thr Ser Ala Thr Gly Phe Ser Ser Pro Val Asp Arg Thr Gly
            340                 345                 350
Asn Asn Asp Leu Leu Gly Thr Arg
        355                 360
```

<210> 26748
<211> 132
<212> PRT
<213> A.fumigatus

<400> 26748

```
Thr Thr Arg Ala Gln Glu Trp Glu Leu Arg Gln Cys Leu His Glu Leu
1               5                   10                  15
Ile Ser Leu Arg Ala His Arg Gln Pro Asp Ser Pro Ala Leu Trp Thr
            20                  25                  30
Gly Gln Gly Thr Met Thr Tyr Ser Glu Leu Asp Ser Lys Ser Thr Met
        35                  40                  45
Leu Ala Arg Gln Leu Ile Ser Leu Gly Val Arg Pro Gly Ser Leu Val
```

```
    50                  55                  60
Pro Ile Cys Leu Ser Lys Ser Thr Val Ala Val Leu Ala Met Leu Ala
65                  70                  75                  80
Ile Met Lys Ala Gly Gly Ala Phe Val Pro Leu Asp Pro Leu His Pro
                85                  90                  95
Thr Gln Arg Leu Ala Asp Leu Val Gln Arg Thr Gly Ala Lys Leu Ile
            100                 105                 110
Leu Ser Ser Ala Asn Thr Arg Asn Ser Ala Glu Phe Ala Gly Pro Arg
        115                 120                 125
Val Val Val Phe
    130
```

<210> 26749
<211> 356
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (16)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26749

```
Glu Ala Ser Ser Val Ser Ile Ser Lys Gly Ser Gly Gly Phe Val Xaa
1               5                   10                  15
Asp Val Thr Ile Val Cys Gly Leu Tyr Gly Phe Asn Ile Gly Asn Gln
            20                  25                  30
Gln Phe Thr Met Arg Asn Leu His Ile Ser Asp Ala Val Val Gly Ile
        35                  40                  45
Ser Gln Ile Trp Asn Trp Gly Trp Thr Tyr Gln Gly Leu Thr Leu Thr
    50                  55                  60
Asn Cys Thr Thr Ala Phe Ser Ile Ala Asn Gly Gly Pro Gly Ala Gln
65                  70                  75                  80
Leu Val Gly Ser Ala Ile Val Leu Asp Ser Thr Ile Glu Asp Cys Pro
                85                  90                  95
Val Phe Val Glu Thr Ala Trp Gln Ser Ser Ser Gln Ser Asn Gly Ser
            100                 105                 110
Leu Ile Leu Glu Asn Val Ala Leu Asn Asn Val Pro Val Ala Val Lys
        115                 120                 125
Gly Pro Ser Gly Thr Val Leu Ala Gly Ser Gly Gly Ala Met Thr Ile
    130                 135                 140
Ser Ala Trp Gly Gln Gly His Lys Tyr Thr Pro Ser Gly Pro Thr Asn
145                 150                 155                 160
Phe Gln Gly Ala Ile Thr Ala Pro Thr Arg Pro Ser Ala Leu Leu Ser
                165                 170                 175
Gly Gly Arg Tyr Tyr Thr Lys Ser Lys Pro Gln Tyr Glu Thr Ser Pro
            180                 185                 190
Thr Ser Ser Phe Leu Ser Val Arg Ser Ala Gly Ala Lys Gly Asp Gly
        195                 200                 205
Ser Thr Asp Asp Thr Ala Ala Ile Gln Ser Ala Leu Thr Thr Ala Val
    210                 215                 220
Gly Ser Gly Arg Ile Val Tyr Phe Asp Gln Gly Val Tyr Lys Val Thr
225                 230                 235                 240
Gly Thr Leu Tyr Ile Pro Pro Gly Ser Arg Ile Val Gly Glu Ala Tyr
                245                 250                 255
Pro Val Ile Met Ala Ser Gly Ser Gln Trp Ser Asn Ile Asn Gln Pro
```

```
            260                 265                 270
Val Pro Val Ile Gln Val Gly Lys Ala Gly Glu Ser Gly Ser Ile Glu
        275                 280                 285
Trp Ser Asp Met Ile Val Ser Thr Gln Gly Ser Thr Pro Gly Ala Val
    290                 295                 300
Leu Ile Glu Trp Asn Leu Ala Ala Ser Gln Gly Ser Gly Met Trp Asp
305                 310                 315                 320
Val His Thr Arg Ile Gly Gly Phe Ala Gly Ser Asn Leu Gln Ala Val
                325                 330                 335
Gln Cys Pro Thr Ser Ala Ala Val Ser Val Tyr Thr Pro Gly Leu Glu
            340                 345                 350
Gly Ile Ala Leu
        355
```

<210> 26750
<211> 89
<212> PRT
<213> A.fumigatus

<400> 26750

```
Ala Pro His Ala Leu Pro Arg Phe Thr Gly Leu Ser Pro Cys Gln Pro
1               5                   10                  15
Val Leu Gly Leu Thr Asp Met Arg Ser Phe Val Ser Val Ile Thr Gly
            20                  25                  30
Thr Ile Leu Gly Ala Ile Val Ile Tyr Val Arg Arg Leu Lys Pro Phe
        35                  40                  45
Ile Val Ala Gly Thr Leu Val Phe Met Ala Ala Phe Gly Ile Leu Ile
    50                  55                  60
Arg Phe Arg Gly Gly Ala Asp Gly Thr Asn His Ala Gly Ile Ile Gly
65                  70                  75                  80
Gly Gln Ile Leu Leu Gly Phe Gly Lys
                85
```

<210> 26751
<211> 128
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (77),(103)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26751

```
Leu Val Gln Leu Val Val Cys Ser Leu Thr Pro Leu Lys Pro Ala Phe
1               5                   10                  15
Arg Ser Pro Pro Ser Ile Ser Val Ser Leu Ala Pro Pro Gly Ala Phe
            20                  25                  30
Ala Met Leu Thr Thr Thr Asp Leu Ala Val Ile Thr Gly Ile Tyr Leu
        35                  40                  45
Ala Thr Tyr Asn Val Gly Ser Ala Leu Gly Asn Thr Ile Ser Gly Ala
    50                  55                  60
Ile Trp Thr Gln Val Leu Pro Gly Glu Leu Glu Asn Xaa Leu Gly Asn
65                  70                  75                  80
Ala Thr Leu Ala Ala Glu Ser Leu Cys Gln Ser Pro Ser Pro Ser Pro
                85                  90                  95
```

```
Gln Val Asn Pro Val Cys Xaa Pro Gly Arg Gly Arg Arg Ser Phe Trp
            100                 105                 110
Pro Tyr Thr Met Arg Lys Lys Trp Trp Leu Tyr Thr Gly Tyr Leu Ala
        115                 120                 125

<210> 26752
<211> 382
<212> PRT
<213> A.fumigatus

<400> 26752
Thr Asp Gly Ser Ser Asp Pro Arg Ser Ala Ala Phe Ser Thr Phe Thr
1               5                   10                  15
Arg Ala Ala Leu Lys Ala Trp Lys Thr Asp Pro Val Phe Gln Pro Tyr
            20                  25                  30
Phe His Glu Thr Gly Phe Ile Ile Ser Gly His Thr Pro Ala Leu Ile
        35                  40                  45
Asp His Ile Arg Lys Asp Glu Val Glu Pro Ser Glu Thr Asn Phe Val
    50                  55                  60
Lys Leu Glu Thr Ala Glu Asp Phe Arg Arg Thr Met Pro Pro Gly Val
65                  70                  75                  80
Leu Thr Gly Asp Phe Pro Gly Trp Lys Gly Trp Leu His Lys Ser Gly
                85                  90                  95
Ala Gly Trp Ile His Ala Lys Lys Ala Met Ile Ser Ala Phe Asn Glu
            100                 105                 110
Ala Lys Arg Leu Gly Val Arg Phe Val Thr Gly Ser Pro Glu Gly Asn
        115                 120                 125
Val Val Ser Leu Val Tyr Glu Asp Gly Asp Val Val Gly Ala Arg Thr
    130                 135                 140
Ala Asp Gly Arg Val His Lys Ala His Arg Thr Ile Leu Ser Ala Gly
145                 150                 155                 160
Ala Gly Ser Asp Ser Leu Leu Asp Phe Lys Lys Gln Leu Arg Pro Thr
                165                 170                 175
Ala Trp Thr Leu Cys His Ile Gln Met Gly Pro Glu Glu Val Lys Gln
            180                 185                 190
Tyr Arg Asn Leu Pro Val Leu Phe Asn Ile Ala Lys Gly Phe Phe Met
        195                 200                 205
Glu Pro Asp Glu Asp Lys Leu Glu Leu Lys Ile Cys Asp Glu His Pro
    210                 215                 220
Gly Tyr Cys Asn Phe Leu Pro Asp Pro Asn Arg Pro Gly Gln Glu Lys
225                 230                 235                 240
Ser Val Pro Phe Ala Lys His Gln Ile Pro Leu Glu Ala Glu Ala Arg
                245                 250                 255
Ala Arg Asp Phe Leu His Asp Thr Met Pro His Leu Ala Asp Arg Pro
            260                 265                 270
Leu Ser Phe Ala Arg Ile Cys Trp Asp Ala Asp Thr Pro Asp Arg Ala
        275                 280                 285
Phe Leu Ile Asp Arg His Pro Glu His Pro Ser Leu Leu Val Ala Val
    290                 295                 300
Gly Gly Ser Gly Asn Gly Ala Met Gln Met Pro Thr Ile Gly Gly Phe
305                 310                 315                 320
Ile Ala Asp Ala Leu Glu Ser Lys Leu Gln Lys Glu Val Lys Asp Ile
                325                 330                 335
Val Arg Trp Arg Pro Glu Thr Ala Val Asp Arg Asp Trp Arg Ala Thr
            340                 345                 350
Gln Asn Arg Phe Gly Gly Pro Asp Arg Ile Met Asp Phe Gln Gln Val
```

```
        355                 360                 365
Gly Glu Asp Gln Trp Thr Lys Ile Gly Glu Ser Arg Gly Pro
    370                 375                 380

<210> 26753
<211> 166
<212> PRT
<213> A.fumigatus

<400> 26753
Lys Cys Cys Asn Leu Leu Leu Ser Lys Gly Ile Ser Gln Ala Ala Met
1               5                  10                  15
Arg Ala Tyr Ser Arg Ile Ser Arg Cys Asn Ser Thr Ser Ala Cys Ala
            20                  25                  30
Met Glu Val Ile Ser Ser Ser Trp Lys Ser Ser Ser Ala Ser Ser Thr
        35                  40                  45
Arg Pro Asn Ser Ser Ser Ser Ser Ser Ala Gln Lys Pro Arg Asp Leu
    50                  55                  60
Ser Gly Thr Ser Ser Asn Arg Ser Pro Thr Ser Phe Ser Met Ser Leu
65                  70                  75                  80
Thr Leu Phe Ser Ile Ser Ala Asn Leu Ala Ala Arg Thr Cys Gly Ser
                85                  90                  95
Leu Asn Ser Ser Ile Met Arg Arg Cys Ser Ala Ser Lys Ala Ser Arg
            100                 105                 110
Ser Ser Gly Asp Ser Ile Ser Tyr Ile Asp Arg Ser Ser Leu Leu Arg
        115                 120                 125
Arg Ser Gly Glu Tyr Ser Gly Thr Ser Gly Asn Ser Ser Ser Gly Glu
    130                 135                 140
Gly Pro Leu Ala Ile Gly Gly Ser Ser Gly Thr Asn Leu Lys Gly Val
145                 150                 155                 160
Thr Glu Asn Gly Arg Asp
                165

<210> 26754
<211> 74
<212> PRT
<213> A.fumigatus

<400> 26754
Val Met Ile His Asp Ile Leu Phe Phe Cys His Ser Leu Val Tyr Ile
1               5                  10                  15
Tyr Leu Phe Pro Leu Leu Asp Ile His Glu Cys Val Arg Leu Val Ser
            20                  25                  30
Ile Ile Ser Ile Pro Ile Ser Arg Ser Ile Arg Cys Arg Gln Arg Ser
        35                  40                  45
Thr Asp Tyr Asn Ser Ile Asp Ile Ile Thr Pro Gln Trp Glu Asn Val
    50                  55                  60
Gln Thr Lys Thr Arg Ser Arg Ile Gly Lys
65                  70

<210> 26755
<211> 402
<212> PRT
<213> A.fumigatus

<220>
```

<221> UNSURE
<222> (85)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26755

```
Asn Pro Asp Ser Leu Gln Thr Ala His Gln Ile Phe Gln Pro Arg Ala
1               5                  10                  15
Gly Cys Gln Arg Leu Ser Leu Asn Pro Lys Pro Leu Val Glu Pro Phe
            20                  25                  30
Glu Cys Phe Leu Arg Arg Val Ser Lys Arg Thr Asn Leu Gly Leu Glu
        35                  40                  45
Pro Ser Val Arg Asp Ile Arg Ser Asn Pro Phe Leu Leu Ile His Ala
    50                  55                  60
Ile Leu Glu Thr Arg Gln Ala Val Val Asp Leu Val Gly Arg Gly Gly
65                  70                  75                  80
Gly Val Glu Val Xaa Ala Cys Pro Gly Ser Arg His Gln Gly Arg Ala
                85                  90                  95
Leu His Ile Ser Gln Val Phe Arg Ala Val Cys Leu Leu Gln Ser Val
            100                 105                 110
Gly Ala Lys Ala Thr His Asp Ile Arg Ile Arg Arg Gly Ala Gly Gly
        115                 120                 125
Pro Pro Gln Val Val Lys Leu Pro Pro Gly Leu Lys Arg Lys Phe Leu
    130                 135                 140
Glu Asn Ala Glu Asp Pro Val Glu His Pro Val Gly Glu Pro Ala Ala
145                 150                 155                 160
His Glu Ala Val Glu Glu Arg Ala Arg His Pro Ala Ala His Lys Ala
                165                 170                 175
Arg Gln Ala Val Glu Ser Ile His Ala His Ala Cys Leu Asp Pro Gly
            180                 185                 190
Val Gly Ser Arg Ala Glu Gly Lys Val Ala Pro His Arg Gly Thr Arg
        195                 200                 205
His Gly Asn Val Val Gln Val Gln Leu Gln Phe Gly Met Ala Arg Ser
    210                 215                 220
Gln Val Glu Glu Val Ile Gln Asn Gly Thr Arg Asp Gly Phe Pro Val
225                 230                 235                 240
Arg Ala His Trp Gln Leu Val Ala Thr Glu Asp Asp Ser Leu Ala Gly
                245                 250                 255
Pro Leu Lys Arg Gln Asp Cys Val Ala Gln Val Arg Pro Val Arg Arg
            260                 265                 270
Ile Asp Lys Val Asp Leu Phe Leu Gly Arg Ile Ala Pro Ala Arg Val
        275                 280                 285
Glu Gln Asp Arg Asp Leu Ala Thr Arg Asp Ala Pro Gly Gly Arg Arg
    290                 295                 300
Gln Val Gln Ile Ser Arg Gln Arg Phe Ala Ala Leu Val Trp Asp Leu
305                 310                 315                 320
Gln Glu Asp Arg Leu Ala Ile Thr Ile Leu Asp Ala Leu Ser Glu Ile
                325                 330                 335
Gly Asn Gly Ser Phe Gln Gly Gly Lys Asp Ser Phe Val Met Ser Asp
            340                 345                 350
Gly Ala Phe Val Glu His Glu Leu Arg Gly Pro Glu Val Val Gly Gly
        355                 360                 365
Ala Gln Val Arg Ala Pro Cys Thr Asp Thr Ile Ser Arg Gly Leu Gly
    370                 375                 380
Leu Leu Cys Asp Gly Phe Cys Leu Ala Thr Tyr Tyr Asp Arg Val Lys
385                 390                 395                 400
Ile Arg
```

<210> 26756
<211> 397
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (318)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26756
Ala Tyr Phe His Pro Val Val Ile Gly Gly Lys Ala Glu Ala Ile Ala
1 5 10 15
Lys Gln Ala Glu Ala Ser Gly Asp Arg Val Gly Ala Arg Arg Ala Tyr
20 25 30
Leu Arg Ser Ser Asn Tyr Leu Arg Ala Ala Gln Phe Met Leu Asn Glu
35 40 45
Gly Pro Ile Gly His Asp Glu Arg Val Leu Pro Thr Leu Glu Arg Ala
50 55 60
Ile Ala Asn Phe Arg Lys Gly Val Gln Tyr Arg Asp Gly Lys Thr Ile
65 70 75 80
Phe Leu Glu Ile Pro Tyr Glu Gly Gly Lys Thr Leu Pro Gly Tyr Leu
85 90 95
Tyr Leu Pro Pro Ala Ala Arg Arg Ile Pro Gly Arg Lys Ile Pro Ile
100 105 110
Leu Leu Asn Ser Gly Gly Gly Asp Ser Thr Gln Glu Glu Ile Tyr Phe
115 120 125
Val Asn Pro Ala Tyr Gly Pro Asp Leu Gly Tyr Ala Val Leu Thr Phe
130 135 140
Glu Gly Pro Gly Gln Gly Ile Val Leu Arg Arg Asp Lys Leu Pro Met
145 150 155 160
Arg Pro Asp Trp Glu Ser Val Thr Gly Pro Val Leu Asp His Leu Phe
165 170 175
Asp Leu Ala Thr Arg His Pro Glu Leu Glu Leu Asp Leu Asp His Ile
180 185 190
Ala Val Thr Gly Ala Ser Met Gly Gly Tyr Phe Ala Leu Arg Ala Ala
195 200 205
Ala Asp Pro Arg Ile Lys Ala Cys Val Ser Val Asp Gly Phe Tyr Ser
210 215 220
Leu Ser Ser Phe Val Gly Gly Arg Met Pro Gly Pro Leu Phe Asn Gly
225 230 235 240
Phe Met Ser Gly Trp Leu Ser Asp Trp Met Phe Asn Gly Ile Leu Gly
245 250 255
Val Leu Lys Lys Leu Ala Phe Gln Ala Arg Trp Glu Phe Asn His Leu
260 265 270
Arg Trp Ala Thr Gly Ser Thr Thr Asp Ala Asp Val Met Arg Ser Phe
275 280 285
Gly Ala Tyr Thr Leu Gln Lys Ala Asp Gly Thr Glu Tyr Leu Ala Asp
290 295 300
Val Lys Cys Pro Thr Leu Val Thr Gly Ala Gly Ala Ser Xaa Tyr Phe
305 310 315 320
Asp Pro Ala Thr Thr Thr Asp Lys Ile Tyr Asp Cys Leu Thr Ser Leu
325 330 335
Gln Asp Gly Val Asp Lys Glu Lys Trp Ile Ala Thr Asp Val Ala Tyr

```
            340                 345                 350
Gly Gly Leu Gln Ala Lys Ile Gly Ala Phe Gly Tyr Ser Ala Gln Lys
        355                 360                 365
Thr Phe Glu Trp Leu Asp Gln Arg Phe Gly Ile Gln Arg Glu Pro Leu
    370                 375                 380
Ala Ala Ser Ser Arg Leu Glu Asp Leu Val Ser Arg Leu
385                 390                 395
```

<210> 26757
<211> 363
<212> PRT
<213> A.fumigatus

<400> 26757

```
Phe Ala Ser Ser Val Phe Ser Thr Ala Thr Ala Val Thr Ala Lys Glu
1               5                   10                  15
Tyr His Val Ser Thr Glu Val Met Thr Leu Ala Thr Ser Leu Val Val
            20                  25                  30
Phe Gly Phe Ala Leu Gly Pro Ile Val Trp Ala Pro Met Ser Glu Leu
        35                  40                  45
Tyr Gly Arg Arg Leu Pro Leu Phe Leu Gly Tyr Ala Ile Phe Val Ile
    50                  55                  60
Phe Gln Ile Pro Val Ala Val Ala Gln Asn Val Gln Thr Ile Met Ile
65                  70                  75                  80
Cys Arg Phe Leu Ile Gly Val Phe Gly Cys Ser Pro Leu Ala Val Val
                85                  90                  95
Gly Gly Ala Met Ala Asp Phe Trp Asp Pro Ile Asp Arg Ala Val Ala
            100                 105                 110
Ile Ala Leu Phe Ser Ala Ala Thr Phe Val Gly Pro Thr Leu Gly Pro
        115                 120                 125
Ile Ile Gly Gly Phe Ile Thr Glu Ser Tyr Leu Gly Trp Arg Trp Thr
    130                 135                 140
Ala Trp Ile Thr Met Ile Pro Ser Ala Ala Phe Gly Thr Leu Ala Phe
145                 150                 155                 160
Phe Ile Val Pro Glu Thr Tyr Gly Pro Val Ile Leu Gln Arg Arg Ala
                165                 170                 175
Ala Arg Leu Arg Arg Glu Thr Gly Asn Trp Ala Leu His Ser Leu Leu
            180                 185                 190
Asp Glu Ser Arg Pro Thr Ala Ser Glu Ile Val Asn Lys Tyr Leu Leu
        195                 200                 205
Arg Pro Ile Gln Met Leu Phe Leu Glu Pro Ile Leu Leu Leu Ile Thr
    210                 215                 220
Ile Tyr Leu Ala Leu Val Tyr Gly Ile Leu Tyr Leu Phe Phe Glu Ala
225                 230                 235                 240
Tyr Pro Val Ser Phe Met Glu Val Arg Gly Trp Thr Asn Gly Gly Ile
                245                 250                 255
Ala Gly Leu Pro Phe Ile Gly Ile Leu Leu Gly Val Val Cys Gly Val
            260                 265                 270
Ala Leu Ile Ile Trp Gln Thr Lys Thr Arg Phe Ala Arg Lys Leu Ala
        275                 280                 285
Lys His Arg Arg Val Val Pro Asp Glu Arg Leu Gly Pro His Asp Cys
    290                 295                 300
Cys Ile Arg Ala Ser Gly Arg Trp Ser Phe Leu Gly Arg Leu Asp Pro
305                 310                 315                 320
His Pro Pro Tyr Val Val Gly Cys Ser Ser Ser Cys Arg Phe Ser Pro
                325                 330                 335
```

```
Ser Ala Leu Gly Ile Leu Gly His Pro Pro Cys Gln Gly Ser Pro Pro
            340                 345                 350
Thr Ser Ser Gln Ser Cys Phe Phe Ser Thr Ser
        355                 360
```

<210> 26758
<211> 83
<212> PRT
<213> A.fumigatus

<400> 26758

```
Ser Asp Leu Trp Asn Val Ile Leu Ala Lys Gly Leu Leu Ala Asp Thr
1               5                   10                  15
Pro His Asn Arg Ala Glu Lys Asn Pro Ala Asp Leu Lys Ala Val Cys
            20                  25                  30
Val Thr Asn Gly Asp Asp Val Gln Lys Lys Ile Ala Asn Thr Cys Gly
        35                  40                  45
Asp Ser Glu Gln Ala Ala Leu Ser Trp Phe Ala Asp Thr Cys Asp Ala
    50                  55                  60
Ala Gly Tyr Lys Val Gly Met Phe Ser Arg Ala Tyr Arg Gly Ala Ser
65                  70                  75                  80
Arg Gly Ser
```

<210> 26759
<211> 92
<212> PRT
<213> A.fumigatus

<400> 26759

```
Leu Ala Ala Ser Leu Met Thr Tyr Phe Leu Asp Ile Lys Ser Ser Thr
1               5                   10                  15
Thr Thr Ser Glu Ser Ala Thr Gly Thr Ser Thr Lys Gly Ser Ala Ser
            20                  25                  30
Asn Thr Gly Phe Val Thr Ala Thr Ala Thr Gly Ser Ser Ser Ser Gly
        35                  40                  45
Glu Asn Lys Ser Gly Thr Ser Ser Ser Ser Ala Thr Ser Thr Ser Gln
    50                  55                  60
Thr Val Ser Ala Gly Ser Ser Asp Arg Gln Val Ser Ala Ala Ala Phe
65                  70                  75                  80
Ala Ala Val Val Phe Phe Gly Phe Ala Ala Thr Leu
                85                  90
```

<210> 26760
<211> 256
<212> PRT
<213> A.fumigatus

<400> 26760

```
Arg Leu His Pro Leu Ile Gln Pro Pro Ser Lys Thr Lys Pro Ala Ala
1               5                   10                  15
Glu Trp Ser Ser Ser Ser Gln Thr Leu Ile Tyr Pro Val Ala Gln Phe
            20                  25                  30
Thr Pro Leu Leu Lys Pro Asp Thr Ser Thr Glu Phe Pro Ala Val Thr
        35                  40                  45
Ala Ile Leu Arg Leu Leu Ser Thr Ser Ser Val Phe Ser Gly Ala Arg
```

```
    50                  55                  60
Trp Leu Phe Thr Ala Gly Tyr Phe Asn Ile His Pro Val Leu Ser Ser
65                  70                  75                  80
Leu Leu Ile Ala Ser Thr Ser Thr Ser His Thr Ala Ser Thr Thr Arg
                85                  90                  95
Gly Thr Val Leu Thr Ala Ser Pro Trp Ala Asn Gly Phe Tyr Gly Ser
            100                 105                 110
Pro Gly Val Ser Gly Met Leu Pro Ala Ala Tyr Thr His Leu Ser Ala
        115                 120                 125
Lys Phe Leu Asp Arg Val Ser Glu Ala Gln Arg Thr Asn Ala Ile Gln
    130                 135                 140
Leu Lys Glu Trp Arg Arg Gly Thr Val Gly Glu Pro Gly Gly Trp Thr
145                 150                 155                 160
Tyr His Ala Lys Gly Leu Trp Ile Thr Leu Pro Lys Glu Glu His Pro
                165                 170                 175
Ser Met Thr Phe Val Gly Ser Ser Asn Tyr Thr Lys Arg Ser Tyr Thr
            180                 185                 190
Leu Asp Leu Glu Val Gly Ala Leu Val Val Thr Asn Asp Gln Glu Leu
        195                 200                 205
Lys Gln Lys Leu Gly Ala Glu Thr Asp Trp Leu Gln Lys Asp Ser Gln
    210                 215                 220
Ala Ile Ser Arg Glu Asp Leu Arg Arg Thr Glu Arg Arg Val Ser Trp
225                 230                 235                 240
Lys Val Arg Leu Ala Met Trp Ile Val Glu Lys Val Gly Gly Ala Leu
                245                 250                 255
```

<210> 26761
<211> 62
<212> PRT
<213> A.fumigatus

<400> 26761

```
Phe Asn Glu Val Met Asp Asp Phe Leu Ala Gly Trp Asp Asp Lys Thr
1               5                   10                  15
Ser Ala Gln Ala Lys Arg Lys Gly Ala Lys Ala Lys Arg Gly Lys Asn
            20                  25                  30
Gly Asn Glu Ala Ile Gly Ile Lys Met Leu Asp Glu Ile Arg Gln Gly
        35                  40                  45
Leu Gly Pro Ala Arg Val Pro Gly Lys Val Ser Gly Arg Ala
    50                  55                  60
```

<210> 26762
<211> 174
<212> PRT
<213> A.fumigatus

<400> 26762

```
Arg Leu Asn Phe Gly Gln Met Gly Phe Val Phe Ile Glu Ala Asn Val
1               5                   10                  15
Lys Lys Trp Gly Leu Ala Pro Met Thr Gly Ser Leu Ala Pro Pro Pro
            20                  25                  30
Pro Tyr Gly Ser Glu Gln Gly Ser Ile Leu Leu Glu Ser Gly Arg Glu
        35                  40                  45
Ser Ala Ala Gln Ile Ser Gln Arg Val Tyr Gln Asp Ala Arg Thr Ser
    50                  55                  60
Ser Thr Val Arg Ile Pro Pro Ser Arg Ser Pro Gly Pro Val Arg Ser
```

65 70 75 80
Pro Thr Asp Ile Ser Leu Ala Pro Leu Ala His Ile Pro Ser His Glu
85 90 95
Asp Val Gly Glu Gly Ser Ser His Ala Asn Thr Ile Ala Asp Glu Gln
100 105 110
Thr Ala Leu Leu Asn Pro Thr Asp Leu Asp Gln Val Pro Pro Pro Glu
115 120 125
Tyr Ser Ser Pro Asp Gly Ser Arg Arg Gly Ser Asp Ile Thr Gly Asp
130 135 140
Leu Pro Asn Gln Ser Ser Pro Pro Ile Pro Ser Tyr Asp Ala Ala Val
145 150 155 160
Gly Asn Gln Ala Asp Asn Thr Leu Met Pro Asp Gly Asp His
165 170

<210> 26763
<211> 83
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (73),(74),(80)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26763
Gly Glu Ser Lys Pro Pro Gly Leu Gln Leu Phe Ser Leu Leu Pro Pro
1 5 10 15
Asp Thr Ile Thr Leu Ser His Glu Val Lys Pro Glu Phe Ala Gly Leu
20 25 30
Phe Asn Ser Glu Arg Ile Trp Phe Lys Leu Ile Gln His His Ile Leu
35 40 45
Gln Leu Ser Trp Glu Pro Leu Ser Ser Gln Asn Ile Ser Leu Asp Ile
50 55 60
Glu Ala Ile Pro Pro Ala Pro Leu Xaa Xaa Phe Thr Asp Gly Pro Xaa
65 70 75 80
Thr Pro Thr

<210> 26764
<211> 268
<212> PRT
<213> A.fumigatus

<400> 26764
Asn Ala Phe Ala Val Leu His Ala Arg Cys Glu Asp Cys Phe Asp Val
1 5 10 15
Val Cys Pro Asp Cys Phe Ser Gly Trp Lys Gln Val Phe Asp Gly His
20 25 30
Val Glu Pro Thr Asn Thr Ile Lys Cys Gln Val Cys Asp Gly Trp Ile
35 40 45
Pro Ile Ser Tyr Ser Thr Ile Thr Val Glu Gly Leu Glu Glu Tyr Leu
50 55 60
Thr Glu His Glu Gln Ala Lys Gln Ser Arg Arg Gln Pro Lys Thr Leu
65 70 75 80
Gly Glu Tyr Glu Gly Pro His Thr Lys Thr Lys Ala Leu Leu Ala His
85 90 95

```
Leu Ser Glu Ser Ala Glu Glu Ser Lys Arg Leu Asn Ala Glu Pro Pro
            100                 105                 110
Ile Lys Ser Val Val Phe Ser Ala Trp Thr Ser His Leu Asp Leu Ile
        115                 120                 125
Glu Ile Ala Leu Lys Asp Arg Gly Met Thr Gly Phe Thr Arg Leu Asp
    130                 135                 140
Gly Thr Met Ser Leu Ala Ala Arg Asn Lys Ala Leu Glu Asp Phe His
145                 150                 155                 160
Thr Asn Asp Asn Thr Thr Ile Leu Leu Ala Thr Ile Gly Ala Gly Gly
                165                 170                 175
Val Gly Leu Asn Leu Thr Ser Ala Ser Lys Val Tyr Ile Met Glu Pro
            180                 185                 190
Gln Tyr Asn Pro Ala Ala Val Ala Gln Ala Ile Asp Arg Val His Arg
        195                 200                 205
Leu Gly Gln Thr Arg Glu Val Thr Thr Val Gln Phe Ile Met Lys Gly
    210                 215                 220
Ser Ile Glu Glu Lys Ile Phe Glu Leu Ala Lys Lys Lys Gln Gln Leu
225                 230                 235                 240
Ala Asp Met Ser Met Asn Arg Gly Lys Leu Asp Lys Lys Glu Ile Gln
                245                 250                 255
Glu Gln Arg Met Arg Glu Tyr Arg Ser Leu Phe Lys
            260                 265
```

<210> 26765
<211> 63
<212> PRT
<213> A.fumigatus

<400> 26765

```
Pro Ala Gln Asn Val Trp Asn Val Cys Val Ser Thr Ser Pro Pro Pro
1               5                   10                  15
Pro His Ser Pro Ser Phe Gly Phe Ala Thr Lys Ser Asn Glu His Leu
            20                  25                  30
Thr Pro Leu Cys Gly Arg His Thr Tyr His Ser Leu Thr Ile Asp Val
        35                  40                  45
His Cys Val Asn Ala Ser Ser Glu Thr Ser Arg Lys Tyr Arg Leu
    50                  55                  60
```

<210> 26766
<211> 75
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (9)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26766

```
His Arg Ile Asp Ser Ser Asn Asn Xaa Gln Leu Gly Gly Thr Thr Val
1               5                   10                  15
Leu His Ser Ala Trp Leu Ser Cys Phe Gly Arg Arg Lys Ser Leu Lys
            20                  25                  30
Ala Ile Trp Thr Val Asn Thr Ile Lys Phe Asp Pro Phe Asn Leu Leu
        35                  40                  45
Thr Ala Ala Ala Ser Val Met His Pro Ile Ile Trp Thr Leu Glu Lys
```

```
    50                  55                  60
Ile Leu Trp Ala Ser Lys Pro Arg Val Ser Lys
65                  70                  75

<210> 26767
<211> 84
<212> PRT
<213> A.fumigatus

<400> 26767
Ala His Cys Gly Val Ala Gly Ser Ala Thr Asp Trp Leu Met Leu Trp
1               5                  10                  15
Thr Ile Lys Gln Ile Gln Gly Gln Ile Ser Ala Ile Thr Asp Leu Glu
            20                  25                  30
Gly Ile Thr Ala Glu Glu His Ile Ile Ser Thr Pro Ser Ser Ile Ala
        35                  40                  45
Val Asp His Val Leu Arg Ser Phe Tyr His Phe Asp Val Gly Lys Leu
    50                  55                  60
Ser Gln Gln Asp Leu Phe Ser Phe Cys Leu Tyr Cys Ser Lys Ile Leu
65                  70                  75                  80
Asp Gly Ser Thr


<210> 26768
<211> 151
<212> PRT
<213> A.fumigatus

<400> 26768
Glu Ala Ser Ile Ile Ser Thr Ser Glu Ser Phe Pro Ser Lys Thr Cys
1               5                  10                  15
Ser Pro Ser Val Cys Thr Ala Gln Lys Tyr Ser Met Ala Pro His Lys
            20                  25                  30
Val Val Glu Gly Ser Pro Thr Gln Gln Ile Ile Ser Asp His Val Trp
        35                  40                  45
Lys Arg Lys Arg Pro Glu Thr Asp Tyr Glu Arg Trp Gln Arg Glu Gln
    50                  55                  60
Asp Glu Ser Tyr Glu Pro Gly Gly Arg Pro Gln Tyr Gly Pro Pro Asn
65                  70                  75                  80
Glu Phe Arg Lys Asp Asp Tyr Val Ala Asp Gly Thr Glu Glu Leu Leu
                85                  90                  95
His Gly Gln His Tyr Ser Val Glu His Arg Ala Pro Ser His Gly Tyr
            100                 105                 110
Phe Val Ser Ser Thr Ala Pro Ala Lys Pro Ile Thr Ser Glu Gly Ser
        115                 120                 125
Phe Ile Ser Tyr Cys Gln Glu Arg Leu Tyr Ser Ala Ser Gly Ala Lys
    130                 135                 140
Ala Arg Thr Glu Leu Met Val
145                 150

<210> 26769
<211> 258
<212> PRT
<213> A.fumigatus

<400> 26769
```

```
Leu Trp Leu Ser Arg Gly Tyr Ala Ser Ile Thr Ala Gly Ala Cys Ser
1               5                  10                  15
Thr Ile Val Thr Asn Pro Ile Trp Val Ile Lys Thr Arg Leu Met Ser
            20                  25                  30
Gln Ser Leu Lys Ser Asn Ser Glu Gly Tyr Thr Ala Pro Trp Gln Tyr
        35                  40                  45
Ser Ser Thr Trp Asp Ala Ala Arg Lys Met Tyr Arg Ile Glu Gly Ile
    50                  55                  60
Arg Ser Phe Tyr Ser Gly Leu Thr Pro Ala Leu Leu Gly Leu Thr His
65                  70                  75                  80
Val Ala Ile Gln Phe Pro Leu Tyr Glu Tyr Leu Lys Met Ala Phe Thr
                85                  90                  95
Gly Tyr Gly Ile Gly Glu His Pro Asp Asn Gly Gly Ser His Trp Ile
            100                 105                 110
Gly Ile Ser Cys Ala Thr Phe Leu Ser Lys Val Cys Ala Ser Thr Leu
        115                 120                 125
Thr Tyr Pro His Glu Val Leu Arg Thr Arg Leu Gln Thr Gln Gln Arg
    130                 135                 140
Thr Ser Pro Ala Pro Ser Pro Glu Gly Ile Ser Phe Arg Gly Gly Leu
145                 150                 155                 160
Asp His Pro Gln Asp Arg Gly Arg Pro Pro Gly Ala Ala Ser Ser Asp
                165                 170                 175
Gly Met Pro Asn Arg Pro Arg Tyr Thr Gly Val Ile Arg Thr Cys Gln
            180                 185                 190
Thr Ile Leu Arg Glu Glu Gly Trp Arg Ala Phe Tyr Ser Gly Ile Gly
        195                 200                 205
Val Asn Leu Phe Arg Ala Val Pro Ala Ala Met Thr Thr Met Leu Thr
    210                 215                 220
Tyr Glu Tyr Leu Arg Lys Leu Ile Gly His Leu Gln His Glu Gly Glu
225                 230                 235                 240
Leu Lys Leu Arg Met Ala Asn Asp Arg Glu Leu Ala Leu Leu Gln Gln
                245                 250                 255
Asp Glu
```

<210> 26770
<211> 70
<212> PRT
<213> A.fumigatus

<400> 26770

```
Ser Leu Asn Ala Pro Ile Ala Ala Phe Thr Met Ala Ile Ile Leu Cys
1               5                  10                  15
Ser Tyr Cys Ile Ser Ser Ile Asn Ser Ala Arg Arg Glu Ala Gln Ser
            20                  25                  30
Ser Pro Val Thr Ala Thr Thr Arg Ala Gln Lys Phe Ser Val Glu Lys
        35                  40                  45
Ser Asp Gln Ser Trp Val Gln Gln Ala Leu Glu Thr Arg Asp Ala Glu
    50                  55                  60
Gln Gln Asn Arg Ser Arg
65                  70
```

<210> 26771
<211> 482
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (471)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26771
Arg Phe His Ser Arg Ala Cys Gln Gln Val Arg Glu Trp Asn Ala Ala
1 5 10 15
Leu Pro Glu Arg Pro Asp Arg Cys Ala His Glu Ile Ile Glu Gln Gln
20 25 30
Val Leu Ser His Pro Thr Ser Pro Ala Ile Cys Ser Trp Asp Gly Glu
35 40 45
Phe Thr Tyr Glu Gln Leu Asp Arg Leu Ser Thr Lys Leu Ala Lys His
50 55 60
Leu Val Cys Leu Gly Val Lys Pro Glu Ile Phe Val Gly Leu Cys Phe
65 70 75 80
Glu Lys Ser Ala Trp Ala Val Ile Ala Gln Val Ala Val Leu Lys Ala
85 90 95
Gly Gly Ala Phe Ala Ser Leu Asp Pro Ser His Pro Asp Ala Arg Leu
100 105 110
Arg Gly Leu Val Asp Asp Ile Gly Ala His Ile Phe Leu Cys Ser Ala
115 120 125
Lys Tyr Leu Asp Lys Ala Arg Gln Ile Ser Arg Ala Ala Tyr Ile Val
130 135 140
Ser Glu Glu Thr Leu Ala Glu Leu Pro Asp Val Ser Ser Thr Ala Ser
145 150 155 160
Met Thr Arg Pro Ser Ile His Asn Ala Ala Tyr Ala Ile Phe Thr Ser
165 170 175
Gly Thr Thr Gly Lys Pro Lys Val Thr Val Leu Glu His Ile Ala Leu
180 185 190
Ser Val Ser Ser Pro Ala Phe Ala Arg Ser Met Gly Met Asp Thr Thr
195 200 205
Thr Arg Ala Leu Gln Phe Ser Ser Tyr Thr Phe Asp Val Ser Ile Lys
210 215 220
Glu Ile Ile Ile Val Leu Met Thr Gly Gly Cys Val Cys Val Pro Ser
225 230 235 240
Asp Glu Glu Arg Met Asn Asp Leu Ser Gly Ala Ile Arg Arg Leu Asn
245 250 255
Ala Asn Phe Ile Ser Cys Pro Pro Ser Val Ser Asn Thr Ile Gln Pro
260 265 270
Glu Ser Val Pro Ser Val Lys Thr Val Val Met Gly Gly Glu Lys Met
275 280 285
Thr Ala Ser His Ile Asp Arg Trp Gly Asp Arg Phe Val Ile Asn Ala
290 295 300
Tyr Gly Pro Ser Glu Ser Thr Val Met Ala Thr Met Ser Val Lys Val
305 310 315 320
Asp Glu Ala Gly Val Arg Val Asn Asn Asp Cys Asn Ser Ile Gly Ala
325 330 335
Ala Ile Cys Gly Arg Thr Trp Val Val Asp Pro Asn Asn Tyr Gln Arg
340 345 350
Leu Leu Pro Ile Gly Ala Val Gly Glu Leu Val Leu Glu Gly Cys Asn
355 360 365
Val Ala Arg Gly Tyr Leu Asn Asn Asp Gln Lys Thr Lys Glu Ser Phe
370 375 380
Ile Ser Asp Pro Ala Trp Thr Lys Ala Pro Gly Leu Lys Glu Leu Phe

385 390 395 400
Lys Arg Lys Glu Arg Met Tyr Arg Thr Gly Asp Leu Val Arg Tyr Asn
405 410 415
Pro Asp Gly Thr Ile Cys Phe Ile Ser Arg Lys Asp Thr Gln Ile Lys
420 425 430
Phe Asn Gly Gln Arg Ile Glu Leu Glu Glu Ile Glu Gln Gln Cys Ile
435 440 445
Ser Phe Leu Ser Gly Gly Thr Gln Val Ala Val Glu Val Val Glu Pro
450 455 460
Glu Ser Lys Pro Leu Gln Xaa Phe Ser Lys Gly Ala Gln Ile Arg Pro
465 470 475 480
Val Val

<210> 26772
<211> 79
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (35)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26772
Leu Pro Ala Pro Leu Asn Pro Phe Ser Leu Gly Ile Gly Arg His Phe
1 5 10 15
Ser Pro Ala Gly Leu Gly Cys Pro Phe Trp Asp Trp Val Glu His Val
20 25 30
Gly Gly Xaa Cys Ser Gly Arg Asn Asp Leu Val Asn Ala Asn Thr Gly
35 40 45
Lys Leu Asn Pro Arg His Met Tyr Gly Ala Thr Asn Gln Asp Val Phe
50 55 60
Pro Val Ala Asn Cys Ala Met Gly Arg Gly Thr Ala Ile Val Gly
65 70 75

<210> 26773
<211> 397
<212> PRT
<213> A.fumigatus

<400> 26773
Thr Pro Gly Thr Cys Thr Val Arg Pro Ile Arg Met Ser Ser Arg Trp
1 5 10 15
Pro Thr Val Gln Trp Gly Val Glu Arg Gln Leu Leu Gly Ser Tyr Ile
20 25 30
Thr Thr Leu Leu Phe Pro Gly Ile Leu Leu Leu Leu Trp Gly Glu Glu
35 40 45
Gln Ala Phe Tyr Val Leu Asp Ala Thr Ala Thr Asn Tyr Ile Tyr Gly
50 55 60
Arg Gln Ala Met Ser Pro Ala Thr Ala Trp Arg Asp His Gly Cys Phe
65 70 75 80
Ser Leu Asn Ser Ser Gln Tyr Tyr Lys Trp Pro Ile Gln Ala Gly Arg
85 90 95
Glu Gly Cys His Asp Asp Thr Val Ala Tyr Asp His Arg Asp Pro Ser
100 105 110

```
His Pro Val Arg Asn Ile Leu Lys His Met Tyr Gln Leu Arg Glu Gln
        115                 120                 125
Phe Pro Val Leu Asn Asp Gly Tyr Thr Leu Asn Asn Leu Ser Lys Ser
    130                 135                 140
Thr Phe Pro Val Gln Tyr Pro Gly Ser Asn Gly Thr Glu Thr Glu Thr
145                 150                 155                 160
Gly Met Trp Ser Val Ser Arg Glu Ala Asn Leu Glu Val Gln Asp Phe
                165                 170                 175
Gly Ser Asp Asp Leu Asn Ser Pro Val Trp Met Val Tyr Gln Asn Asp
            180                 185                 190
Asn His Thr Val Asp Tyr Lys Phe Asp Cys Asn Ser Glu Thr Asp Ala
        195                 200                 205
Leu Ile Ala Pro Tyr Pro Ala Asp Thr Val Val Lys Asn Leu Phe Tyr
    210                 215                 220
Pro Trp Asp Glu Phe Thr Leu Thr Ala Gly Pro Thr Lys Arg Thr Phe
225                 230                 235                 240
Gly Asn Ala Thr Leu Pro Ala Gly Cys Tyr Gly Asn Leu Thr Leu Lys
                245                 250                 255
Ala Phe Glu Phe Arg Ala Tyr Val Pro Lys Lys Leu His Arg Lys Pro
            260                 265                 270
Arg Pro Met Ile Thr Lys Phe Ser Pro Gly His Asp Val Pro Ile Ala
        275                 280                 285
Ser Thr Val Ala Pro Asp Ala Ser Glu Asn Val Pro Ile Glu Leu His
    290                 295                 300
Phe Ser Glu Glu Met Asp Cys Asp Gly Val Thr Lys Ser Ile Ser Leu
305                 310                 315                 320
Thr Ser Ser Thr Glu Ser Leu Lys Ile Pro Ser Ile Asp Ala Gly Ser
                325                 330                 335
Val His Cys Glu Arg Ile Thr Asn Phe Asn Thr Ser Trp Thr Ala Gln
            340                 345                 350
Ile Pro Ser Met Trp Lys Trp Gln Ala Thr Leu Thr Asn Val Tyr Asn
        355                 360                 365
Gly Ile His Gln Ile Thr Val Lys Glu Pro Lys Thr Ser Ser Gly Asn
    370                 375                 380
Ala Ser Thr Asn Ser Thr Asp His Phe Leu Phe Arg Ile
385                 390                 395
```

<210> 26774
<211> 188
<212> PRT
<213> A.fumigatus

<400> 26774

```
Leu Lys His Glu Arg Phe Phe Gln Pro Arg Gly Glu Asp Gly Asn Pro
1               5                   10                  15
Cys Val Phe Val Arg Ala Ser Asp Leu Gly Val Pro Gly Asn Leu Ala
            20                  25                  30
Pro Asp Lys Ile Asp Ala His Pro Thr Leu Leu Ser Gln Leu Asp Ser
        35                  40                  45
Ile Arg Arg Gln Ala Gly Val Lys Met Gly Leu Ala Gly Thr Thr Lys
    50                  55                  60
Glu Val Pro Gly Ser Val Pro Lys Ile Cys Leu Val Ser Ser Pro Ser
65                  70                  75                  80
Asp Ala Tyr Thr Ser Gly Met Met Gln Thr Pro Lys Asp Val Asp Leu
                85                  90                  95
Val Val Arg Ala Leu Ser Val Gly Gln Pro His Lys Ala Val Pro Ile
```

```
            100                 105                 110
Thr Val Ala Leu Ala Leu Ala Thr Ala Ala Arg Val Ser Gly Thr Val
        115                 120                 125
Val Ala Asp Val Val Ser Asp Lys Pro Val Asp Pro Ala Gly Ile Thr
    130                 135                 140
Leu Gly His Ala Ser Gly Lys Leu Leu Val Gly Ala Asp Phe Asp Pro
145                 150                 155                 160
Thr Gly His Val Ser Cys Ala Thr Val Tyr Arg Thr Ala Arg Arg Ile
                165                 170                 175
Met Glu Gly Arg Val Phe Trp Lys Gly Val Ser Thr
            180                 185
```

<210> 26775
<211> 186
<212> PRT
<213> A.fumigatus

<400> 26775

```
Val Leu Tyr Ser Phe Glu Arg Arg Arg Val Val His Met Pro Ile Gly
1               5                   10                  15
Trp Phe Trp Phe Gly Trp Thr Ser Tyr Pro Ser Ile Pro Trp Ile Val
            20                  25                  30
Pro Thr Ile Ala Val Gly Cys Ala Thr Met Gly Ile Phe Ser Val Tyr
        35                  40                  45
Leu Ala Thr Phe Asn Tyr Leu Ala Asp Thr Tyr His Arg Tyr Ala Ser
    50                  55                  60
Ser Ala Ile Ala Ala Gln Ser Cys Cys Arg Phe Ser Ile Leu Leu Phe
65                  70                  75                  80
Cys Ser Ser Leu Leu Thr Arg Arg Ser Gly Arg Asn Leu Leu Gly Gly
                85                  90                  95
Val Phe Pro Leu Val Thr Asn Ala Leu Phe Thr Asn Leu Gly Tyr Pro
            100                 105                 110
Ala Ala Ser Ser Leu Leu Gly Gly Ile Val Ser Phe Cys Val Tyr Glu
        115                 120                 125
Arg Gly Val Glu Ala Asn Leu Leu Thr Gly Ser Leu Ala Val Tyr Arg
    130                 135                 140
Pro Met Gly Pro Ser Ala Val Trp Thr Gln Asp Ser Arg Gln Glu Gln
145                 150                 155                 160
Ile Cys Lys Cys Lys Cys Pro Gln Tyr Ile Arg Leu Gly Pro Thr Asn
                165                 170                 175
Cys Thr Arg Asn Leu His Thr Ser Ser Leu
            180                 185
```

<210> 26776
<211> 143
<212> PRT
<213> A.fumigatus

<400> 26776

```
Ile Arg Leu Pro Ala Phe Pro Gln Thr Gly Ser Pro Lys Tyr Ser Pro
1               5                   10                  15
Arg Asp Leu Asn Arg Glu Thr Ala Pro His Leu Thr Ser Asn Lys Ser
            20                  25                  30
Ile Ile His Gly Gln His Ile Leu Asn Ala Gln Cys Ser Glu Leu Ser
        35                  40                  45
Ser Ala Gln His Lys Gln Pro Arg Asp Pro Pro Ser Thr Ser Thr His
```

```
    50                  55                  60
Pro Ser Ser Leu Ala Pro Ser Ile Pro Gly Pro Ile Arg Thr Ser Ser
65                  70                  75                  80
Thr Ala Lys Pro Ser Thr Leu Asn Glu Pro Lys Thr Pro Ser Leu Gly
                85                  90                  95
Pro Thr Thr Leu Ser His Gly Thr Pro Pro Pro Met Thr Pro Arg Pro
            100                 105                 110
Pro Leu Gln Arg Pro Asn Arg Arg Arg Ser Arg Pro Asn Ala Ser Ser
        115                 120                 125
Ser Ala Arg Trp Ile Pro Cys Ser Ser Ala Gln Arg Thr Ala Arg
    130                 135                 140
```

<210> 26777
<211> 370
<212> PRT
<213> A.fumigatus

<400> 26777

```
Ser Asp Ser Trp Ala Ile Ile Gln Ala Leu Trp Trp Ile Leu Ile Met
1               5                   10                  15
Pro Asp Arg Arg Leu Ser Gln Leu Leu Lys Ser Lys Leu Leu Arg Arg
            20                  25                  30
Ser Ser Thr Thr Ala Thr Thr Ser Pro Lys Gln Asn Gln Lys Pro Val
        35                  40                  45
Asn Ala Gln Lys Lys Ala Ala Val Gly Ala Asp Pro Leu Val Asp Pro
    50                  55                  60
Asn Ser Thr Ser Asp Leu Ser Cys Ser Leu Pro Pro His Leu Leu Thr
65                  70                  75                  80
Ser Asn Glu Gly Glu Gly Asp Ala Lys Ser Arg Ala Tyr Ser Ile Ile
                85                  90                  95
Ser Ser Ile Pro Leu Asp His Pro Ser Ser Pro Asp Glu Ile Pro Gly
            100                 105                 110
Pro Ala Thr Gly Ser Ser Ala Gly Cys Glu Gln Tyr Phe Thr His Phe
        115                 120                 125
Asp Arg Ser Gly Ala Asn Ser Arg Gln Glu Gly Ser Gln Asn Gly Ser
    130                 135                 140
Ile Gln Gln Ser Pro Thr Phe Thr Arg Thr Leu Arg His Lys Gln Leu
145                 150                 155                 160
Thr Glu Glu Lys Gly Lys Gly Lys Leu Gln Ser Arg Glu Gly Asp Gln
                165                 170                 175
Arg Gly Glu Tyr Gly Tyr Gln Arg Ile Arg Asn Asp Ser Asn Asp Ser
            180                 185                 190
Asp Pro Gln Tyr Ser Leu Thr Thr Glu Leu Ala Asn Lys Pro Ser Thr
        195                 200                 205
Pro Gln Thr Pro Ala Gly Asp Asp Ser Leu His Ser Pro Ser Ala Thr
    210                 215                 220
Pro Leu Pro Leu Ser Pro Ser Leu Pro Gly Pro Thr Gly Ala Ser Ser
225                 230                 235                 240
Leu Gln Ala Ala Tyr Arg Pro Val Arg Glu Asn Ser Ser Val Pro Leu
                245                 250                 255
Val Glu Ser Gln Leu Thr Pro Ser Leu Gly Ala Val Ala Glu Asp Ser
            260                 265                 270
Ser Gly Glu Ser Ala Phe His Phe Val Gly Pro Ser Ser Ser Ser Pro
        275                 280                 285
Phe Pro Lys Arg Pro Pro Leu Gly Phe Arg Arg Gln Ser Leu Phe Pro
    290                 295                 300
```

```
Ala Ser His Gln His Leu Ile Ser Gly Leu Met Gly Phe Gly Pro Tyr
305                 310                 315                 320
Gln Asn Leu Gly Gln Gly Ser Gly His Pro Ser Thr Val Asn Ala Asp
                325                 330                 335
Met Ile Pro Arg Lys Val Trp Val Lys Arg Pro Gly Gly Ser Ala Thr
            340                 345                 350
Leu Val Pro Thr Met Glu Asp Ser Leu Val Asp Glu Leu Arg Asp Pro
        355                 360                 365
Gly Ile
    370
```

<210> 26778
<211> 62
<212> PRT
<213> A.fumigatus

<400> 26778

```
Glu Lys Lys Val His Gly Asp His Lys Ile Ile His Leu Lys His Pro
1               5                   10                  15
Ile Leu Cys Ser Thr Glu Tyr Trp Thr Ser His Ile Gly His Pro Ala
            20                  25                  30
Ile Tyr Thr Ser Met Thr Ser Ala Val Ser Thr Asn Glu Leu Tyr Thr
        35                  40                  45
Tyr Ile Arg Trp Ala Ser Ser Ala Pro Asn Ser Ser Glu Tyr
    50                  55                  60
```

<210> 26779
<211> 159
<212> PRT
<213> A.fumigatus

<400> 26779

```
Cys Arg Gly Leu Leu Ser Gly Cys Tyr Ser Leu Pro Lys Ile Leu Thr
1               5                   10                  15
Arg Ser Leu Met Gly Phe Trp Val Phe Ser Pro Asp Ser Pro Ala Arg
            20                  25                  30
Leu Pro Lys Thr Ser Cys Ala Met Arg Arg His Ser Glu Gly Met Ser
        35                  40                  45
His Trp Leu Ala Asn Gly Ala Val Asp Glu Gly Gly Val Thr Leu Asp
    50                  55                  60
Val Pro Pro Leu Phe Pro Thr Val Phe Leu Ser Val Ser Pro Thr Trp
65                  70                  75                  80
Leu Pro His Phe Asp Ser Tyr Leu Phe Leu Leu Asp Arg Ser Val Cys
                85                  90                  95
Ala Asp Trp Arg Ser Ile Ser Thr Ser Glu His Leu Gly Pro Ser Cys
            100                 105                 110
Thr Ile Asp Cys Leu Leu Ile Pro Cys Ile Gly Asn Val Pro Ile Glu
        115                 120                 125
Trp Leu Thr Tyr Ala Leu Tyr Ser Glu Glu Tyr Cys Tyr Ser Thr Thr
    130                 135                 140
Arg Ser Phe Thr Asn Pro Ile Val Asp Ser Asp Arg Ser Thr Val
145                 150                 155
```

<210> 26780
<211> 77
<212> PRT

<213> A.fumigatus

<400> 26780
Glu Ser Lys Trp Gly Ser Gln Val Gly Glu Thr Asp Arg Asn Thr Val
1 5 10 15
Gly Lys Arg Gly Gly Thr Ser Asn Val Thr Pro Pro Ser Ser Thr Ala
20 25 30
Pro Phe Ala Asn Gln Trp Asp Ile Pro Ser Glu Trp Arg Leu Ile Ala
35 40 45
Gln Leu Val Phe Gly Ser Arg Ala Gly Glu Ser Gly Glu Lys Thr Gln
50 55 60
Lys Pro Ile Lys Glu Arg Val Lys Ile Phe Gly Lys Leu
65 70 75

<210> 26781
<211> 130
<212> PRT
<213> A.fumigatus

<400> 26781
Leu Glu Tyr Ser Asp Ser Ile Leu Trp Pro Leu Leu His Tyr His Pro
1 5 10 15
Gly Glu Ile Val Phe Asp Glu Gly Ala Trp Asp Ala Tyr Arg Glu Ala
20 25 30
Asn Leu Leu Phe Ala Lys Thr Ile Val Lys Glu Ala Gln Asp Gly Asp
35 40 45
Leu Ile Trp Val Gln Asp Tyr His Leu Met Leu Leu Pro Glu Leu Leu
50 55 60
Arg Ala Glu Leu Arg Ala Ala Gly Lys Lys Asp Asn Lys Ile Gly Phe
65 70 75 80
Phe Leu His Thr Pro Phe Pro Ser Ser Glu Ile Tyr Arg Ile Leu Pro
85 90 95
Val Arg Gly Gln Leu Leu Arg Gly Val Leu His Cys Asp Leu Ile Gly
100 105 110
Phe His Thr Tyr Asp Tyr Ala Arg His Phe Leu Ser Ser Cys Ser His
115 120 125
Leu Leu
130

<210> 26782
<211> 149
<212> PRT
<213> A.fumigatus

<400> 26782
Leu Arg Pro Leu Arg Pro Ser Ser Pro Val Val Lys Thr Tyr Glu Phe
1 5 10 15
Ser Met Ser Ser Gly Gly Leu Val Thr Gly Leu Ser Gly Leu Ser Lys
20 25 30
Thr Thr Thr Phe Gln Trp Tyr Gly Trp Pro Gly Leu Glu Val Pro Glu
35 40 45
Asp Glu Leu Gly Ser Val Lys Lys Arg Leu Lys Asp Glu Phe Asn Ala
50 55 60
Thr Pro Val Phe Met Asp Asp Lys Leu Ala Asp Arg His Tyr Asn Gly
65 70 75 80
Phe Ser Ser Lys Trp Pro Pro Pro Thr Thr Tyr His Ser Pro Arg Leu

```
                85                  90                  95
Ala Val Cys Glu Arg Gln His Gln Gln Ser Ile Ala Asp Trp Ser Ile
            100                 105                 110
Gln Thr Arg Ser Tyr Gly Pro Ser Phe Ile Thr Thr Pro Ala Arg Ser
        115                 120                 125
Phe Ser Thr Lys Ala Leu Gly Met Pro Thr Val Arg Pro Thr Phe Tyr
    130                 135                 140
Ser Pro Lys Gln Leu
145
```

<210> 26783
<211> 140
<212> PRT
<213> A.fumigatus

<400> 26783

```
Leu Leu Met Ala Leu Tyr Arg Gly Leu Val Thr Thr Pro Ser Ser Val
1               5                   10                  15
Lys Tyr Glu Gly Arg Ser Val Ala Val Gly Ala Phe Pro Ile Gly Ile
            20                  25                  30
Asp Pro Asp Lys Phe Thr Asp Gly Leu Lys Ser Pro Lys Val Gln Asn
        35                  40                  45
Arg Ile Ala Ser Leu Glu Asn Lys Phe Gln Gly Thr Lys Leu Met Val
    50                  55                  60
Ser Val Asp Arg Leu Asp Tyr Ile Lys Gly Ile Pro Gln Lys Leu His
65                  70                  75                  80
Ala Leu Glu Val Phe Leu Gln Asn His Pro Glu Trp Val Gly Lys Val
                85                  90                  95
Val Leu Val Gln Val Ala Val Pro Ser Arg Gln Asp Val Glu Glu Tyr
            100                 105                 110
Gln Asn Leu Arg Ala Val Val Asn Glu Leu Val Gly Arg Ile Asn Gly
        115                 120                 125
Lys Phe Gly Lys Arg Asp Pro Leu Ala Gln Val Arg
    130                 135                 140
```

<210> 26784
<211> 116
<212> PRT
<213> A.fumigatus

<400> 26784

```
Cys His Ile Ala Asp Thr Leu Thr Gln Thr Gly Thr Val Asp Tyr Met
1               5                   10                  15
Pro Ile His Phe Met His Lys Ser Val Ser Phe Asp Glu Leu Ile Ala
            20                  25                  30
Leu Tyr Ala Ala Ser Asp Ala Cys Val Val Ser Cys Thr Arg Asp Gly
        35                  40                  45
Met Asn Leu Val Ser Phe Glu Tyr Ile Ala Thr Gln Gln Lys Arg Lys
    50                  55                  60
Gly Val Leu Ile Leu Ser Glu Phe Ala Gly Ala Ala Gln Ser Leu Asn
65                  70                  75                  80
Gly Ser Leu Val Val Asn Pro Trp Asn Thr Glu Glu Leu Ala Arg Ala
                85                  90                  95
Tyr His Glu Ala Val Ser Met Ser Asp Glu Gln Pro His Asp Thr Leu
            100                 105                 110
Ser Ala Arg Ser
```

115

<210> 26785
<211> 455
<212> PRT
<213> A.fumigatus

<400> 26785

```
Glu Gly Gly Arg Val Lys Phe Phe Pro Gly Leu Glu Arg Gly Asn Trp
1               5                  10                  15
Lys Asn Leu Arg Gly Lys Ala Pro Asn Gly Pro Glu Leu Ala Pro Phe
            20                  25                  30
Ile Lys Arg Val Gly Pro Glu His Glu Arg Glu Asp Trp Arg Met Arg
        35                  40                  45
Pro Phe Gly Lys His Ala Glu Glu Thr Gly Glu Ala Asp Asp Asp Leu
    50                  55                  60
Gly Leu Asp Lys Val Phe Asp Glu Glu Leu Asp Asn Met Leu Arg Glu
65                  70                  75                  80
Glu Phe Glu Gly Met Ala Met Glu Glu Glu Asn Trp Leu Ser Glu Val
                85                  90                  95
Gly Glu Glu Gly Ser Thr Glu Ala Pro Val Pro Arg Gln Pro Tyr Glu
            100                 105                 110
Val Thr Leu Asn Asp Ala Glu Ser His Pro Tyr Val Asp Lys Leu Asn
        115                 120                 125
Glu Cys Leu Arg Arg Leu Asn Ser Asp Pro Ser Asp Glu Arg Ala Lys
    130                 135                 140
Gln Tyr Leu Trp Lys Trp Tyr Arg Arg Cys Arg Gln Val Ile Pro Asn
145                 150                 155                 160
Phe Leu Gln Ser Ile Pro Glu Glu Ala Leu Thr Met Met Trp Glu Ser
                165                 170                 175
Gln Ala Asn Gly Asp Leu Thr Arg Ala Ser Arg Ala Thr Arg Leu Gln
            180                 185                 190
Ala Leu Ala Glu Asp Ala Ile Ser Ala Gly Arg Ser Leu Ala Thr Ser
        195                 200                 205
Arg Thr Leu Val Tyr Ile Gln Ser Leu Gln Glu Ser Gly Lys Thr Asn
    210                 215                 220
Leu Ala Leu Asp Gln Trp Glu Ala Cys Gln Thr Ser Leu Ser Gln Ser
225                 230                 235                 240
Lys Glu Asp Leu Glu Ala Tyr Trp Lys Leu Gly Val Gln Leu Phe Ala
                245                 250                 255
Ala Ala Asp Asp Pro Gln Arg Ala Gln Asp Ile Ala Leu Ala Phe Leu
            260                 265                 270
Ala Asn Asp Lys Ser Arg Glu Pro Arg Ile Leu Leu Pro Val Ile Thr
        275                 280                 285
Ala Trp Gly Arg Gln Pro Gly Arg Glu Ala Glu Val Lys Ala Trp Ala
    290                 295                 300
Leu Tyr Leu Gln Leu Lys Ala Leu Leu Glu Ser Lys Met Lys Met Glu
305                 310                 315                 320
Asp Tyr Asp Phe Val Ser Ile Gly Leu Leu Lys Ala Gly Lys Leu Asp
                325                 330                 335
Leu Ala Ile Ala Val Phe Lys Asp Met Met Val Thr Ala Gln Asp Pro
            340                 345                 350
Ala Asn Asp Ser Ala Ala Leu Tyr Lys Ala Ala Leu Gly Leu Val Gly
        355                 360                 365
Asn Leu Gln Met Ser Ser Ile Arg Glu Gln Asp Val Asn Lys Ile Ser
    370                 375                 380
```

```
Leu Ser Thr Leu Thr Val Leu Pro Arg Arg Phe Gln Asn Arg Phe Phe
385                 390                 395                 400
Tyr Ala Ser Trp Ile Lys Lys Leu Ile Gly Met Gly Glu Val Asp Ser
                405                 410                 415
Ala Ala Met Val Ile Glu Leu Met Tyr Glu Arg Gly Val Lys Pro Asp
            420                 425                 430
Ser Lys His Leu Asn Gly Leu Leu Ala Ala Val Phe Thr Thr Gly Leu
        435                 440                 445
Glu Gly Ser Ser Ala Leu Ser
    450                 455
```

<210> 26786
<211> 139
<212> PRT
<213> A.fumigatus

<400> 26786

```
Leu Thr Val Arg Gly Pro Ser Ala Pro Leu Val Lys Ile Lys Gly Ser
1               5                   10                  15
Leu His Ser Ile Leu Val Asn Thr Val Ser Ser Glu Ala Glu Val Glu
            20                  25                  30
Gln Ala Lys Lys Ile Ile Glu Thr Ala Arg Glu Tyr Ile Leu Ala Met
        35                  40                  45
Ser Ile Glu Leu Glu Arg Arg Ser Leu Ser Thr Asp Thr Pro Glu Asn
    50                  55                  60
Leu Lys Arg Ser Leu Glu Leu Ser Ala Tyr Phe Thr Ile Pro Lys Leu
65                  70                  75                  80
Glu Val Ala His Arg Gln Leu Ala Leu Met Ala Ala Met Lys Leu Ala
                85                  90                  95
Phe Ala Asn Lys Asn Phe Ser Ser Ala Leu Ser Phe Ala Asn Arg Met
            100                 105                 110
Leu Ala Asn Gly Gly Ser Ala Lys Leu Leu Asp Gln Val Ser Leu Leu
        115                 120                 125
Arg Phe Cys Lys Ser Leu Cys Ser Ile Arg Tyr
    130                 135
```

<210> 26787
<211> 83
<212> PRT
<213> A.fumigatus

<400> 26787

```
Ala Lys Lys Ile Lys Ala Gln Cys Glu Arg Ser Pro Gln Asp Lys Ile
1               5                   10                  15
Asp Ile Glu Phe Asp Gln Phe Ala Glu Phe Asp Ile Cys Ala Ala Ser
            20                  25                  30
Phe Thr Pro Ile Tyr Gly Gly Ser Pro Ser Val Ser Asp Pro Phe Thr
        35                  40                  45
Gly Ala Lys Tyr His Glu Gln Tyr Lys Gly Thr Val Cys Arg Ile Ser
    50                  55                  60
Glu Val Thr Glu Ile Gly Ala Pro Ala Ser Gly Leu Arg Leu Phe Val
65                  70                  75                  80
Pro Ser Gln
```

<210> 26788

<211> 87
<212> PRT
<213> A.fumigatus

<400> 26788
Trp Glu Gln Ser Thr Gly Ser Trp Asn Ser Ala His Ile Arg Pro Met
1 5 10 15
Leu Asp Leu Arg His Gly Gly Leu Arg Pro Tyr Thr Leu Lys Ser Ser
20 25 30
Pro Phe Pro Lys Lys His Pro Ile Met Val Leu Gly Ser Ser Tyr Tyr
35 40 45
Gln Trp Leu Leu Asp Ser Ser Leu Phe Ala Val Asn His Phe Lys Lys
50 55 60
Ala Ser Pro Asp Leu Arg Glu Thr Met His Tyr Ile Cys Leu Val Thr
65 70 75 80
Ile His Arg Asp Ile Thr Ile
85

<210> 26789
<211> 60
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5),(59)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26789
Trp Pro Leu Phe Xaa Glu His Ser Asn Lys Met His Phe Pro Val Phe
1 5 10 15
Asp Phe Leu Thr Leu Gly Thr Thr Asn Phe Asp Gln Val Thr Lys Ala
20 25 30
Asn Gln Cys Leu Gly Ile Ile Asn Leu His Trp Lys Gly Glu Gly Asp
35 40 45
Tyr Asp Arg Arg Phe Ser Val Gly Leu Leu Xaa Pro
50 55 60

<210> 26790
<211> 114
<212> PRT
<213> A.fumigatus

<400> 26790
Leu Pro Gly Pro Ala Phe Ala Thr Phe Leu His Leu Ser Pro Arg Leu
1 5 10 15
Ala Leu Phe Leu Ser Pro Leu Leu Leu Ala Phe Gly Leu Ile Val Gly
20 25 30
Val Pro Pro Ser Leu Ala Pro Leu Ser Val Ser Pro Trp Arg Ser Leu
35 40 45
Pro Arg Leu Phe Pro Pro Pro Pro Ser Gly Ile Phe Ala Phe Ser Leu
50 55 60
Ser Arg Asn Leu Leu Phe Pro Pro Leu Leu Ser Tyr Pro Phe Ile Ser
65 70 75 80
Leu Leu Ala Phe Ala Pro Ser Pro Ser Pro Leu Ala Cys Leu Ser Pro
85 90 95

Leu Val Pro Pro Leu Pro Leu Leu His Leu Gly Pro Leu Phe Ser Arg
100 105 110
Ser Tyr

<210> 26791
<211> 193
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222>
(12),(13),(14),(15),(16),(17),(18),(19),(20),(21),(22),(23),(24),(25),(26),(29),(30),(32),(33)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26791
Thr Pro Ile Leu Tyr Asn Asn Thr Gly Gly Cys Xaa Xaa Xaa Xaa Xaa
1 5 10 15
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Val Gly Xaa Xaa Asp Xaa
20 25 30
Xaa Pro Pro Thr Pro Pro Ala Ala Asn Arg Pro Ala Thr Pro Val Gln
35 40 45
Pro Gln His His Pro Pro Pro Ala Ser Pro Gly Gln Thr Pro Arg Leu
50 55 60
Leu Ser Leu Thr Val Ser Asp Phe Arg Ala Leu Leu Ser Pro His Phe
65 70 75 80
Cys Thr Cys Leu Leu Val Trp Pro Ser Phe Ser Leu Pro Ser Tyr Leu
85 90 95
Arg Ser Val Ser Ser Ser Ala Ser Pro Pro Leu Ser Leu Leu Ser Gln
100 105 110
Ser His Pro Gly Ala Pro Ser Leu Gly Ser Phe His Pro Pro Leu Arg
115 120 125
Ala Ser Leu Leu Ser Leu Ser Leu Ala Thr Ser Phe Ser Pro Pro Phe
130 135 140
Ser Leu Thr Pro Ser Phe Leu Phe Leu Leu Ser His Arg Pro Pro Leu
145 150 155 160
Pro Leu Pro Ala Ser Pro Leu Ser Ser Leu Leu Cys Pro Ser Phe Ile
165 170 175
Ser Val Leu Tyr Phe Pro Ala Pro Thr Ser Met Val Leu Pro Ile Ser
180 185 190
Leu

<210> 26792
<211> 233
<212> PRT
<213> A.fumigatus

<400> 26792
Leu Glu Lys Pro Gly Val Leu Phe Ala Phe Ser His Val Trp Cys Arg
1 5 10 15
Ser Arg Arg Val Ser His Ser Val Ser Ile Pro Arg Ser Leu Glu Ala
20 25 30
Ser Cys Thr Asp Tyr Phe Arg Val Val Ser Ile Ser Thr Leu Cys Pro

```
        35                  40                  45
Ser Leu Gly Trp Pro Pro Pro Tyr Leu Phe Thr Ser Ala Asp Leu Gly
    50                  55                  60
Leu Phe Thr Leu Ser Ser Phe Ile Gly Ile Ile Ile Ala Phe Pro Ile
65                  70                  75                  80
Ala Gly Pro Leu Thr Asp Tyr Val Ser Gln Trp Leu Arg Arg Arg Asn
                85                  90                  95
Asn Asn Ile His Lys Pro Glu His Arg Phe Pro Ala Leu Leu Val Pro
            100                 105                 110
Phe Leu Leu Cys Pro Pro Gly Leu Ile Ile Phe Gly Tyr Ser Phe Ala
        115                 120                 125
His Gln Arg His Tyr Ile Gly Pro Ala Ala Gly Ala Ala Leu Ser Ala
    130                 135                 140
Ala Ser Leu Thr Leu Val Pro Ser Val Met Leu Ser Tyr Val Val Asp
145                 150                 155                 160
Ser Tyr Pro Arg Thr Ser Gly Glu Ala Leu Val Leu Val Asn Ala Ser
                165                 170                 175
Lys Asn Val Val Ala Phe Gly Leu Ala Lys Gly Ser Tyr Ser Trp Met
            180                 185                 190
Ala Leu Val Gly Val Asp Lys Met Phe Tyr Glu Phe Ala Gly Ile Gln
        195                 200                 205
Trp Ala Val Ile Ala Leu Ala Leu Pro Leu Tyr Tyr Ala Gly Pro Trp
    210                 215                 220
Ile Arg Ala Lys Thr Thr Asn Phe Val
225                 230
```

<210> 26793
<211> 390
<212> PRT
<213> A.fumigatus

<400> 26793

```
Arg Phe Pro Arg Gly Arg Asn Gly Ala Asp Lys Arg Tyr Phe Arg Pro
1               5                   10                  15
Glu Asn Phe Gly Tyr Pro Arg Gly Thr Gly His Trp Ala Ser Gly Asn
            20                  25                  30
Gln Ile Val Asp Leu Trp Asp Ala Lys Ala Val Ile Ser Thr Ile Glu
        35                  40                  45
Leu Glu Glu Asn Glu Ala Ala Phe Ser Met Ala Ala Val Pro Phe Ser
    50                  55                  60
Ser Gln Glu Asp Glu Ala Phe Leu Val Val Gly Thr Ala Lys Asp Met
65                  70                  75                  80
Ile Val Asn Leu Pro Ser Ser Ala Gly Gly Phe Ile His Ile Tyr Arg
                85                  90                  95
Phe Gln Glu Asp Gly Lys Glu Leu Glu Phe Ile His Lys Thr Lys Val
            100                 105                 110
Glu Glu Pro Pro Leu Ala Leu Leu Gly Phe Gln Gly Arg Leu Leu Ala
        115                 120                 125
Gly Ile Gly Ser Thr Leu Arg Ile Tyr Asp Leu Gly Met Lys Gln Leu
    130                 135                 140
Leu Arg Lys Cys Gln Ala Gln Val Val Ser Lys Thr Ile Val Gly Leu
145                 150                 155                 160
Gln Thr Gln Gly Ser Arg Ile Val Val Ser Asp Val Arg Glu Ser Val
                165                 170                 175
Thr Tyr Val Val Tyr Lys Tyr Gln Asp Asn Ile Leu Ile Pro Phe Val
            180                 185                 190
```

```
Asp Asp Ser Val Ser Arg Trp Thr Thr Ser Thr Thr Met Val Asp Tyr
        195                 200                 205
Glu Thr Val Ala Gly Gly Asp Lys Phe Gly Asn Leu Trp Leu Val Arg
    210                 215                 220
Cys Pro Lys Lys Ala Ser Glu Glu Ala Asp Glu Asp Gly Ser Gly Ala
225                 230                 235                 240
His Leu Ile His Glu Arg Gly Tyr Leu His Gly Ala Pro Asn Arg Leu
                245                 250                 255
Asp Leu Met Ile His Thr Tyr Thr Gln Asp Ile Pro Thr Ser Leu His
            260                 265                 270
Lys Thr Gln Leu Val Ala Gly Gly Arg Asp Ile Leu Val Trp Thr Gly
        275                 280                 285
Phe Gln Gly Thr Ile Gly Met Leu Val Pro Phe Val Ser Arg Glu Asp
    290                 295                 300
Val Asp Phe Phe Gln Asn Leu Glu Met Gln Leu Ala Ser Gln Cys Pro
305                 310                 315                 320
Pro Leu Ala Gly Arg Asp His Leu Ile Tyr Arg Ser Tyr Tyr Ala Pro
                325                 330                 335
Val Lys Gly Val Ile Asp Gly Asp Leu Cys Glu Met Tyr Phe Leu Leu
            340                 345                 350
Pro Asn Asp Thr Lys Met Met Ile Ala Ala Glu Leu Asp Arg Ser Val
        355                 360                 365
Arg Glu Ile Glu Arg Lys Ile Ser Val Ser Gln Pro Phe Pro Thr Leu
    370                 375                 380
Phe Leu Lys Leu Cys His
385                 390

<210> 26794
<211> 335
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (319),(320),(323)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26794
Ser Ala Phe Ser Ala Ala Gln Thr Gln Val Glu Phe Pro Pro Ala Ser
1               5                   10                  15
Gln Leu Leu Glu Met Asp Pro Thr Arg Ser Gly Ser Phe Val Pro Pro
            20                  25                  30
Leu Pro Glu Pro Ala Ala Glu Tyr Asp Lys Lys Gly Ser Leu Ser His
        35                  40                  45
Ser Gln His Leu Ser Ser Ser Cys Ser Ser Ser Leu Ser Leu Gln Pro
    50                  55                  60
Pro Glu Asn Val His Ser Gly Gln Glu Cys Ile Leu Asp Pro Pro Leu
65                  70                  75                  80
Ser Ser Ala Leu Arg Pro Ser Pro Met Asn Thr Pro Arg Gly Leu Lys
                85                  90                  95
Thr Ser Leu Ser Gly Arg Arg Glu Leu Gly Phe Ile Pro Ile Thr Gly
            100                 105                 110
Pro Ala Pro Pro Lys Phe Thr Thr Asp Ser Pro Ala Lys Arg Thr Pro
        115                 120                 125
Cys Thr Thr Tyr Ser Cys Asn Ser Ser Ser Ser Ser Ala Met Pro Gln
    130                 135                 140
```

```
Ser Ala Leu Phe Thr Thr Phe Pro Ser Ala Asn Asn Gly Lys Gln Ser
145                 150                 155                 160
Ser Lys Glu Lys Arg Gln Leu Ala Glu Ser Cys Asn Asp Asn Phe Ala
                165                 170                 175
Asp Phe Pro Glu Pro Ser Phe Ala Ser Lys Pro Leu Lys Arg Thr Leu
            180                 185                 190
Met Asp Ala Ala Pro Leu Lys Glu Arg Thr Ile Lys Lys Gln Lys Arg
        195                 200                 205
Glu Asp Val Asp Val Thr Arg Leu Pro Asn Pro Glu Glu Met Ser Pro
    210                 215                 220
Ile Glu Asp Asp Gly Thr Lys Pro Pro Tyr Ser Tyr Ala Thr Leu Ile
225                 230                 235                 240
Gly Met Ser Ile Leu Arg Ala Pro Asn Arg Arg Leu Thr Leu Ala Gln
                245                 250                 255
Ile Tyr Lys Trp Ile Ser Asp Thr Phe Ser Tyr Tyr Lys His Ser Asp
            260                 265                 270
Pro Gly Trp Gln Asn Ser Ile Arg His Asn Leu Ser Leu Asn Lys Ala
        275                 280                 285
Phe Ile Lys Gln Glu Arg Pro Lys Asp Asp Pro Gly Lys Gly Asn Tyr
    290                 295                 300
Trp Ala Ile Glu Pro Gly Met Glu Ala Arg Pro Leu Arg Ala Xaa Xaa
305                 310                 315                 320
Glu Cys Xaa Asp Lys Pro Arg Ser Lys Ser Thr Val Trp Arg Glu
                325                 330                 335
```

<210> 26795
<211> 85
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (29),(32),(42)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26795

```
Ser Val Gly Leu Tyr His Ala Trp Cys Cys Arg Gly Arg Asp Gln Arg
1               5                   10                  15
Arg Arg Cys Ile Leu Pro Ser Asp Ser Ala Arg Thr Xaa Pro Ala Xaa
            20                  25                  30
Ala Pro Pro Glu Lys Lys Lys Ser Gln Xaa Gln Arg Arg Lys Glu Lys
        35                  40                  45
Lys Lys Ala Glu Glu Glu Lys Lys Ala Lys Asn Ala Thr Val Gln Glu
    50                  55                  60
Gly Met Leu Asn Pro Thr Ala Phe Cys Ala Pro Ser Lys Arg Ser Ile
65                  70                  75                  80
Glu Leu Ile Thr Ala
                85
```

<210> 26796
<211> 159
<212> PRT
<213> A.fumigatus

<400> 26796

```
Pro Val Leu Gly Asn Lys Asp Ala Ala Ala Asp Asp Phe Glu Leu Ala
```

```
1               5                   10                  15
Ile Thr His Asn Lys Asp Asp Pro Asp Ile Tyr Tyr His Arg Ala Gln
            20                  25                  30
Leu His Phe Ile Leu Gly Glu Phe Ala Glu Ala Ala Lys Asp Tyr Gln
        35                  40                  45
Lys Ser Ile Asp Leu Asp Arg Thr Phe Ile Phe Ser His Ile Gln Leu
    50                  55                  60
Gly Val Thr Gln Tyr Lys Met Gly Ser Val Ala Ser Ala Met Ala Thr
65                  70                  75                  80
Phe Arg Arg Ser Val Lys Asn Phe Glu Asp Val Pro Asp Val Tyr Asn
                85                  90                  95
Tyr Tyr Gly Glu Leu Leu Leu Asp Gln Gln Asn Phe Ser Glu Ala Ile
            100                 105                 110
Glu Lys Phe Asp Lys Ala Val Glu Met Glu Lys Gln Ser Lys Pro Met
        115                 120                 125
Gly Ile Asn Val Leu Pro Leu Ile Asn Lys Ala Leu Ala Leu Phe Gln
    130                 135                 140
Arg Lys His Asp Val Phe Thr Lys Ser Ser Arg Lys Asp Pro Thr
145                 150                 155
```

<210> 26797
<211> 285
<212> PRT
<213> A.fumigatus

<400> 26797

```
Ser His Pro Ser Cys Phe Ser Trp Arg Pro Leu Leu Glu Cys Ser Gln
1               5                   10                  15
Leu Leu Leu Gln Thr Arg Lys Ala Tyr Ala Ala Lys Leu Lys Ala Ala
            20                  25                  30
Gly Asn Lys Ala Tyr Gly Ser Lys Asp Tyr Asn Arg Ala Ile Asp Leu
        35                  40                  45
Tyr Gly Lys Ala Ile Ile Cys Lys Pro Asp Pro Val Phe Tyr Ser Asn
    50                  55                  60
Arg Ala Ala Cys Tyr Asn Val Leu Ser Glu Trp Glu Lys Val Val Glu
65                  70                  75                  80
Asp Thr Thr Ala Ala Leu Ala Met Asp Ser Glu Tyr Val Lys Ala Leu
                85                  90                  95
Asn Arg Arg Ala Ile Ala Tyr Glu His Leu Glu Lys Tyr Ser Glu Ala
            100                 105                 110
Leu Leu Asp Phe Thr Ala Ser Cys Ile Ile Asp Gly Phe Ser Asn Asp
        115                 120                 125
Val Ser Arg Asn Ala Leu Glu Arg Leu Leu Lys Lys Val Ala Glu Arg
    130                 135                 140
Lys Ala Lys Ala Ile Leu Glu Ala Lys Gly Arg Lys Leu Pro Ser Pro
145                 150                 155                 160
Thr Phe Val Ser Asn Tyr Leu Gln Ser Phe Arg Pro Gln Ser Leu Pro
                165                 170                 175
Glu Gly Leu Glu Glu Ser Ala Asp Leu Ser Glu Glu Ser Gly Lys Gly
            180                 185                 190
Gln Leu Arg Lys Gly Leu Val Ala Met Ser Lys Lys Thr Gly Asp Gly
        195                 200                 205
Tyr Glu Glu Ala Ala Ala Ala Phe Glu Lys Ala Leu Glu Leu Gly Asp
    210                 215                 220
Leu Gly Glu Tyr Glu Ala Leu Ala Leu Asn Met Arg Ala Thr Phe Thr
225                 230                 235                 240
```

```
Tyr Leu Glu Gly Asn Ala Gln Ser Ala Leu Ala Asp Leu Asn Lys Ser
                245                 250                 255
Ile Glu Leu Gln Pro Ser Leu Val Gln Ser Tyr Ile Lys Arg Ala Ser
            260                 265                 270
Leu His Leu Glu Leu Gly Lys Tyr Met Pro Ser Leu Leu
        275                 280                 285
```

<210> 26798
<211> 94
<212> PRT
<213> A.fumigatus

<400> 26798
```
Arg Pro Phe Lys Thr Phe Pro Trp Thr Leu Gly Val Asp Leu Gln Asn
1               5                   10                  15
Gln Glu Asn Leu Val Lys Ser Lys Val Lys Leu Ile Leu Val Ser Lys
            20                  25                  30
Gln Leu Ile Asp Gly Thr Ala Ser Lys Leu Tyr Gln Val Arg Pro Leu
        35                  40                  45
Lys Lys Ser Tyr Pro Ser Tyr Leu Ser Leu Arg Gly Ser Val Cys Tyr
    50                  55                  60
Val Leu Asp Leu Ala Asp Ala Asn Ile Gln Thr Ala Cys Ser Ser Pro
65                  70                  75                  80
Pro Ser Leu Leu Ile Asn Ile Thr Thr Asn Met Ile Leu Ser
                85                  90
```

<210> 26799
<211> 70
<212> PRT
<213> A.fumigatus

<400> 26799
```
Ile Glu Lys Thr Ser Ile Thr Thr Asn Arg Leu Arg Thr Ile Met Thr
1               5                   10                  15
Trp Asp Leu Asn Ile Gln Gln Pro Lys Lys Gln Gly Ser Val Pro Asp
            20                  25                  30
Tyr Leu Ser Phe Arg Asp Val Tyr Leu Thr Gln Lys Gln Thr Pro Val
        35                  40                  45
Arg Ser Met Asn Phe Asn Phe Leu Asp Gly Ile Ala Ala Gln Cys Cys
    50                  55                  60
Arg Asn Tyr Ser Ile Ser
65                  70
```

<210> 26800
<211> 284
<212> PRT
<213> A.fumigatus

<400> 26800
```
Tyr Arg Tyr Ser Ser Gly Ser Ala Gln Lys Thr Arg Phe Arg Asp Leu
1               5                   10                  15
Ile Thr Gly Gly Arg Thr Gln His Phe Arg Arg Met Leu Ile Gly Ser
            20                  25                  30
Ser Ser Gln Ile Phe Gln Gln Leu Gly Gly Cys Asn Ala Val Ile Tyr
        35                  40                  45
Tyr Leu Pro Val Leu Leu Lys Glu Ser Leu His Gln Ser Asn Asp Met
```

```
    50                  55                  60
Ala Leu Leu Ile Gly Gly Ile Asn Met Ile Val Tyr Ser Leu Phe Ala
65                  70                  75                  80
Thr Phe Ser Trp Phe Ser Ile Glu Lys Ile Gly Arg Arg Lys Leu Phe
                85                  90                  95
Leu Gly Gly Ser Phe Leu Gln Thr Ile Ser Met Val Ile Thr Phe Ala
            100                 105                 110
Cys Leu Ile Pro Gly Asp Glu Gln Thr Ser Lys Gly Ala Val Phe Gly
        115                 120                 125
Leu Phe Leu Tyr Met Ala Ala Phe Gly Ala Ala Trp Leu Pro Leu Pro
    130                 135                 140
Trp Leu Tyr Pro Ala Glu Leu Ser Pro Ile Lys Thr Arg Ala Lys Ala
145                 150                 155                 160
Asn Ala Val Ser Thr Cys Ser Asn Trp Leu Phe Asn Phe Thr Val Val
                165                 170                 175
Met Ile Thr Pro Val Met Val Ala His Ile Gly Trp Gly Thr Tyr Leu
            180                 185                 190
Leu Phe Ala Ala Leu Asn Ala Ser Phe Ile Pro Val Ile Trp Leu Phe
        195                 200                 205
Tyr Pro Glu Thr Ala Asn Arg Ser Leu Glu Glu Ile Asp Leu Ile Phe
    210                 215                 220
Thr Lys Gly Tyr Val Glu Asn Ile Ser Tyr Val Lys Ala Ala Arg Glu
225                 230                 235                 240
Leu Pro Lys Leu Ile Asp Asp Glu Ile Glu Ala Lys Ala Ala Glu Tyr
                245                 250                 255
Ala Phe Ala Ser Gly Asp Ser Leu Asp Glu Ile Glu Lys Ala His Ala
            260                 265                 270
Glu His Asn Ala Ala Gln Arg Leu Glu Thr Thr Gln
        275                 280
```

<210> 26801
<211> 183
<212> PRT
<213> A.fumigatus

<400> 26801

```
Phe Ala Gly Gly Met Val Gly Ala Ile Phe Ala Ile Phe Phe Gly Asp
1               5                   10                  15
Arg Thr Gly Arg Arg Trp Met Ile Phe Ser Gly Ala Ile Val Met Ile
            20                  25                  30
Val Gly Val Ile Ile Gln Val Thr Ser Phe Val Gly His Ile Pro Leu
        35                  40                  45
Leu Gln Phe Phe Ile Gly Arg Val Ile Thr Gly Ile Gly Asn Gly Met
    50                  55                  60
Asn Thr Ser Thr Ile Pro Thr Tyr Gln Ala Glu Cys Ser Lys Thr Ser
65                  70                  75                  80
Asn Arg Gly Leu Leu Ile Cys Ile Glu Gly Gly Val Ile Ala Ile Gly
                85                  90                  95
Thr Ala Ile Ala Tyr Trp Ile Asp Phe Gly Ala His Tyr Gly Pro Asp
            100                 105                 110
Asp Leu Val Trp Arg Phe Pro Ile Ala Phe Gln Ile Phe Phe Gly Leu
        115                 120                 125
Ile Ile Ile Ile Gly Met Phe Phe Leu Pro Asp Ser Pro Arg Tyr Leu
    130                 135                 140
Ile Ser Lys Asp Arg Ile Gln Glu Gly Glu Tyr Val Leu Ala Ala Leu
145                 150                 155                 160
```

```
Ala Gly Arg Glu Val His Asp His Glu Thr Gln Ile Gln Lys Gln Ser
                165                 170                 175
Val Ile Glu Ser Ile Arg Ala
            180
```

<210> 26802
<211> 253
<212> PRT
<213> A.fumigatus

<400> 26802

```
Lys Gln Val Gln Ser Cys Trp Trp Arg Pro Glu Trp Gly Asp Ser Ala
1               5                   10                  15
Val Ser Met Ala Leu Arg Ser Gly Gln Glu Ala Ile Ala Thr Phe Leu
            20                  25                  30
Ala Asp His Gly Ala Leu Leu Leu Arg Gly Gln Ala Gly Arg Arg Ala
        35                  40                  45
Ser Ile Ile Ala Ser Arg Arg Gly Leu Gln Arg Leu Val Arg Arg Leu
    50                  55                  60
Thr Val Tyr Tyr Glu Ala Ile Ala Gly Arg Pro Leu His Arg Gln Ser
65                  70                  75                  80
Ser Arg Ile Val Ser Gly Leu Pro Glu Ile Pro Glu Ile Pro Trp Glu
                85                  90                  95
Arg Pro Ser Tyr Phe His Thr Glu Ser Gly Glu Arg Asp Glu Val Ser
            100                 105                 110
Phe Ala Glu Leu Met Glu Gln Tyr Asp Ile Gln Thr Gly Phe His Gln
        115                 120                 125
Arg Tyr His Met Met Glu Gln Ile Gly Lys Gly His Phe Ala Thr Val
    130                 135                 140
Asn Leu Cys Ser Asn Arg Val Thr Gly Val Leu Phe Ala Val Lys Met
145                 150                 155                 160
Phe Gln Ser His Arg Pro Pro Ser Ser Ser Asp Phe Glu Ser Leu His
                165                 170                 175
Tyr Glu Ile Gln Leu Leu Arg Glu Leu Gln Lys His Ser His Pro Asn
            180                 185                 190
Leu Met Arg Met Ala Asp Leu Phe Ala Asp Phe Glu Lys Asn Arg Ile
        195                 200                 205
Cys Leu Val Met Asp Leu Gly Lys Glu Gly Asp Leu Phe Asp Leu Ile
    210                 215                 220
Val Ala Lys Gly Lys Phe Thr Glu Thr Glu Thr Arg Val Leu Phe Thr
225                 230                 235                 240
Gln Leu Leu Ser Ala Ile Lys Phe Leu Val Gly Pro Leu
                245                 250
```

<210> 26803
<211> 149
<212> PRT
<213> A.fumigatus

<400> 26803

```
Met Trp Arg Arg Arg Val Leu Gln Thr Ser Arg Ser Arg Ser Tyr Gly
1               5                   10                  15
Phe Gly Val Asp Val Trp Ser Ser Gly Val Val Leu Tyr Ile Cys Leu
            20                  25                  30
Ser Gly Phe Pro Pro Phe Ser Asp Glu Leu Tyr Thr Glu Glu Asn Pro
        35                  40                  45
```

```
Tyr Thr Leu Ala Gln Gln Ile Lys Met Gly Gln Tyr His Tyr Pro Ser
    50                  55                  60
Pro Tyr Trp Asp Ser Val Gly Asp Pro Ala Leu Asp Leu Ile Asp Ala
65                  70                  75                  80
Met Leu Thr Val Asp Val Asp Lys Arg Ala Thr Ala Glu Glu Cys Leu
                85                  90                  95
Ala His Pro Trp Met Cys Lys Glu Ser Ile Ser Pro Asp Gly Ala Thr
            100                 105                 110
Asp Ala Ser Met Ala Leu Pro Leu Asp Ile Arg Met Val Gln Leu Met
        115                 120                 125
Pro Lys Gln Val Leu Asp Ser Glu Gly Ser Ala Leu Thr Thr Gly Leu
    130                 135                 140
Gln Pro Gly Thr Ile
145
```

<210> 26804
<211> 151
<212> PRT
<213> A.fumigatus

```
<400> 26804
His Asp Arg Gly Trp Val His Arg Asp Val Lys Pro Glu Asn Ile Leu
1               5                   10                  15
Val Met Asp Lys Asn Leu Thr Ile Gln Leu Ser Asp Phe Gly Leu Ala
            20                  25                  30
Lys Lys Leu Pro Thr Asp Ser Gly Ser Glu Glu Leu Ala Ser Thr Leu
        35                  40                  45
Cys Gly Thr Pro Ser Cys Met Leu Ser Thr Ser Cys His Leu Phe Ala
    50                  55                  60
Ile Ala Asp Pro Ser Arg Cys Gly Ala Gly Gly Ser Ser Arg Arg Leu
65                  70                  75                  80
Ala Ala Val His Thr Val Leu Glu Trp Thr Cys Gly Pro Pro Ala Leu
                85                  90                  95
Ser Tyr Thr Ser Val Cys Leu Gly Phe Pro His Phe Leu Thr Ser Cys
            100                 105                 110
Thr Leu Lys Arg Thr Arg Ile Leu Ser His Asn Arg Ser Arg Trp Val
        115                 120                 125
Asn Ile Ile Ile His Arg Arg Thr Gly Ile Pro Leu Glu Ile Leu Leu
    130                 135                 140
Trp Ile Ser Leu Met Gln Cys
145                 150
```

<210> 26805
<211> 186
<212> PRT
<213> A.fumigatus

```
<400> 26805
Ser Ile Thr Pro Lys Gly Asn Val Phe Lys Ile Asp Ser Gln Gly Glu
1               5                   10                  15
Lys Gly Ile Asn Met Leu Leu Phe Ser Asn Asn Lys Cys Asp Gly Lys
            20                  25                  30
Pro Ser Gly Gln Ala Thr Glu Ile Phe Ser Lys Ala Ser Ser Gln Asp
        35                  40                  45
Leu Leu Gly Phe Gln Val Val Ala Leu Ser Thr Glu Pro Thr Ala Thr
    50                  55                  60
```

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09/417507
10/14/99

```
Ala Thr Thr Gly Lys Ser Val Ser Arg Val Ala Thr Thr Phe Pro Ala
65                  70                  75                  80
Ser Glu Thr Ala Ser Thr Gly Ala Ser Asp Asp Gly Ser Met Thr Ile
                85                  90                  95
Gln Pro Thr Asp Lys Met Thr Ile Gln Pro Ala Gly Glu Met Thr Ile
            100                 105                 110
Gln Pro Thr Asp Glu Met Ser Thr Thr Ala Ala Ala Thr Ala Thr Ala
        115                 120                 125
Thr Ala Thr Thr Thr Ser Thr Pro Glu Ser Ser Ser Thr Ala Ser Ser
    130                 135                 140
Thr Thr Ser Ser Ala Ala Ser Gly Thr Thr Ser Asn Ala Ala Gly Gln
145                 150                 155                 160
Leu Val Ala Leu Asn Gly Asp Thr Val Lys Gly Ile Ile Gly Thr Val
                165                 170                 175
Phe Gly Leu Gly Leu Val Gln Trp Ile Ile
            180                 185
```

<210> 26806
<211> 195
<212> PRT
<213> A.fumigatus

<400> 26806

```
Arg Pro His Ala Gln Gly Cys Gln Ser Gln Thr Pro Ser Leu Leu Pro
1               5                   10                  15
Gly Leu Asp Pro Pro Pro Thr Gln His Pro Phe Ala Val Cys Pro Pro
            20                  25                  30
His Ala Asn Arg Leu Gly Ile Arg Gln Gln His Ala Gln Arg His Ala
        35                  40                  45
Gly Pro Pro Ala Met Glu Gln Val Leu Trp Gln Thr Asn Arg His Pro
    50                  55                  60
Phe Arg Arg His Asp Val Trp Pro Asn Arg Trp His Pro Asp Leu Arg
65                  70                  75                  80
Ala Gly Leu Leu Pro Ala Val Arg Ala Leu Arg Pro Pro Val Pro His
                85                  90                  95
Leu Arg Arg Leu Ala His His His Pro Gly Leu Asp His Pro Gly Arg
            100                 105                 110
Arg Arg Gln Leu Arg His Val Arg Gly Leu Ala Leu Leu Gly Arg Pro
        115                 120                 125
Gly Ala Gly His Arg Arg Tyr Arg Arg Pro Ala Ser Pro Asp Arg Gly
    130                 135                 140
Arg Leu Pro Val Pro Ala Arg Gln Ala Arg Leu Leu Leu Ser His His
145                 150                 155                 160
Leu Val Ala Gly Leu Pro His Arg Arg Leu Asp His Leu Arg His Leu
                165                 170                 175
Gln Asp Asp Arg Ser Pro Leu Ser Tyr Thr Thr Gly Leu Glu Gly Ser
            180                 185                 190
Ala Ser Arg
        195
```

<210> 26807
<211> 236
<212> PRT
<213> A.fumigatus

<400> 26807

```
Ala His Thr Ala Leu Ala Asp Leu Ser Thr Ser Asn Pro Pro Ala Glu
1               5                  10                  15
Ser Ala Val Arg Gln Thr Asp Thr Met Thr Ser His His Asp Arg Gln
            20                  25                  30
Glu Arg Pro Asp Glu Asp Asn Phe Glu Gly Leu Thr Leu Lys Asp Val
        35                  40                  45
Asn Pro Lys Arg Pro Pro Phe Tyr Arg Asp Trp Thr Leu Leu Gln Leu
    50                  55                  60
Asn Thr Leu Leu Leu Cys Ala Leu Leu Thr Gln Ile Ala Ser Gly Tyr
65                  70                  75                  80
Asp Ser Ser Met Leu Asn Gly Met Gln Ala Leu Pro Gln Trp Asn Lys
                85                  90                  95
Tyr Phe Gly Lys Pro Thr Gly Thr Arg Phe Gly Ala Met Thr Phe Gly
            100                 105                 110
Pro Thr Gly Gly Ile Leu Ile Ser Val Leu Val Ser Ser Gln Leu Cys
        115                 120                 125
Glu Arg Phe Gly Arg Arg Tyr Pro Ile Cys Gly Gly Ser Leu Ile Ile
    130                 135                 140
Ile Leu Gly Ser Ile Ile Gln Ala Ala Ala Val Asn Tyr Gly Met Phe
145                 150                 155                 160
Val Val Ser Arg Phe Leu Val Gly Leu Gly Leu Gly Ile Val Ala Thr
                165                 170                 175
Ala Ala Pro Pro Leu Leu Thr Glu Val Ala Tyr Pro Ser Gln Arg Gly
            180                 185                 190
Lys Leu Val Ser Phe Tyr Leu Thr Thr Trp Ser Leu Gly Ser Leu Ile
        195                 200                 205
Ala Ala Trp Ile Thr Tyr Gly Thr Phe Lys Met Thr Asp Arg Arg Cys
    210                 215                 220
Leu Thr Arg Arg Gly Trp Lys Val Ala Arg Pro Ala
225                 230                 235
```

<210> 26808
<211> 284
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (284)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26808

```
Asp Pro Pro Thr Glu Tyr Pro Glu Phe Val Pro Gln Lys Gly Pro Ser
1               5                  10                  15
Thr Gly Arg Tyr Val Leu Arg Glu Ser Ser Leu Trp Thr Cys Gly Phe
            20                  25                  30
Phe Pro Gly Leu Leu Tyr Val Leu Leu Glu Arg Ala Ile Gln Tyr Pro
        35                  40                  45
Ser Ala Phe Pro Tyr Leu Gly His Pro His Ser Leu Asp Pro Ala Ser
    50                  55                  60
Leu Arg Asp His Leu Val Ala Leu Cys Thr Lys Trp Thr Ala Pro Ile
65                  70                  75                  80
Tyr Pro Met Ser Leu Arg Thr Asp Thr His Asp Leu Gly Phe Ile Leu
                85                  90                  95
Ala Pro Ser Leu Arg Arg Ser Trp Glu Leu Thr Ala Asn Pro Asn Ser
            100                 105                 110
```

```
Leu Arg Ala Leu Leu Thr Gly Ala Gln Ser Leu Ala Ser Arg Phe Val
        115                 120                 125
Pro Ala Thr Gly Ala Ile Arg Ser Trp Asp Val Leu Arg Gln Ser Asp
    130                 135                 140
Val Asp Ile Thr Ser Leu Glu Thr Asp Cys Leu Val Ile Ile Asp Ser
145                 150                 155                 160
Met Met Asn Leu Asp Leu Leu Tyr Tyr Ala Ala Ala His Leu Gly Pro
                165                 170                 175
Gln Leu Ala Ala Ile Ala Thr Thr His Ala Lys Thr Leu Leu His Ser
            180                 185                 190
His Leu Arg Arg Glu Thr Ile Pro Gly Thr Ala Arg Ala Gly Tyr Ser
        195                 200                 205
Thr Ile His Val Val Asn Phe Asp Pro Ala Thr Gly Ala Ile Met Glu
    210                 215                 220
Arg Arg Thr Ala Gln Gly Tyr Ala Ala Asp Ser Thr Trp Ala Arg Gly
225                 230                 235                 240
Gln Ala Trp Ala Ile Thr Gly Tyr Ala Gln Thr Tyr Ala Trp Thr Arg
                245                 250                 255
Asp Arg Gln Phe Leu Asp Val Ala Ile Gly Leu Ala Glu Tyr Phe Leu
            260                 265                 270
Ala Arg Leu Glu Gly Ala Pro Pro Cys Val Glu Xaa
        275                 280
```

<210> 26809
<211> 144
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (122),(127)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26809

```
Thr Ser Ile Phe Ser Thr Thr Arg Arg Arg Ile Trp Val Arg Ser Trp
1               5                   10                  15
Arg Arg Leu Arg Pro Arg Met Arg Arg Pro Ser Ser Thr Pro Ile Cys
            20                  25                  30
Ala Gly Arg Arg Tyr Pro Glu Arg Arg Gly Arg Val Thr Pro Pro Ser
        35                  40                  45
Thr Ser Ser Ile Leu Thr Pro Pro Arg Val Arg Ser Trp Ser Ala Ala
    50                  55                  60
Leu Arg Arg Gly Thr Arg Arg Thr Arg Arg Gly Arg Ala Ala Arg Arg
65                  70                  75                  80
Gly Arg Leu Pro Gly Met Arg Arg Arg Thr His Gly Pro Gly Thr Gly
                85                  90                  95
Ser Ser Trp Met Leu Pro Leu Gly Trp Pro Ser Thr Ser Ser Arg Asp
            100                 105                 110
Trp Arg Gly Arg Arg Leu Ala Trp Ser Xaa Arg Trp Met Ala Xaa Gly
        115                 120                 125
Ser Ala Gly Thr Cys Arg Cys Gly Thr Leu Met Arg Arg Ser Thr Lys
    130                 135                 140
```

<210> 26810
<211> 279
<212> PRT

<213> A.fumigatus

<400> 26810

```
Gly Gly Thr Arg Tyr Leu Pro Ala Pro Ser Cys Lys Thr Ala Ala Ile
1               5                  10                  15
Gly His Leu Glu Gly Ala Val Gly Asp Pro Gly Gly Asp Glu Gly Ala
            20                  25                  30
Gln Arg Pro Gly Gly Glu Ile Glu Gly Asp Glu Leu Ala Ser Leu Gly
        35                  40                  45
Arg Val Gly Asp Leu Gly Gln Glu Arg Arg Gly Gly Gly Ser Asp Asp
    50                  55                  60
Ala Gln Pro Gln Ala Asp Gln Glu Ala Arg Asp His Glu His Ala Val
65                  70                  75                  80
Val Asp Gly Gly Gly Leu Asp Asp Arg Ala Gln Asp Asp Asp Glu Arg
                85                  90                  95
Ala Ala Ala Asp Gly Val Pro Ala Ala Glu Ala Leu Ala Gln Leu Gly
            100                 105                 110
Gly Asp Gln His Gly Asp Gln Asp Ala Thr Gly Trp Ala Lys Arg His
        115                 120                 125
Gly Ala Glu Thr Gly Ala Gly Trp Phe Ala Lys Val Leu Val Pro Leu
    130                 135                 140
Arg Glu Gly Leu His Ala Val Glu His Ala Ala Val Val Ser Arg Gly
145                 150                 155                 160
Asp Leu Arg Glu Glu Gly Thr Gln Gln Lys Gly Val Glu Leu Glu Glu
                165                 170                 175
Gly Pro Ile Pro Val Glu Gly Arg Ala Phe Gly Ile Asp Ile Leu Glu
            180                 185                 190
Arg Glu Ala Phe Lys Val Val Leu Val Trp Ser Leu Leu Ser Ile Val
        195                 200                 205
Val Arg Ser His Arg Val Gly Leu Ala Asp Gly Arg Phe Cys Trp Trp
    210                 215                 220
Ile Ala Gly Arg Gln Val Arg Lys Ser Cys Met Gly Leu Cys Thr His
225                 230                 235                 240
Pro Asp Ala Glu Lys Thr Trp Gly Asn Ile Gly Ser Ile Pro Glu Ser
                245                 250                 255
Ile Val Arg Trp Pro Ser Ile Phe Pro Gly Gly Ser Asp Gly Phe Gly
            260                 265                 270
Ala Gly Glu Cys Ala Arg Ala
        275
```

<210> 26811
<211> 224
<212> PRT
<213> A.fumigatus

<400> 26811

```
Thr Arg Met Val Thr Asp Thr Gly Val Gly Pro Ser Asn Arg Val Ser
1               5                  10                  15
Gly Val Arg Pro Ser Lys Arg Thr Leu Asp Arg Ala Leu Cys Pro Pro
            20                  25                  30
Arg Ile Leu Leu Val Asp Leu Arg Leu Leu Pro Arg Ala Leu Val Arg
        35                  40                  45
Pro Pro Arg Thr Gly His Pro Ile Pro Leu Gly Leu Ser Ile Pro Gly
    50                  55                  60
Thr Pro Ser Gln Pro Arg Ser Ser Gln Pro Ala Arg Pro Pro Arg Arg
65                  70                  75                  80
```

```
Pro Leu His Gln Met Asp Arg Pro His Leu Pro Asp Val Pro Ala Asn
                85                  90                  95
Arg His Pro Arg Pro Arg Leu His Pro Gly Pro Val Ala Pro Pro Leu
            100                 105                 110
Leu Gly Thr His Arg Gln Ser Gln Gln Ser Ser Arg Ser Pro Asn Arg
        115                 120                 125
Arg Ala Lys Pro Arg Leu Ala Leu Arg Ala Arg His Arg Arg His Pro
    130                 135                 140
Gln Leu Gly Arg Pro Pro Pro Val Arg Arg Gly His His Leu Pro Arg
145                 150                 155                 160
Asp Arg Leu Pro Arg His His Arg Gln His Asp Glu Pro Arg Ser Ser
                165                 170                 175
Leu Leu Arg Gly Gly Ala Ser Gly Ser Ala Ala Gly Gly Asp Cys Asp
            180                 185                 190
His Ala Cys Glu Asp Pro Pro Pro Leu Pro Ser Ala Pro Gly Asp Asp
        195                 200                 205
Thr Arg Asn Gly Glu Gly Gly Leu Leu His His Pro Arg Arg Gln Phe
    210                 215                 220
```

<210> 26812
<211> 160
<212> PRT
<213> A.fumigatus

```
<400> 26812
Thr Leu Thr Leu Val Asp Pro Leu Asp Arg Thr Thr Val Leu Asp Pro
1                 5                  10                  15
Ile Ser Arg Phe Cys Ala Tyr Phe Pro Asp Ile Asn Glu Cys Ile Lys
            20                  25                  30
Lys Arg Asn His Lys Leu Leu Asp Tyr Asp Ala Met Arg Ala Lys Val
        35                  40                  45
Lys Lys Leu Val Glu Lys Pro Asp Lys Asp Ala Thr Lys Leu Pro Arg
    50                  55                  60
Ala Glu Lys Glu Thr Glu Met Ala Lys Gln Ala Tyr Glu Gln Leu Asn
65                  70                  75                  80
Glu Gln Leu Phe Thr Glu Leu Pro Gln Leu Ile Asp Leu Arg Val Pro
                85                  90                  95
Tyr Leu Asp Pro Ser Phe Glu Ala Leu Val Lys Ile Gln Leu Arg Phe
            100                 105                 110
Cys Ala Glu Ala Tyr Ser Arg Met Ala Gln Val Gln Gln Tyr Leu Asp
        115                 120                 125
Ala Glu Thr Arg Asp Gln Tyr Ala Arg Gly Asp Leu Asp Asn Arg Val
    130                 135                 140
Glu Glu Val Leu Gln Glu Ile Arg Asp Leu Ser Ile Ala Gly Thr Val
145                 150                 155                 160
```

<210> 26813
<211> 184
<212> PRT
<213> A.fumigatus

```
<400> 26813
Thr Glu Ser Gly Pro Lys Leu Val Arg Gln Leu Ser Ser Trp Leu Ser
1                 5                  10                  15
Thr Thr Gln Ser Glu Val Leu Gly Arg Val Val Arg Gln Gly Asp Val
            20                  25                  30
```

```
Ala Leu Pro Ala Asn Phe Gly Asp Tyr Ala Tyr Gly Ala Asn Ala Glu
        35                  40                  45
Trp Gln Leu Arg Gly Val Asp Pro Arg Ser Leu Lys Ser Phe Arg Pro
    50                  55                  60
Thr Leu Val Ile Leu His Asp Glu Leu Glu Ala Pro Leu Gly Lys Val
65                  70                  75                  80
Arg Val Lys Arg Gly Gly Leu Glu Lys Ala Ser Leu Arg Gly His Arg
                85                  90                  95
Gly Leu Ile Ser Val Met Glu Ser Leu Arg Gly Lys Gly Leu Tyr Pro
            100                 105                 110
Pro Arg Thr Gly Gln Ala Ala Gln Gly Ala Asn Ala Gly Leu Ser Ile
        115                 120                 125
Leu Arg Val Gly Val Gly Ile Gly Arg Pro Ser Thr Arg Thr Arg Asn
    130                 135                 140
Asp Val Ala Asp Tyr Val Leu Thr Glu Met Asn Ala Ser Glu Leu Ala
145                 150                 155                 160
Ala Val Arg Ala Ala Ala Val Pro Val Leu Asp Ile Leu Ala Asp Glu
                165                 170                 175
Leu Tyr Arg Glu Ser Asn Asp Asp
            180
```

<210> 26814
<211> 154
<212> PRT
<213> A.fumigatus

```
<400> 26814
Ser Trp Ile Gly Arg Val Cys Cys Ala Ser Ser Ser Ala Leu Leu Ser
1               5                   10                  15
Glu Ser Arg Thr Ser Ser Leu Ser Leu Phe Cys Ala Ser Tyr Ser Ala
            20                  25                  30
Tyr Tyr Ala Cys Met Pro Val Leu Leu Ser Asn Thr Leu Asp Ser Gly
        35                  40                  45
Thr Asp Asp Leu Ser Ile Ser Gly Leu Ile Leu Ile Phe Ile Glu Val
    50                  55                  60
Pro Phe Leu Leu Arg Ile Cys Leu Pro Ser Ser Lys Phe Asp Ala Phe
65                  70                  75                  80
Ile Arg Arg Phe Thr Thr Asn Trp Met Arg Ala Ala Met Tyr Gly Val
                85                  90                  95
Met Ser Val Val Gln Trp Leu Ser Leu Leu Pro Gly Ser Gly Ala Ser
            100                 105                 110
Ser Leu Ile Val Ala Ala Val Phe Leu Leu Ile Ala Ser Ile Phe Tyr
        115                 120                 125
Ala Leu Ala Gly Leu Lys Ser Gln Glu Phe Val Gly Ser Lys Thr Leu
    130                 135                 140
Gly Gly Gln Gly Leu Val Gln Met Ile Val
145                 150
```

<210> 26815
<211> 80
<212> PRT
<213> A.fumigatus

```
<400> 26815
Thr Met Arg Arg Cys Lys His Leu Cys Cys Arg Glu Gly Leu Glu Lys
1               5                   10                  15
```

```
Pro Pro Lys Leu Thr Arg Lys Gln Ser Thr Asn Gly Asn Gln Val Lys
            20                  25                  30
Ser Gly Leu Asn Gln Leu Thr Leu Ser Ala Ser Ile Pro Arg Thr Lys
        35                  40                  45
Ala Gly Arg Thr Ser Thr Ile Glu Ala Arg Asp Lys Gly Ser Gly Lys
    50                  55                  60
Thr Pro Pro Lys Gly Arg Gly Ile His Gly His Gln Leu Arg Tyr His
65                  70                  75                  80
```

<210> 26816
<211> 61
<212> PRT
<213> A.fumigatus

<400> 26816

```
Ile Ser Gln Ser Arg Val Ser Phe Asn Arg Gln Asn Leu Pro Glu Lys
1               5                   10                  15
Lys Thr Leu Thr Asn Asn Lys Asp Ser Gly Lys Gly Ser Thr Ile Phe
            20                  25                  30
Lys Gln Ser Tyr Arg Thr Arg Ala Tyr Leu Leu Arg Lys Val Gln Arg
        35                  40                  45
Ala Tyr Tyr Thr Ala Gly Met Glu Glu Asn Tyr Pro Pro
    50                  55                  60
```

<210> 26817
<211> 123
<212> PRT
<213> A.fumigatus

<400> 26817

```
Ser Lys Gln Arg Asp Val Ser His Leu Ile Ser His His Pro Asn His
1               5                   10                  15
His Glu Phe Arg Asp Tyr His His Ser Asn Leu Ser Ser Phe Ala Met
            20                  25                  30
Glu Thr Thr Leu Thr His Arg Pro Trp Glu Pro Thr Thr Thr Gly Pro
        35                  40                  45
Gln Asn Ala Pro Thr Ser Ser Ala Gln Thr Leu Pro Ser Ile Ser Thr
    50                  55                  60
Leu Thr Ala Ser Met Ala Ser Asn Ile Pro Leu Pro Ala Glu Lys Ser
65                  70                  75                  80
Pro Gly Asn Ala Ser Leu Asn Thr Val Glu Arg Asp Ser Gly Thr Trp
                85                  90                  95
Ser Met Pro Gln Ser Thr Ser Met Ile Ser Cys Ser Thr Ser Ala Met
            100                 105                 110
Pro Asp Phe Thr Arg Gly Cys Glu Ser Ala Gln
        115                 120
```

<210> 26818
<211> 85
<212> PRT
<213> A.fumigatus

<400> 26818

```
Thr Thr Thr Asn Ser His Leu Ile Ile Ile Ser Arg Leu Pro Gln Phe
1               5                   10                  15
Glu Phe His Leu Ser Val Ala Asn Thr Leu Tyr Ala Ser Asp Lys Glu
```

```
            20                  25                  30
Thr Pro His Tyr Gln Pro Asp Glu Gln Lys Leu Asp Ala Arg Phe Phe
        35                  40                  45
Pro Thr Lys Pro Pro Gly Asn Pro Val Ser Ser Ser Pro Glu Ala Gln
    50                  55                  60
Ser Ile Asn Lys Ala Arg His Phe His Ile Lys Thr Ile Ala Gln Ala
65                  70                  75                  80
Lys Ser Gln Leu Met
                85
```

<210> 26819
<211> 198
<212> PRT
<213> A.fumigatus

```
<400> 26819
Arg Arg Ala Ala Ala Met Ser Leu Ser Met Ala Ile Leu Ala Gly Thr
1               5                   10                  15
Thr Ser Val Thr Asp Asn Thr Gly Ala Thr Val Val Ala Val Ile Phe
            20                  25                  30
Leu Phe Val Phe Gln Phe Ile Phe Thr Val Gly Tyr Ser Gly Leu Thr
        35                  40                  45
Phe Leu Tyr Ala Thr Glu Val Ala Pro Leu Gln Leu Arg Ala Ala Ile
    50                  55                  60
Ser Ala Val Ser Thr Ala Ala Val Trp Thr Phe Asn Phe Leu Leu Ala
65                  70                  75                  80
His Val Thr Pro Val Gly Phe Asn Ser Ile Gly Leu Gln Tyr Tyr Ile
                85                  90                  95
Ile Phe Ala Val Leu Asn Ala Ala Ile Glu Pro Thr Val Tyr Leu Phe
            100                 105                 110
Phe Pro Glu Thr Asn Gly Arg Thr Leu Glu Glu Ile Asp Glu Ile Phe
        115                 120                 125
Ile Arg Ser Lys Ser Ile Phe Glu Pro Ala Pro Arg Arg Ala Gln Pro
    130                 135                 140
Ala Pro Asp Ala Phe Cys Arg Ser Gly Arg Arg Arg Asp Gly Ile Arg
145                 150                 155                 160
Gly Arg Pro Leu Gln Ile Asn Gln Gly Leu Asn Cys Gln Arg Phe Asp
                165                 170                 175
Asp Ser Arg Leu Asp Trp Val Asp Pro Glu Gly Phe Arg Gln Val Ser
            180                 185                 190
Gly Gln Arg Ser Ala Gly
        195
```

<210> 26820
<211> 140
<212> PRT
<213> A.fumigatus

```
<400> 26820
Ser Asn Pro Pro Val Pro Met Val His Pro Arg Leu Ala Ala Asn Leu
1               5                   10                  15
Ser Leu Pro Lys Pro Leu Ala Cys Ile Gln Glu Pro Ser Leu Gln Gly
            20                  25                  30
Arg Cys Ser Gly His Pro Asp His His Cys Thr Ser Ser Ala Ser Ser
        35                  40                  45
Ser Ile Gly Leu Pro Met Gln Met Gln Ile Leu Thr Arg Glu Thr Lys
```

```
    50                  55                  60
Asp Ser Ser Ser Ser Trp Asn Gly Gln Thr Met Met Arg Ser Glu Ile
65                  70                  75                  80
Ile Pro Gln Lys Ala Ala Gly Val Asn Leu Gly Gln Gly His Leu Tyr
                85                  90                  95
Tyr His Phe Ser Val Ser Thr Leu Ala Thr Asn Ala Pro Asp Pro Ser
            100                 105                 110
Leu Glu His Gln Ile Ala Phe Phe Glu Val Pro Pro Leu Ser Pro Thr
        115                 120                 125
Ala Pro Ser Cys Ser Phe Leu Lys Asp Phe Leu Ser
    130                 135                 140
```

<210> 26821
<211> 155
<212> PRT
<213> A.fumigatus

<400> 26821

```
Thr Arg Thr Asn Pro Arg Pro Ala Val Leu Ser Thr Gly Met Ile Leu
1               5                   10                  15
Phe Phe Cys Tyr Pro Cys Ala Arg Ala Ala Thr Asp Phe Ser Ser Asp
            20                  25                  30
Ile Asn Thr Asn Asn Gly Gly Gln Tyr Asn Ala Leu Tyr Trp Tyr Met
        35                  40                  45
Val Gly Val Arg Leu Phe Arg Asp Arg Ala Val Ala Asn Ala Pro Arg
    50                  55                  60
Thr Pro Ala Thr Ser Lys Gln Lys Arg Ile Ala Trp Gly Cys Thr Ala
65                  70                  75                  80
His Ile Arg Cys Thr Leu Val Ala Ala Ala Leu Arg Ala Pro Thr Leu
                85                  90                  95
Ile Arg Leu Ser Leu Arg Ile Leu Ile Phe Arg Gly Asn Val Pro Asp
            100                 105                 110
Ser Ala Arg Gly Lys Val Ser Gly Lys Ala Ser Gly Ala Asp Ser Thr
        115                 120                 125
Phe Lys Trp Val Val His Trp Tyr Ala Glu Asn Pro Met Ser Ala Leu
    130                 135                 140
Asn Val Pro Met Leu Ile Ile Gln Val Gln Arg
145                 150                 155
```

<210> 26822
<211> 171
<212> PRT
<213> A.fumigatus

<400> 26822

```
Gly Cys Thr Arg Pro Thr Arg Ala Cys Pro Ala Gly Ala Arg Ser Pro
1               5                   10                  15
Thr Pro Ser Glu Ala Pro Arg Cys Leu Thr Ser Pro Trp Leu Ser Ser
            20                  25                  30
Ser Arg Ser Thr Ala Pro Ser Arg Ser Ser Ser Pro Arg Arg Pro Arg
        35                  40                  45
Arg Pro Ala Pro Pro Arg Cys Ala Ser Ala Arg Pro Cys Leu Leu Arg
    50                  55                  60
Val Val Ala Pro Lys Ser Arg Tyr Ala Thr Gly Gln Leu Ser Ser Pro
65                  70                  75                  80
Asp Lys Lys Leu Met Arg Gln Val Asn Ser Trp Thr Gly Pro Ile Pro
```

```
                85                  90                  95
Ser Ala Pro Lys Asp Leu Asn Ser Arg Gly Val Thr Arg Gly Ala Tyr
            100                 105                 110
Arg Gly Leu Gly Glu Val Tyr Asp Val Ala Ile Pro Ala Gly Thr Ile
        115                 120                 125
Val Ala Gly Thr Asn Thr Val Arg Gly Asn Ser Phe Leu Ser Ser Ser
    130                 135                 140
Tyr Arg Asp Asp Asn Arg Asn Arg Leu Pro Leu Val Ser Ser Leu Ala
145                 150                 155                 160
Ala Pro Glu Thr Arg Ser Ser Val Leu Thr Leu
                165                 170
```

<210> 26823
<211> 64
<212> PRT
<213> A.fumigatus

<400> 26823

```
Arg Gly Thr Phe His Pro Arg Gly Glu Asp Gly Ile Asp Val Lys Phe
1               5                   10                  15
Thr Val Asn Arg Ser Asn Cys Asp Ile Thr Ser Ile Asn Tyr Tyr Gly
            20                  25                  30
Ala Glu Leu Gln Tyr Gln Gly Thr Gly Ser His Ile Gly Ser Gly Leu
        35                  40                  45
Gly Ser Ala Ser Val Ser Ala Thr Gln Ser Gly Val Phe Arg Tyr Cys
    50                  55                  60
```

<210> 26824
<211> 77
<212> PRT
<213> A.fumigatus

<400> 26824

```
Leu Ser Arg Tyr Asn Asp Glu Ala Gln Tyr Trp Thr Tyr Thr Ala Ser
1               5                   10                  15
Asp Gly Ser Phe Thr Ser Pro Ala Met Lys Pro Gly Thr Tyr Thr Met
            20                  25                  30
Val Tyr Tyr Gln Gly Glu Tyr Lys Val Ala Ser Thr Ser Val Ser Val
        35                  40                  45
Ser Ala Gly Ser Thr Thr Thr Lys Asn Ile Ser Gly Ser Val Thr Thr
    50                  55                  60
Gly Lys Thr Ile Phe Lys Ile Gly Glu Trp Asp Gly Gln
65                  70                  75
```

<210> 26825
<211> 95
<212> PRT
<213> A.fumigatus

<400> 26825

```
Ser Ser Pro Ser Thr Gly Arg Thr Ala Thr Ser His Arg Ser Thr Thr
1               5                   10                  15
Thr Ala Pro Ser Cys Ser Ile Lys Ala Gln Ala Val Thr Leu Gly Gln
            20                  25                  30
Val Ser Asp Leu His Pro Ser Leu Pro Leu Arg Ala Val Cys Ser Gly
        35                  40                  45
```

```
Thr Ala Glu Asp Gly Ile Ile Val Leu Thr Ser Val Cys Asp Tyr Ile
    50                  55                  60
Lys Val Thr Cys Ser Thr Ser Thr Leu Thr His Tyr Phe Val Val His
65                  70                  75                  80
Asn Gly Asp Pro Ile Ile His Met Ala Thr Tyr Ile Thr Ala Gly
                85                  90                  95

<210> 26826
<211> 130
<212> PRT
<213> A.fumigatus

<400> 26826
Gln His Arg Pro Thr Gly Phe Arg Asn Ala Ala Asn Gln Leu Arg Met
1               5                  10                  15
His Pro Ser Asp Ser Arg Met Ser Ser Trp Gly Pro Leu Thr Tyr Thr
            20                  25                  30
Val Gly Ser Ser Ser Leu Ser Asp Phe Pro Met Ala Ile Phe Lys Ser
        35                  40                  45
Val Asn Ser Pro Val Thr Ile Lys Phe Thr Ala Ser Ser Ser Gln Thr
    50                  55                  60
Gly Ala Ala Thr Leu Arg Ile Gly Thr Thr Leu Ser Phe Ala Gly Gly
65                  70                  75                  80
Arg Pro Gln Val Thr Val Cys His Arg Pro Ala Leu Phe Ala Gly Gln
                85                  90                  95
Glu Ala Asn Glu Thr Gly Gln Leu Val Asp Arg Thr Asp Ser Leu Arg
            100                 105                 110
Pro Gln Arg Pro Gln Leu Ala Arg Cys Tyr Ser Arg Cys Val Gln Gly
        115                 120                 125
Ala Arg
    130

<210> 26827
<211> 222
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (99)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26827
Tyr Ile Glu Ile Trp Phe Glu Ser Leu Asn Ser Ile Thr Met Ser Ala
1               5                  10                  15
Pro Ser Glu Ala Pro Ala Ala Thr Val Ser Val Ile Asp Ser His Ala
            20                  25                  30
Asn Ser Ala Pro Ser Asn Ser Ile Lys Asp Gln Thr Ser Ala Ala Thr
        35                  40                  45
Thr Val Gln Ser Lys Ala Gln Val Pro Pro Ser Asn Thr Ser Ala Arg
    50                  55                  60
Asp Glu Lys Asp Asn Glu Leu Asp Leu Pro Thr Ser Ala Ala Asp Gly
65                  70                  75                  80
Leu Val Gln Lys Pro Phe Pro Arg Pro Leu Asp Thr Ser Lys Ala Ala
                85                  90                  95
Ala Pro Xaa Glu Leu Thr Pro Asp Gln Gln Ser Lys Tyr Glu Ala Val
```

```
            100                 105                 110
Leu Lys Ala Val Ser Glu Trp Thr Thr Leu Pro Thr Thr Ser Ala Lys
        115                 120                 125
Asn Ala Pro Thr Ala Pro Ile Thr Asp Asp Glu Arg Met Phe Leu Thr
    130                 135                 140
Arg Glu Cys Leu Leu Arg Tyr Leu Arg Ala Thr Lys Trp Asn Val Thr
145                 150                 155                 160
Glu Ala Ile Asn Arg Leu Gln Arg Thr Leu Thr Trp Arg Arg Glu Tyr
                165                 170                 175
Gly Leu Glu Lys Leu Thr Pro Ala Tyr Ile Ser Ile Glu Asn Glu Thr
            180                 185                 190
Gly Lys Gln Val Ile Leu Gly Tyr Asp Ile His Ala Arg Pro Cys Leu
        195                 200                 205
Tyr Leu Leu Pro Ser Asn Gln Asn Thr Glu Thr Ser Asp Arg
    210                 215                 220

<210> 26828
<211> 418
<212> PRT
<213> A.fumigatus

<400> 26828
His Ala Trp Phe Asn His Ser Ser Thr Ile Pro Ile Tyr Arg Thr Glu
1               5                   10                  15
Leu Leu Leu Phe Asp Asp Glu Ile Met Val Leu Gly Ile Ser Pro Pro
            20                  25                  30
Ser Asp Pro Lys Arg Ala Gln Ala Trp Trp Thr Glu Val Phe Leu Ser
        35                  40                  45
His Pro Pro Arg Glu Val Val Tyr Ala Pro Glu Phe Pro Pro Arg Pro
    50                  55                  60
Asp Glu Phe Gln Glu Ile Asp Trp Ala Pro Asn Val Gly Ser Lys Asp
65                  70                  75                  80
Ala Lys Leu Ala His Ile Leu Trp Asp Arg Pro Thr Gln Lys Leu Arg
                85                  90                  95
Glu Tyr Leu Asp Ser Leu Gly Gln His Pro Phe Pro Arg Pro Asp Asp
            100                 105                 110
Asp Asp Asp Thr Arg Ala Met Asn His Thr Glu Gly Leu Ala Phe Glu
        115                 120                 125
Val Tyr Glu Leu Leu Leu Arg Glu His Met Tyr Pro Ile Ala Glu Ser
    130                 135                 140
Glu Trp Gln Asp Lys Trp Thr Gln Met Gly Met Asp Gln Ala Lys Trp
145                 150                 155                 160
Gly Ile Asp Asp Ile Leu Gln Asp Trp Gly His Ala Pro Asn Pro Gly
                165                 170                 175
Pro Ile Leu Ile Arg Gly Asn Asp Val Met Thr Ser Arg Gln Leu Thr
            180                 185                 190
Val Ala Arg Leu Lys Gln Glu Leu Arg Asp Arg Asn Gln Pro Glu Thr
        195                 200                 205
Gly Thr Ser Gln Val Leu Arg Gln Arg Leu Cys Asp Tyr Glu Arg Lys
    210                 215                 220
Ser Leu Thr Leu Phe Ser Arg Ser Asp Leu Gly His Trp Gly Ile Ser
225                 230                 235                 240
Ser Gly Lys Pro Arg Gly Arg Arg Ile His Pro Gly Asp Lys Leu Asp
                245                 250                 255
Thr Leu Asp Met Tyr Thr Trp Ala Ile Lys Leu Ser Pro Tyr Asn Pro
            260                 265                 270
```

```
Thr Tyr Trp Ile Ser Arg Ala Tyr Cys His Tyr Gln Gln Ala Phe Phe
        275                 280                 285
Asp Leu Ala Ile Gly Asp Ala Tyr Arg Ala Gln Leu Leu Cys Glu Val
    290                 295                 300
Leu Val Asp Ala Arg Cys Arg Asn Arg Gln Pro Gly Leu Tyr Pro Arg
305                 310                 315                 320
Ile Trp His Ala Ile Ser Gln His Ile Met Ala Gly Met His Thr Asp
                325                 330                 335
Thr Gly Asp Val Pro Pro Glu Val Glu Lys Met Arg Gln Pro Asn Gly
            340                 345                 350
Ile Asn Tyr Phe Ile Pro Thr Leu Arg Lys Ala Leu His Asn Ile Ile
        355                 360                 365
Gly Leu Ser Leu Ala Ala Leu Gln Ala Arg Glu Asp Gly Lys Ala Met
    370                 375                 380
Glu Lys Tyr Leu Pro Gln Arg Val Ile Met Pro Asp Arg Asp Arg Arg
385                 390                 395                 400
Pro Phe Glu Arg Arg Arg Glu Val Phe Thr Ala Arg Ala Arg Lys Gln
                405                 410                 415
Ala Trp
```

<210> 26829
<211> 176
<212> PRT
<213> A.fumigatus

<400> 26829

```
Ser Val Gly Pro Ser Ser Arg Val Val Lys Met Gly Pro Thr Arg Trp
1               5                   10                  15
Gly Arg Arg His Ser Ile Ile Ala Gly Gly Ile Gly Leu Ser Thr Thr
            20                  25                  30
Met Phe Leu Ile Gly Ala Leu Tyr Ala Ala Asp Ala Val His Pro Ser
        35                  40                  45
Ser Gly Pro Gly Arg Trp Leu Val Ile Val Ala Ile Tyr Leu Phe Ala
    50                  55                  60
Val Ile Phe Ser Leu Thr Trp Ala Ile Cys Ile Lys Val Tyr Ala Ala
65                  70                  75                  80
Glu Ile Gln Pro Gln Arg Thr Arg Ala Ser Ala Thr Ser Leu Ala His
                85                  90                  95
Gly Ser Asn Trp Val Thr Asn Phe Leu Val Ala Leu Thr Thr Pro Ile
            100                 105                 110
Leu Leu Ala Lys Ser Ser Phe Gly Ala Tyr Phe Leu Phe Gly Gly Cys
        115                 120                 125
Thr Leu Leu Thr Ala Leu Val Cys Ala Leu Phe Met Pro Glu Thr Lys
    130                 135                 140
Gly Lys Ser Leu Asp Glu Ile Glu Glu Ala Phe Lys Ser Lys Ser Leu
145                 150                 155                 160
Gly Ser His Leu Ala Lys Ala Ile Arg Pro Ile Thr Arg Ser Ser Asn
                165                 170                 175
```

<210> 26830
<211> 284
<212> PRT
<213> A.fumigatus

<400> 26830

```
Thr Arg Ser Ala Asp Pro Ser Thr Pro Val Val Lys Thr Asn Leu Tyr
1               5                  10                  15
Val Gln Asn Glu Ala Thr Ala Ala Leu Leu Ser Arg Thr Val Lys Ala
            20                  25                  30
Asn Glu Glu Val Leu Ser Gly Leu Lys Val Ser Arg Ala His Pro Ala
        35                  40                  45
Phe Gly Ser Ala Val Lys Pro Ser Thr Ser Leu Ala Glu Leu Ala Thr
    50                  55                  60
Leu Gly Ile Asn Asp Pro Ala Val Ala Trp Pro Val Phe Glu Ala Leu
65                  70                  75                  80
Trp Ala Glu Leu Thr Ala Thr Ser Ala Ser Pro Gly Tyr Asp Met Ala
                85                  90                  95
Phe Lys Thr Arg Pro Pro Ile Leu Ala Thr Val Asp Gly Leu Ala His
            100                 105                 110
Trp Met Lys Asn Thr Glu Tyr Arg Ser Ala Asp Phe Glu Pro Ile His
        115                 120                 125
Ala His Asp Leu Val Phe Val Arg His Phe Leu Ser Leu Leu Lys Pro
    130                 135                 140
Gly Ala Gly Gln Pro Thr Leu Pro Asn Gly Gly Met Leu Leu Tyr Ala
145                 150                 155                 160
Thr Ser Ala Ser Asn Asn Pro Thr Val Tyr Ser Phe Glu Val Ala Leu
                165                 170                 175
Lys Gln Val Ala Ala Arg Gln Ala Gly Leu Asn Pro Ser Ala Pro Glu
            180                 185                 190
Phe Pro Gln Ala Asp Pro Tyr Ser Lys Val Asp Lys Arg Val Leu Asp
        195                 200                 205
Ala Phe Asp Ser Pro Lys Pro Ser Ser Ala Lys Glu Gly Ala Leu Glu
    210                 215                 220
Leu Gln Thr Ile Gly Gly Leu Thr Arg Asp Glu Ala Arg Gly Phe Met
225                 230                 235                 240
Glu Tyr Phe Ala Arg Ser Gly Leu Leu Arg Glu Asn Ile Asn Asp Glu
                245                 250                 255
Trp Val Gly Glu Lys Trp Ser Leu Ala Gly Gly Gly Ile Val Gly Glu
            260                 265                 270
Leu Glu Lys Leu Gly Arg Arg Leu Arg Val Met Ala
        275                 280
```

<210> 26831
<211> 291
<212> PRT
<213> A.fumigatus

<400> 26831

```
Arg Gly Val Val Lys Ala Ile Arg Arg Lys Met Glu Ala Asp Leu Asn
1               5                  10                  15
Lys Lys Arg His His Ala Pro Arg Ala His Arg Thr Arg Lys Ala Pro
            20                  25                  30
Pro Gly Thr Val Leu Ala Leu Lys Pro Ser Gln Ala Leu Gln Ile Lys
        35                  40                  45
Pro Asn Thr Thr Val Ala Glu Ala Ala Gln Met Met Ala Ala Lys Arg
    50                  55                  60
Glu Asp Cys Val Leu Val Thr Asp Asp Asp Asp Arg Ile Ala Gly Ile
65                  70                  75                  80
Phe Thr Ala Lys Asp Leu Ala Phe Arg Val Val Gly Asn Gly Gln Lys
                85                  90                  95
Ala Arg Glu Ile Thr Val Ala Glu Ile Met Thr Lys Asn Pro Leu Cys
```

```
            100                 105                 110
Ala Arg Thr Asp Thr Ser Ala Thr Asp Ala Leu Asp Leu Met Val Arg
        115                 120                 125
Lys Gly Phe Arg His Leu Pro Val Met Asp Glu Asn Gln Asp Ile Ser
    130                 135                 140
Gly Ile Leu Asp Ile Thr Lys Cys Phe Tyr Asp Ala Met Glu Lys Leu
145                 150                 155                 160
Glu Arg Ala Tyr Ser Ser Ser Arg Lys Leu Tyr Asp Ala Leu Glu Gly
                165                 170                 175
Val Gln Thr Glu Leu Gly Ser Thr Gln Pro Gln Gln Ile Ile Gln Tyr
            180                 185                 190
Val Glu Ala Leu Arg Ser Lys Met Ser Gly Pro Thr Leu Glu Ser Val
        195                 200                 205
Leu Asp Gly Leu Pro Pro Thr Thr Val Ser Val Arg Thr Ser Val Arg
    210                 215                 220
Asp Ala Ala Thr Leu Met Lys Glu His His Thr Thr Ala Leu Leu Val
225                 230                 235                 240
Gln Asp Gln Gly Ser Ile Thr Gly Ile Phe Thr Ser Lys Asp Ile Val
                245                 250                 255
Leu Arg Val Ile Ala Pro Gly Leu Asp Pro Ala Thr Cys Ser Val Val
            260                 265                 270
Arg Val Met Thr Pro His Pro Asp Phe Ala Pro Ala Asp Met Ser Ile
        275                 280                 285
Gln Ala Ala
    290
```

<210> 26832
<211> 233
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (216)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26832

```
Asp Gly Ile Phe Ile Tyr Cys Arg Ser Ser Leu Leu Glu His Glu His
1               5                   10                  15
Gly Leu Gly Pro Ser Gly Leu Asp Arg Ile Arg Gln Pro Pro Ser Arg
            20                  25                  30
Thr Leu Asn Leu Pro Asn Arg Ser Ala Ser Ser Leu Val Pro Leu Ser
        35                  40                  45
Pro Gln Ser Asn Thr Pro Ser Arg Arg Ser Ser Thr Ala Ser Lys Pro
    50                  55                  60
Ser Leu Met Arg Ile Ser Ser Asn Asp Ser Ile Ser Thr Leu Glu Asp
65                  70                  75                  80
Leu His Arg Phe Pro Leu Glu Ser Leu His Ser Phe Ser Phe Ala Gln
                85                  90                  95
Gln Ser Asp Glu Leu Leu Asn Ser Arg His Asn Ile Leu Lys Arg Ser
            100                 105                 110
Ile Asp Phe Met Arg Asp Arg Phe Gly Trp Ser Ala Gly Asn Ser Ala
        115                 120                 125
Ile Ala Asn Ala Gln Ala Arg Met Ala Gly Asp Ala Glu Ala Gln Ser
    130                 135                 140
Met Val Glu Leu Met Ser Lys Thr Ser Ile Ala Gly Lys Asp Asp Arg
```

```
145                 150                 155                 160
His Asn Tyr Ala Gly Leu Ser Arg Gly Pro Leu Thr Ser Pro Ala Asp
                165                 170                 175
Val Asp Ser Gly Asn Leu Phe Asp Gln Ala Phe Thr Gly Pro Gly Gly
            180                 185                 190
Ser Ala Ile Glu Ser Lys Ala Thr Arg Gln Gly His Asp Ala Ser Gly
        195                 200                 205
Gly Asn Leu Leu Ser Thr Gly Xaa Ile Pro His Gln Arg Arg Glu Met
    210                 215                 220
Lys Ser Ala Pro Ser Ser Arg Arg Pro
225                 230
```

<210> 26833
<211> 64
<212> PRT
<213> A.fumigatus

<400> 26833
Ala Ser Ile Ile Val Ser Val Val Leu Pro Arg Asn Thr Cys Phe Gly
1 5 10 15
His Glu Leu Tyr His Thr Leu Gly Leu Arg Ile Ala Ser His Ala Ser
 20 25 30
Leu Arg Val Gly Asn Gly Gly Ile Ala Ser Gly Pro Ala Glu Thr Val
 35 40 45
Thr His Lys Ile Tyr Gly Ser Phe Gln Asn Val Met Thr Thr Val Glu
 50 55 60

<210> 26834
<211> 146
<212> PRT
<213> A.fumigatus

<400> 26834
Gln Trp Cys Gly Pro Val Leu Asn Ser Arg Pro Trp Pro His Trp Gln
1 5 10 15
Ala Ser Thr Ser Leu Ser Thr Ala Ser Ile Arg Thr Asp Thr Ala Thr
 20 25 30
Met Ala Asp Ile Ala Asp Gln Leu Ile Glu Lys Leu Gln Thr Leu Glu
 35 40 45
Thr Ser Ile Phe Glu Gly Gln Asp Ala Thr Arg Gln Lys Leu Ala Leu
 50 55 60
Ala Ala Arg Lys Leu Phe His Thr Leu Glu Thr Lys Glu Glu Lys Thr
65 70 75 80
Met Arg Leu Ala Ile Glu Glu Pro Val Met Phe Ser Val Leu Gln Ala
 85 90 95
Leu Ile Asp Thr Gly Leu Phe Glu Gly Trp Ala Ala Ala Gly Gly Gly
 100 105 110
Glu Arg Asp Val Thr Glu Leu Ala Lys Leu Ser Lys Arg Asp Val Glu
 115 120 125
Pro Glu Leu Leu Arg Arg Phe Leu Ser Ala Glu Ser Ala Ile Pro Arg
 130 135 140
Gly Cys
145

<210> 26835
<211> 73

<212> PRT
<213> A.fumigatus

<400> 26835
Phe Phe Ser Arg Leu Asp Phe Ser Ile Phe Lys Arg Leu Ile Ile Ile
1 5 10 15
Ala Met Ser Ala Pro Thr Thr Pro Thr Phe Lys Leu Val Leu Val Gly
20 25 30
Asp Ser Gly Thr Gly Lys Ala Ser Lys Ile Thr Leu Ile Leu Pro Phe
35 40 45
Thr Leu Glu Met Gln Tyr Leu Ala Leu Leu Ala Phe Tyr Lys Gly Arg
50 55 60
Thr Phe Leu Asn Tyr Leu Pro Trp Leu
65 70

<210> 26836
<211> 182
<212> PRT
<213> A.fumigatus

<400> 26836
Ser Ile Val Arg Thr Thr Arg Ala Arg Ile Ile His Leu Arg Thr Asp
1 5 10 15
His Lys Glu Val Met Lys His Leu Glu Lys Gly Leu His Glu His Phe
20 25 30
Ala Ser Phe Gln Arg Ala Gln Ala Ala Val Ala Ala Ser Gly Met Asn
35 40 45
Gly Thr Ser Val Gln Arg Ser Asn Leu Gly Glu Asn Ser Leu Ser Asn
50 55 60
Ala Glu Met Ile Gly Thr Pro Phe Ala Lys Val Asn Ser Val Val Pro
65 70 75 80
Asp Ser Pro Ala Asp Gln Ala Gly Leu Lys Ala Gly Asp Ile Ile Arg
85 90 95
Ser Phe Gly Asn Val Asn Trp Ile Asn His Glu Arg Leu Ser Lys Val
100 105 110
Ala Gln Thr Val Gln Gln Asn Glu Gly Val Ser Val Arg Ile Phe Val
115 120 125
Leu Lys Val His Trp Ala Asp Leu Thr Gln Gly Thr Ile Val Val Lys
130 135 140
Ile Val Arg Glu Asp Gly Pro Ala Ser Asn Asn Thr Thr Glu Leu Ser
145 150 155 160
Leu Glu Leu Ile Pro Arg Arg Asp Trp Gly Gly Arg Gly Leu Leu Gly
165 170 175
Cys His Phe Val Pro Leu
180

<210> 26837
<211> 70
<212> PRT
<213> A.fumigatus

<400> 26837
Arg Leu Trp Leu Ile Asp Gln Asn Leu Ala Val Leu Val Leu Gly Arg
1 5 10 15
Ile Leu Ser Lys Ala Ile Asp Pro Trp Glu Pro Thr Leu Thr Thr Lys
20 25 30

```
Ala Gly Ile Gln Ala Asn Arg Glu Ala Ala Ile Val Thr Ile Lys Ala
        35                  40                  45
Ser Arg Lys Arg Ile Trp Pro His Gly Leu Val Asp Asn Leu Ser Ser
    50                  55                  60
Ile His Ser Asp Arg Gln
65                  70
```

<210> 26838
<211> 60
<212> PRT
<213> A.fumigatus

<400> 26838

```
Arg Cys Thr Ile Ser Asn Ser Pro Phe Leu His Asp Asn Ala Asp Phe
1               5                   10                  15
Asn Ala Gly Ile Gly Val Val Val Met Leu Gly Gln Ser Asn Tyr Leu
            20                  25                  30
Ala Ile Val Gly Gly Gly Arg Asn Pro Lys Phe Pro Gln Asn Lys Val
        35                  40                  45
Arg Ser Phe Gln Phe Trp Thr Ala Cys Ile Leu Arg
    50                  55                  60
```

<210> 26839
<211> 65
<212> PRT
<213> A.fumigatus

<400> 26839

```
Asp Ser Leu Gln Leu Val Ile Trp Asp Asp Ala Lys Gln Lys Ala Val
1               5                   10                  15
Ile Thr Leu Glu Phe Arg Thr Ser Val Leu Gly Val Arg Leu Ser Lys
            20                  25                  30
Ser Arg Ile Val Val Ala Leu Leu Asn Ser Ile His Ile Phe Ala Phe
        35                  40                  45
Ser Ser Leu His Ala Gly Ala Gly Arg Ile Pro Arg Phe Glu Gly Asn
    50                  55                  60
Ala
65
```

<210> 26840
<211> 63
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (2)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26840

```
Arg Xaa Thr Phe Gly Pro Cys Gly Arg Arg Ile Ala Pro Ser Val Ser
1               5                   10                  15
Val Ile Ala Val Thr Thr Cys Val Pro Thr Val Thr Tyr Val Thr Val
            20                  25                  30
Pro Val Ser Thr Pro Ser Gly Ala Ala Gly Val His Ser Ser Val Pro
        35                  40                  45
```

```
Val Ile Pro Ser Val Pro Ala Gly Thr Pro Ala Pro Ser Ala Thr
    50                  55                  60

<210> 26841
<211> 366
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (360)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26841
Tyr Trp Ser Ser His Leu Gln Trp Thr Gly Phe Asp Glu Gly Pro Met
1               5                  10                  15
Arg Pro Phe Ser Ser Phe Ile Phe Ser Ser Leu Leu Ser Leu Leu Ser
            20                  25                  30
Val Val Ser Ser Lys Trp Ile Phe Leu Gln Ala Ile Val Ser Asn Arg
        35                  40                  45
Gly Ser His Val Ile Ile Phe Glu Asp His Glu Tyr Trp Phe Tyr Leu
    50                  55                  60
Trp Pro Ala Val Val Ile Trp Val Ser Asp Arg Val Leu Arg Leu Ile
65                  70                  75                  80
Arg Ile Val Tyr Cys Asn Leu His Val Gln Leu Gly Ser Arg Ser Arg
                85                  90                  95
Phe Gln Cys Thr Glu Cys Val Ala Ala Tyr Asp Lys Asp Ala Asp Ile
            100                 105                 110
Ile His Leu Glu Leu Thr Pro Gly Ser Gly Leu Gln Pro Ala Pro Gly
        115                 120                 125
Gln Tyr Tyr Phe Leu Tyr Lys Pro Phe Arg Leu Thr Gly Trp Glu Ser
    130                 135                 140
His Pro Phe Thr Leu Gly Ser Trp Ser Tyr Asn Asp Gly Ala Pro Ser
145                 150                 155                 160
Thr Gln Cys Arg Ser Leu Lys Arg Asp Thr Thr Thr Asp Val Ser Glu
                165                 170                 175
Ile Pro Leu Leu Pro Asp Thr Pro Ser Ser Gly Ser Asp Tyr Gly Ser
            180                 185                 190
Ile Asp Thr Ser Thr Asp Pro Pro Glu Arg Lys Leu Ala Leu Arg Phe
        195                 200                 205
Trp Ile Arg Pro Tyr Asp Gly Trp Thr Arg His Leu Arg Asp Gln Cys
    210                 215                 220
Leu Gln Ser Pro Thr Arg Ile Ile Gln Pro Asn Ile Leu Leu Glu Gly
225                 230                 235                 240
Pro Tyr Gly Glu Gln Cys Pro Leu Trp Lys Tyr Glu Ser Val Leu Leu
                245                 250                 255
Ile Ala Gly Gly Thr Gly Ile Ala Ala Ala Val Pro Tyr Ile Gln Asp
            260                 265                 270
His Ile Leu Arg Ser Ser Thr Gly Gln Thr Ser Thr Gln Ser Ile His
        275                 280                 285
Leu Val Trp Thr Ala Arg Gln Pro Ala Leu Leu Arg Asp Ile Ala Gly
    290                 295                 300
Arg Glu Leu Lys Gln Ala Leu Ser Arg Lys Asp Phe Arg Val Ser Phe
305                 310                 315                 320
Tyr Val Thr Ser Glu Ser Ala Ser Gln Gly Ala Ile Met Asp Gly Val
                325                 330                 335
```

```
Glu Phe Ala Cys Gly Arg Pro Asp Leu Gln Ala Ile Ile Thr Ala His
            340                 345                 350
Ala Glu Glu Ala Arg Leu Gly Xaa Ser Ser Val Leu Val Trp
        355                 360                 365

<210> 26842
<211> 239
<212> PRT
<213> A.fumigatus

<400> 26842
Val Leu Ser Ser Glu Pro Glu Trp His Ser Leu Glu Ala Asp His Ile
1               5                   10                  15
Pro Gln Leu Val Val Lys Lys His Pro Asp Pro Val Thr Ala Tyr Asp
            20                  25                  30
Asp Gly Pro Leu Ala Ala Tyr Val Leu Arg Leu Tyr Asp Ser Ala Glu
        35                  40                  45
Phe His Asp Cys Arg Ile Leu Leu Lys Ser Gly Lys Asp Asn Phe Pro
    50                  55                  60
Pro Ile Thr Ile Arg Thr His Lys Val Leu Ile Ala Arg Ser Pro Leu
65                  70                  75                  80
Leu Ala Ser Ile Met Lys Ser Pro Ala Ala Lys Gln Asp Ile Pro Glu
                85                  90                  95
Ile Val Ala Met Ala Gly Glu Asn Phe Leu Leu Val Lys Ala Phe Gly
            100                 105                 110
Ile Ala Leu Gln Ser Leu Tyr Gly Leu Ala Leu Leu Asn Gln Lys Arg
        115                 120                 125
Leu Arg Ser Met Thr Leu Phe Ser Leu Gly Tyr Thr Glu Glu Ser Ile
    130                 135                 140
Lys Ser Ser Pro Tyr Pro Ile Asn Thr Ala Leu Ala Asp Phe Ala Leu
145                 150                 155                 160
Cys Tyr Ala Ser Ser Gly Ala Phe Leu Gln Arg Arg Asp Ile Val Glu
                165                 170                 175
Thr Gly Ile Lys Leu Ile Val Glu Val Ile Asn Trp Asp Asn Ile Glu
            180                 185                 190
Leu Ile Phe Tyr Phe Gly Phe Cys Met Ser Lys Phe Leu Ile Thr Ala
        195                 200                 205
Pro Gln Met Ala Glu Leu Glu Lys Ser Ser Ala Asp Gln Pro Ala Thr
    210                 215                 220
Ala Asp Gln Val Phe Thr Ser Gly Leu Ala Gly Arg Thr His Ala
225                 230                 235

<210> 26843
<211> 315
<212> PRT
<213> A.fumigatus

<400> 26843
Ala Trp Glu Phe Lys His Pro Glu Phe Arg Ala Asn Ser Lys Glu Ser
1               5                   10                  15
Leu Asp Asn Ile Arg Arg Lys Ala Pro Ala Pro Arg Lys Gln Thr Gln
            20                  25                  30
Asn Thr Asp Asp Ser Val Pro Thr Gln Gln Ile Asp Leu Leu Asn Gln
        35                  40                  45
Gln Ile Val Ala Gln Gln Gln Gln Ile Gln His Leu Ser Asp Arg Tyr
    50                  55                  60
```

```
Ala Gln Leu Thr Val Asp His Gln Leu Met Leu Gln Glu Leu Met Arg
65                  70                  75                  80
Val Gln Lys Thr Val Leu Asn His Glu Asn Val Ile His Gln Val Met
                85                  90                  95
Asn Tyr Leu Leu Ser Val Asp Ala Arg Gln Arg Arg Asp Ser Lys Ala
            100                 105                 110
Ala Ala Ala Phe Gln Ala Gln Gly Gln Gly Gly Ser Asn Val Asn Gly
        115                 120                 125
Gly Gln Val Asp Asp Met Pro Ser Ser Pro Leu Gln His Ala Ser Lys
    130                 135                 140
Leu Leu Ser Asn Met Asn Ala Glu Val Gln Phe Asn Leu Thr Gly Val
145                 150                 155                 160
Glu Ser Val Gly Glu Ser Ser Lys Ser Ala Pro Val Val Ser Thr Pro
                165                 170                 175
Ala Leu Glu Ala Gly Pro Arg Asn Gly Val Val Arg Pro Pro Thr Ala
            180                 185                 190
Ala Gly Ala Asn Pro Thr Asn Leu Leu Tyr Pro Lys Met Asn Gly Glu
        195                 200                 205
Ile Glu Pro Val Val Tyr Pro Val Gly Ala Thr Asn Gly Ile Asp Pro
    210                 215                 220
Met Tyr Ser Glu His Val Asn Asn Leu Pro Tyr Pro Met Pro Pro Lys
225                 230                 235                 240
Gln Glu Val Asp Asp Thr Arg Arg Gln Val Pro Asp Ser Arg Lys Lys
                245                 250                 255
Ser Thr Asn Val Asp Pro Gly Trp Val Arg Ser Pro His Ile Leu Leu
            260                 265                 270
Val Glu Asp Asp Ala Thr Cys Arg Gln Ile Gly Gly Lys Phe Leu Tyr
        275                 280                 285
Ser Phe Ser Cys Val Ile Asp Thr Ala Val Gly Ser Pro Leu Phe Pro
    290                 295                 300
Tyr Gly Arg Lys Ala Thr Asp Ser Leu Ala Val
305                 310                 315
```

<210> 26844
<211> 144
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (16)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26844

```
Arg Asp Ser Phe Val Val Leu Glu Val Gly Cys Phe Ser Ala Leu Xaa
1               5                   10                  15
Arg Arg Ser Val Arg Cys Arg Thr Phe Lys Leu Thr Val Leu Pro Tyr
            20                  25                  30
Arg Ser Ala Arg Asn Ser Gln Lys Thr Ile Leu Pro Lys His Phe Lys
        35                  40                  45
His Ser Asn Phe Ala Ser Phe Val Arg Gln Leu Asn Lys Tyr Asp Phe
    50                  55                  60
His Lys Val Arg Gln Thr Asn Glu Glu Asn Gly Gln Ser Pro Tyr Gly
65                  70                  75                  80
Gln Asn Val Arg Leu Arg Cys Ser Thr Gln Ala Glu Arg Asn Leu Thr
                85                  90                  95
```

```
Thr Tyr Arg His Gly Ser Ser Asn Thr Arg Asn Ser Glu Arg Thr Ala
            100                 105                 110
Arg Ser Arg Leu Ile Thr Phe Asp Glu Arg Arg Arg Arg Leu Glu Ser
        115                 120                 125
Arg Leu Arg Thr Pro Thr Thr Pro Phe Arg His Asn Arg Ser Ile Phe
    130                 135                 140
```

<210> 26845
<211> 149
<212> PRT
<213> A.fumigatus

<400> 26845

```
Thr Ile Cys Arg Ile Leu Cys Leu Gln Asn Arg Lys Trp Thr Thr Leu
1               5                   10                  15
Ala Asp Lys Phe Pro Thr Val Glu Arg Arg Ala Gln Met Ser Ile Pro
            20                  25                  30
Gly Gly Cys Ala Ala Arg Thr Phe Tyr Trp Trp Lys Met Met Gln His
        35                  40                  45
Val Ala Lys Leu Val Val Asn Ser Ser Ile Leu Ser Leu Val Leu Leu
    50                  55                  60
Thr Gln Arg Ser Val Leu Leu Cys Ser Arg Met Asp Ala Lys Gln Leu
65                  70                  75                  80
Thr Val Leu Gln Phe Asp Gly Leu Glu Ala Val Asn Lys Ile Gln Asp
                85                  90                  95
Gly Ser Lys Tyr Asp Leu Ile Leu Met Asp Ile Ile Met Pro Asn Leu
            100                 105                 110
Asp Gly Val Ser Ala Cys His Leu Ile Arg Gln Phe Asp Arg Thr Pro
        115                 120                 125
Ile Ile Ala Met Thr Ser Asn Ile Arg Ser Asp Asp Ile Gln Leu Tyr
    130                 135                 140
Phe Gln His Gly Thr
145
```

<210> 26846
<211> 116
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (83)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26846

```
Thr Ser Met Thr Gly Lys Lys Ile Leu Ile Ile Leu Thr Asp Ala Lys
1               5                   10                  15
Ser Phe Pro Leu Lys Lys Thr Ser Gly Pro Asp Ala Gly Lys Thr Val
            20                  25                  30
Glu Gln Pro Ser Gly Phe Phe Leu Met Glu Leu Ala Lys Pro Leu Glu
        35                  40                  45
Lys Ile Leu Ala Ala Gly Tyr Glu Val Thr Phe Ala Ser Pro Lys Gly
    50                  55                  60
Leu Glu Pro Thr Pro Asp Pro Leu Ser Glu Ser Leu Ala Ala Phe Ala
65                  70                  75                  80
Gly Asn Xaa Tyr Glu Arg Arg Arg Glu Asn Asp Leu Ile Asp Arg Met
```

```
                85                  90                  95
Lys Arg Glu Asn Gly Phe Ser Arg Pro Arg Pro Leu Gly Thr Ser Phe
            100                 105                 110
His His Gly Arg
        115
```

<210> 26847
<211> 165
<212> PRT
<213> A.fumigatus

<400> 26847

```
Gly Cys Gly Gly Ala Ala Leu Gln Glu Lys Gly Leu Phe Asn Phe Asn
1               5                  10                  15
Thr Leu Thr Tyr Ser Ala Glu Gly Asn Thr Phe Phe Ile Lys Tyr Asn
            20                  25                  30
Asn Val Thr Met Glu Glu Ala His Ala Gln Val Phe Phe Arg Gln Lys
        35                  40                  45
Ser Ile Glu Arg Asn Ala Thr Phe Arg Ile Pro Glu Val Tyr His Ala
    50                  55                  60
Phe Ile Val Ser Glu Gly Gly Cys Thr Gly Arg Gly Cys Thr Tyr Ile
65                  70                  75                  80
Val Met Glu His Ile Glu Ile Asp Phe Glu Arg Thr Val Ser Asp Glu
                85                  90                  95
Gln Arg Ala Gln Ala Ile Ser Glu Leu Ile Ser Ile Pro Pro Pro Pro
            100                 105                 110
Gly Val Phe Gly Ser Leu Ser Gly Gly Arg Tyr Arg His His Phe Phe
        115                 120                 125
Arg Asp Ser Gln Pro Pro Val Pro Phe Ser Ser Ala Thr Glu Leu Glu
    130                 135                 140
Tyr Asn Ile Asn Arg Val Ser Leu Ala Leu Cys Pro Ile Gly Glu Arg
145                 150                 155                 160
Ile Leu Trp Leu Asn
                165
```

<210> 26848
<211> 522
<212> PRT
<213> A.fumigatus

<400> 26848

```
Arg Val Ser Phe Gln Pro Arg Gly Val Lys Thr Lys Arg Thr His Ser
1               5                  10                  15
Met Ser Ile Leu Asp Thr Thr Lys Asp Leu Ser Ala Leu Phe Thr Lys
            20                  25                  30
Gln Val Arg Ala Thr Pro Asp Ala Pro Ala Leu Glu Asp Asp Ser Thr
        35                  40                  45
Thr Tyr Thr Tyr Ala Glu Leu Asp Thr Glu Val Asp Ala Leu Ala Gln
    50                  55                  60
Arg Leu Arg Ser Tyr Gly Val Gly Arg Asp Ser Leu Val Gly Val Leu
65                  70                  75                  80
Leu Pro Arg Ser Ala His Tyr Val Ile Ala Cys Leu Ala Ala Leu Arg
                85                  90                  95
Ala Gly Gly Ala Phe Leu Val Leu Glu Leu Ala Tyr Pro Pro Asp Leu
            100                 105                 110
Leu Ala Asp Val Leu Glu Asp Ala Lys Pro Val Val Val Val Thr His
```

```
        115                 120                 125
Arg Ala Glu Ala Lys Lys Val Lys Ala Asp Val Pro Leu Ile Ala Leu
    130                 135                 140
Asp Glu Pro Ala Thr His Ala Asn Gly His Thr Lys Glu Pro Ser Thr
145                 150                 155                 160
Pro Leu Pro Ala Glu Asp Asp Leu Asp Arg Leu Ala Phe Val Ser Tyr
                165                 170                 175
Ser Ser Gly Thr Thr Gly Lys Pro Lys Gly Ile Ala Asn Pro His Arg
            180                 185                 190
Ala Pro Val Leu Ser Tyr Asn Leu Arg Phe Gly Val Gln Asp Leu Gln
        195                 200                 205
Pro Gly Asp Arg Val Ala Cys Asn Val Phe Phe Ile Trp Glu Ile Leu
    210                 215                 220
Arg Pro Leu Leu Arg Gly Ala Thr Val Val Ala Val Pro Asp Asp Val
225                 230                 235                 240
Ser Tyr Asp Pro Ala Ala Leu Val Asp Leu Leu Ala Ala Lys Arg Ile
                245                 250                 255
Thr Glu Thr Leu Met Thr Pro Thr Leu Leu Ala Thr Val Leu Ala Arg
            260                 265                 270
His His Asp Leu Gly Ala Gln Leu Pro His Leu Arg Thr Leu Trp Leu
        275                 280                 285
Asn Gly Glu Val Val Thr Thr Asp Leu Ala Arg Arg Ala Ile Lys Ala
    290                 295                 300
Leu Pro Ser Thr Arg Leu Leu Asn Cys Tyr Ser Ala Cys Glu Thr His
305                 310                 315                 320
Glu Ile Ala Cys Gly Asp Ile Arg Glu Met Leu Asp Asp Asn Ala Pro
                325                 330                 335
Tyr Cys Pro Val Gly Pro Pro Leu Asp Pro Lys His Thr Tyr Ile Leu
            340                 345                 350
Gly Glu Asp Gly Lys Ala Val Pro Glu Gly Glu Ser Gly Glu Leu Phe
        355                 360                 365
Val Gly Gly Pro Leu Leu Ala Arg Gly Tyr Leu Asn Leu Pro Asp Thr
    370                 375                 380
Thr Ala Lys Ala Phe Thr Ala Asp Pro Phe Asp Ala Thr Pro Gly Ala
385                 390                 395                 400
Arg Leu Tyr Arg Thr Gly Asp Arg Ala Arg Ile Leu Pro Ser Gly Leu
                405                 410                 415
Leu Glu Ile Thr Gly Arg Val Gly Ala Met Ile Lys Leu Arg Gly Tyr
            420                 425                 430
Ser Val Val Pro Gly Lys Val Glu Asn Glu Ile Val Lys His Leu Ala
        435                 440                 445
Val Ser His Cys Ala Val Ile Ala His Gly Glu Gly Leu Asp Arg Lys
    450                 455                 460
Leu Val Ala Tyr Ile Val Arg Asp Gln Asp Ser Thr Asp Asp Arg Pro
465                 470                 475                 480
Val Val Gln Ile Asn Leu Ser Gly His Ser Pro Ala Ala Arg Gln Thr
                485                 490                 495
Leu Ala Pro Tyr Leu Ala His Tyr Met Ile Pro Ala Leu Trp Val Glu
            500                 505                 510
Met Asp Glu Leu Pro Thr His Ala Gly Leu
        515                 520
```

<210> 26849
<211> 141
<212> PRT
<213> A.fumigatus

<400> 26849
Ala Ala Ser Ala Arg Ser Ser Arg Thr Arg Val Ser Val Leu Ser Thr
1 5 10 15
Leu Val Ser Val Leu Ser Ser Ser Ser Ser Lys Ser Ile Thr Leu Asn
20 25 30
Gln Trp Ser Arg Leu Val Ile Ser Lys Leu Val Asn Phe Arg Ile Pro
35 40 45
Tyr Thr Met Ala Lys Phe Val Val Tyr Glu Lys Val Val Glu Ala Val
50 55 60
Tyr Arg Lys Val Asp Lys Asn Thr Ile Ser Asp Gly Ala Lys Thr Gly
65 70 75 80
Ile Asn Leu Gly Ser Gly Leu Ile Ala Gly Phe Ala Ala Ala Leu Val
85 90 95
Ser Gln Pro Ala Asp Thr Met Leu Ser Val Ile Asn Lys Thr Gln Gly
100 105 110
Ala Pro Gly Glu Ser Thr Val Ser Arg Leu Val Lys Ile Ala Lys Asp
115 120 125
Leu Gly Ile Arg Gly Ser Tyr Ala Gly Ile Gly Thr Arg
130 135 140

<210> 26850
<211> 166
<212> PRT
<213> A.fumigatus

<400> 26850
His Cys Gly Asp Cys Gly Ser Phe Arg Pro Leu Val Lys Thr Gln Leu
1 5 10 15
Gly Thr Asp Val Ser Leu Ser Gln Cys Ser Val Lys Thr Arg Ile Gln
20 25 30
Leu Asp Pro Val Thr Tyr Asn Arg Gly Met Ile Gly Gly Phe Arg Gln
35 40 45
Val Ile Ala Asn Glu Gly Ala Gly Ala Leu Leu Thr Gly Phe Gly Pro
50 55 60
Thr Ala Ala Gly Tyr Phe Leu Gln Gly Ala Phe Lys Phe Gly Gly Tyr
65 70 75 80
Glu Phe Phe Lys Gln Gln Phe Ile Asn Gln Leu Gly Tyr Glu Thr Ala
85 90 95
Ser Asn Asn Arg Thr Ala Val Tyr Leu Ala Ser Ser Ala Ala Ala Glu
100 105 110
Phe Phe Ala Asp Ile Ala Leu Cys Pro Leu Glu Ala Thr Arg Ile Arg
115 120 125
Leu Val Ser Glu Pro Thr Phe Ala Ser Gly Leu Met Ser Gly Phe Gly
130 135 140
Lys Ile Leu Lys Asn Glu Gly Ile Gly Ala Phe Tyr Ser Gly Phe Gly
145 150 155 160
Pro Ile Leu Phe Lys Gln
165

<210> 26851
<211> 225
<212> PRT
<213> A.fumigatus

<400> 26851

```
Glu Phe Ile Leu Arg Val Gln Arg Glu Gly Lys Pro Asp Ile Phe Val
1               5                  10                  15
Ala Arg Arg Tyr Gly Glu Phe Ala Lys Leu Tyr Arg Arg Leu Arg Thr
            20                  25                  30
Glu Phe Pro Gly Arg Thr Leu Ala Pro Leu Pro Arg Lys Asn Lys Ser
        35                  40                  45
Ser Thr Ser Thr Ser Phe Phe Gly Ser Ala Asp Asp Glu Ala Ser Ser
    50                  55                  60
Ile Ser Ser Val Ser Thr Gln Asp Thr Ser Glu Gly Tyr Ile Gly Arg
65                  70                  75                  80
Thr Leu Ala Pro Gly Pro His His Ser Arg Ser Leu Ser Arg Ser Ser
                85                  90                  95
Met Lys Ser Ser Lys Ser Gly Arg Leu Ser Ser Glu Gly Pro Arg Glu
            100                 105                 110
Cys Val Leu Tyr Arg Glu Glu Gln Arg Val Ser Leu Arg Ala Phe Leu
        115                 120                 125
Arg Thr Leu Leu Gln Asn Lys Arg Val Ser Glu Ser Lys Ala Met Glu
    130                 135                 140
Glu Phe Leu Thr Ala Asn Pro Val Thr Leu Asn Glu Glu Glu Leu Thr
145                 150                 155                 160
Asp Val Glu Arg Arg Lys Ala Ala Asp Ala Ile Arg Ile Glu Glu Gln
                165                 170                 175
Lys Gln Phe Tyr Glu Ile Ala Arg Gln Arg Ala Ala Glu Leu Asp Val
            180                 185                 190
Tyr Met Glu Gln Phe Arg Arg Asp Ile Val Glu Ser Ser Lys Gln Arg
        195                 200                 205
Val Thr Asn Asp Pro Glu Pro Ala Leu Leu Thr Phe Arg Thr Gln Met
    210                 215                 220
Val
225
```

<210> 26852
<211> 365
<212> PRT
<213> A.fumigatus

<400> 26852

```
Leu Pro Arg Ser Pro Glu Asn Cys Pro Ser Arg Leu Thr Ile Thr Arg
1               5                  10                  15
Val Ala Ala Thr Leu Tyr His Val Phe Leu Ala Glu Asp Asn Ser Pro
            20                  25                  30
Glu Met Phe Ala Gln Phe Lys Arg Ile His Ser Leu Val Pro Tyr Thr
        35                  40                  45
Leu Leu Lys Asn Val Ile Arg Ile Ala Asn Pro Ala Ala Val Met Ser
    50                  55                  60
Gly Val Leu Asp Leu Phe Leu Ala Gln Pro Phe Gly Ser Arg Ser Leu
65                  70                  75                  80
Leu Gln Arg Ile Phe Ser Met Ala Leu Asn Asp Gly Ile Lys Gln Phe
                85                  90                  95
Gln Lys Ser Ile Asp Ser Leu Ala Ala Lys Val Asp Asp Pro Val Leu
            100                 105                 110
Thr Gly Lys Leu Lys Glu Phe Thr His Ala Asp Glu Asn Ile Lys Asn
        115                 120                 125
Glu Ile Arg Thr Glu Ala Ala Thr Glu Asp Val Asp Leu Ile Val Ala
    130                 135                 140
Ile Leu Arg Ser Asp Leu Ile Ala Pro Glu Leu Thr Pro Glu Gln Val
```

```
145                 150                 155                 160
Gly Lys Val Phe Asn Ala Tyr Val Ala Trp Asn His Ala Val Asp Asn
                165                 170                 175
Val Asp Leu Glu Met Gln Glu Gly Ala Gln Trp Phe Ala Asn Met Lys
            180                 185                 190
Gln Leu Leu Lys Leu Tyr Thr Arg Gln Arg Asp Lys Ala Met Ile Leu
        195                 200                 205
Ser Ile Ile Glu Glu Pro Val Thr Leu Gln Leu Phe Arg Asp Leu Phe
    210                 215                 220
Thr Ile Phe Tyr Glu Pro Leu Val Arg Val Tyr Lys Ser Ala Asn Val
225                 230                 235                 240
Tyr Ser Ser Ile Thr Asp Phe Ala Gln Phe Ala Asp Asp Ala Ile Ala
                245                 250                 255
Val Ile Glu Lys Cys His Arg Gln Asp Val Ser Ala Asp Pro Asn Gln
            260                 265                 270
Thr Val Gln Ala Phe Ile Asp Leu Cys Glu Arg His Gln Asp Asn Phe
        275                 280                 285
Tyr Lys Phe Ile His Glu Val His Leu His Asp Asn Gly Leu Phe Thr
    290                 295                 300
Ser Leu Met Gly Trp Ile Glu Asp Ile Leu Glu Phe Leu Arg His Gly
305                 310                 315                 320
Pro Gln Gly Gly Lys Leu Asp Met Asn Ala Leu Phe His Gly Ala Lys
                325                 330                 335
Asp Val Gly Gln Ile Asp Glu Ala Lys Ala Ile Glu Glu Ile Asn Ala
            340                 345                 350
Leu Ile Lys Trp His Glu Asp Arg Lys Arg Gly Ser Glu
        355                 360                 365
```

<210> 26853
<211> 71
<212> PRT
<213> A.fumigatus

<400> 26853

```
Ser Gly Phe Thr His Gly Glu Ala Leu Gly Ser Lys His Gln Phe Val
1               5                   10                  15
Thr Leu His Thr His Asn Gln Pro Phe Ser Pro Thr Asn Arg Ala Leu
            20                  25                  30
Leu Gly Ile His Met Ser Met Cys Asn Ala Thr Ser Thr Arg His Leu
        35                  40                  45
Gln Asn Leu Val Lys Lys Gly Glu Leu Asp Ile Ser Ser Leu Val Thr
    50                  55                  60
His Arg Lys Phe Lys Ser Glu
65                  70
```

<210> 26854
<211> 316
<212> PRT
<213> A.fumigatus

<400> 26854

```
Val Lys Leu Leu Phe Ser Thr Asn Leu Thr Val Phe Tyr His Pro Phe
1               5                   10                  15
Leu Pro Ile Ser Lys Ser Leu Phe His Ser Pro Phe Asn Ile Met Lys
            20                  25                  30
Ala Val Val Tyr Thr Gln Asn Glu Thr Val Glu Val Leu Asp Arg Pro
```

```
        35                  40                  45
Lys Pro Thr Val Gln Gln Pro Thr Asp Ala Val Val Arg Met Leu His
    50                  55                  60
Ala Ser Ile Cys Gly Thr Asp Leu His Ile Leu Lys Gly Asp Val Pro
65                  70                  75                  80
Thr Ala Lys Pro Gly Leu Ile Leu Gly His Glu Gly Val Gly Ile Ile
                85                  90                  95
Glu Ala Leu Gly Ser Ala Val Gln Gly Phe Gln Val Gly Asp Arg Val
            100                 105                 110
Ile Val Ser Cys Met Thr Ser Cys Gly Ser Cys Arg Phe Cys Gln Arg
        115                 120                 125
Ser Ile Gln Ser His Cys Gln Gln Gly Gly Trp Thr Leu Gly His Gln
    130                 135                 140
Val Asp Gly Thr Gln Ala Glu Phe Val Arg Val Pro His Ala Thr Leu
145                 150                 155                 160
Ser Leu His Pro Leu Asp Ser Ser Val Asp Thr Cys Ala Ala Val Ser
                165                 170                 175
Leu Ser Asp Ala Leu Pro Thr Gly Phe Glu Cys Gly Val Cys Asn Ala
            180                 185                 190
Gly Ile Ser Pro Thr Gly Ser Val Val Ile Val Gly Ala Gly Pro Val
        195                 200                 205
Gly Met Ala Ala Leu Leu Met Thr Cys Leu Ile Lys Pro Ala Phe Ile
    210                 215                 220
Val Met Val Asp Leu Asp Asp Ala Arg Leu Glu Thr Ala Arg Thr Met
225                 230                 235                 240
Gly Ala His His Thr Val Asn Ser Ala Ala Pro Asp Ala Ile Gln Gln
                245                 250                 255
Leu Leu Asp Leu Thr Glu Asn Lys Gly Tyr Asp Ser Val Ile Glu Ala
            260                 265                 270
Val Gly Ile Pro Ala Thr Phe Glu Met Cys Gln Glu Leu Val Ala Val
        275                 280                 285
Gly Gly Gln Ile Ala Asn Met Gly Val His Gly Val Lys Val Asp Leu
    290                 295                 300
His Met Glu Lys Leu Trp Asp Arg Asn Ile Ser Leu
305                 310                 315
```

<210> 26855
<211> 68
<212> PRT
<213> A.fumigatus

<400> 26855

```
Leu Asn Arg Ser Leu Ala Lys Pro Thr Arg Ala Ala Arg Gly His Thr
1               5                   10                  15
Gly Asn Asn Asp Pro Val Ala His Leu Lys Ser Leu Asn Gly Gly Ser
            20                  25                  30
Gln Cys Phe Asp Asp Pro Asp Thr Leu Met Ala Gln Asp Lys Thr Arg
        35                  40                  45
Phe Arg Ser Trp Tyr Ile Thr Phe Glu Asp Met Lys Ile Cys Ala Thr
    50                  55                  60
Asp Arg Cys Met
65
```

<210> 26856
<211> 202
<212> PRT

<213> A.fumigatus

<400> 26856
Ala Ser Ser Gln Leu Ile Ala Met Trp Leu Phe Arg Gly Ala Gln Ser
1 5 10 15
Ala Val Phe Tyr Tyr Ala Ser Cys Thr Pro Cys Ala Met Ser Phe Asp
20 25 30
Arg Arg Lys Arg Lys Lys Glu Ala Val Arg Ser Gln Arg Glu Lys Glu
35 40 45
Lys Val Asp Ala Val Ile Thr Asp Gln Pro Lys Pro Phe Ala Gln Pro
50 55 60
Thr Pro Phe Ser Thr Asn Pro Gly Trp Ala Glu Glu Ile Ala Leu Gly
65 70 75 80
Pro Gly Pro Pro Ala Arg Arg Ser Gly His Arg Asn Asn His Arg Leu
85 90 95
Thr Asp Ser Trp Asn Thr Asp Pro Leu Ser Pro Met Glu Ser Ile His
100 105 110
Asp Glu Gly Glu Ala Ser Lys Arg Lys Asp Lys Ser Arg Glu Lys His
115 120 125
Pro Gln Gly Asp Arg Arg Asn Arg Lys Arg Asn Leu Arg Glu Glu Glu
130 135 140
His Gln Arg Gly Glu Glu Glu Glu Glu Lys Gly Ser Ser Glu Gly Ile
145 150 155 160
Ser Val Arg Gly Lys Ala Asp Thr Thr Glu Pro Ser Lys Tyr Tyr Ile
165 170 175
Ala Arg Val Pro Pro Val Asn Asp Leu His Pro Pro Ile Val Ser Gly
180 185 190
Pro Lys Ser Arg Ala Glu Thr Arg Trp Met
195 200

<210> 26857
<211> 74
<212> PRT
<213> A.fumigatus

<400> 26857
Gln Ile Ala Gly Arg Ser Pro Arg Ala Leu Ser Ser Glu Phe Arg Asn
1 5 10 15
Arg Thr Glu Asn Ala Leu His Val Val Val Ser Ala Thr Ala Asn Ile
20 25 30
Glu Ile Lys Leu Gln Val Pro Pro Gly Gln Ile Asp Thr Gln Thr Leu
35 40 45
Phe Tyr Thr Ser Ala Phe Ala Gly Leu Val Tyr Ile Lys Arg Cys Tyr
50 55 60
Ser His Pro Asp Leu Arg His His His Ser
65 70

<210> 26858
<211> 174
<212> PRT
<213> A.fumigatus

<400> 26858
Ala Met Leu Gly Glu Leu Val Gln Gly Pro Gly Glu Arg Val Trp Ala
1 5 10 15
Gly Thr Gly Gln Ala Ala Gln Gly Cys Arg Pro Pro His Val Pro Leu

```
            20                  25                  30
Cys Ala Ala Val Cys Leu Ser Leu Leu Tyr Arg Asp Gly Ile Leu Leu
        35                  40                  45
Ile Pro Leu Phe Arg Leu Asp Ile Pro Pro Phe Met Ser Tyr Ala Ala
    50                  55                  60
Ala Tyr Ser Leu Phe Asn Tyr His Leu Ala Asp Pro Ser Lys Gly Leu
65                  70                  75                  80
Val Tyr Asp Asn Leu Arg Leu Val Arg Ala Phe Glu Arg Gly Leu Asp
                85                  90                  95
Pro Lys Ser Ser Glu Ala Gly Phe Ile Leu Thr His Ile Asp Met Val
            100                 105                 110
Lys Glu Ser Asn Gly Leu Ile Ser Gly Ala Leu Lys Val Val Asp Thr
        115                 120                 125
Leu Glu Gln Gly Gly Pro Arg Ser Glu Val Asn Asp Gly Phe Arg Glu
    130                 135                 140
Ile Leu Ala Ser Met Glu Lys Ile Glu Ala Cys Met Glu Gly Lys Leu
145                 150                 155                 160
Leu His Arg His Ser Ser Ala Leu Thr Asn Ser Thr Pro Gly
                165                 170
```

<210> 26859
<211> 189
<212> PRT
<213> A.fumigatus

<400> 26859

```
Thr His Arg His Thr Leu Phe Leu Ser Thr Ser Thr Met Thr Gln Asn
1               5                   10                  15
Lys Val Pro Pro Thr Ser Thr Thr Thr Leu Lys Arg Phe Pro His Ile
            20                  25                  30
His Asp Asp Pro Ala Thr Leu Pro Arg Ser Leu Asp Pro Phe Thr Ile
        35                  40                  45
Thr Thr Ser Thr Gly Phe Leu Pro Tyr Cys Thr Ser Pro Thr Thr Leu
    50                  55                  60
Pro Asp Ala Phe Lys Pro Leu Met Asp Leu Leu Asp Arg Met Pro Val
65                  70                  75                  80
Val Arg Gln Asp Gly Ser Pro Gly Leu Leu Ala Lys Tyr Glu Leu Gly
                85                  90                  95
Pro Ala Val Glu Thr Glu Leu Pro Asp Leu Thr Asp Glu Val Asp Lys
            100                 105                 110
Leu Val Thr Ala Asp Gly Ser Arg Asp Leu Tyr Met Val Thr Ala Val
        115                 120                 125
Phe Arg Asp Tyr Ser Phe Leu Ala Ser Ala Tyr Leu Leu Glu Pro Cys
    130                 135                 140
Trp Glu Asn Trp Cys Lys Ala Pro Glu Asn Gly Tyr Gly Leu Gly Arg
145                 150                 155                 160
Asp Lys Leu Pro Lys Ala Val Ala Arg Pro Met Tyr His Cys Ala Gln
                165                 170                 175
Leu Tyr Val Phe Arg Cys Cys Ile Val Met Val Tyr Cys
            180                 185
```

<210> 26860
<211> 135
<212> PRT
<213> A.fumigatus

<400> 26860
Thr Pro Leu Leu Pro Arg Arg Lys Trp Arg Gln Arg Gln His Gly Thr
1 5 10 15
Leu Pro Asn Trp Pro Pro Phe Leu Ser Ala Ile Pro Ile Asn Ile Tyr
20 25 30
Leu Pro Gln Ile Pro Leu Leu Asp His Leu Leu Gln Ile Pro Met Pro
35 40 45
Ser Thr Pro Leu Thr Lys Ile Leu His Glu Phe Arg Ala Tyr Arg Pro
50 55 60
Leu Pro His Arg Glu Phe Leu Ala Tyr Ile Asp Ser Lys Ala Ala Glu
65 70 75 80
Val Gly Val Arg Asn Phe Ala Val Gln Asp Thr Glu Thr Thr Val Leu
85 90 95
Leu Leu Lys Thr Leu Asn His Val Arg Ser Phe Arg Trp Arg His Trp
100 105 110
Leu Phe Ala Arg Glu Tyr Ile Ile Lys Arg Thr Pro Ser Ser Arg Pro
115 120 125
Gly Ala Gly Arg Tyr Arg Ala
130 135

<210> 26861
<211> 159
<212> PRT
<213> A.fumigatus

<400> 26861
Ala Thr Ser Pro Ser Phe Ile Arg Thr His Glu Leu Asn Ser Arg Leu
1 5 10 15
Thr Thr Ser Asp Met Trp Ala Asn Ser Lys Pro Ala Glu Tyr Leu Ser
20 25 30
Phe Arg Val Phe Ile Phe Gly Ile Thr Ser Gln Ser Met Phe Pro Asn
35 40 45
Gly Val Ile Tyr Asp Gly Val Leu Asp Asn Lys Pro Leu Tyr Phe Arg
50 55 60
Gly Glu Ser Gly Ala Asn Asp Ser Met Val Arg Ser Leu Thr Gly Leu
65 70 75 80
Pro Phe Tyr Leu Gln Ser Gln Leu Thr Ser Ile Tyr Leu Arg Ser Pro
85 90 95
Cys Ser Thr Thr Ser Ser Lys Ser Pro Cys Pro Pro Pro Pro Ser Pro
100 105 110
Arg Ser Tyr Thr Asn Ser Ala Pro Thr Asp His Ser Pro Thr Val Asn
115 120 125
Ser Ser Pro Thr Ser Thr Pro Arg Pro Pro Lys Ser Ala Ser Ala Thr
130 135 140
Ser Gln Ser Lys Thr Arg Arg Leu Pro Ser Cys Phe Ser Arg Arg
145 150 155

<210> 26862
<211> 112
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (75)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26862
Ile Ala Arg Asn His Lys Ile Tyr Gly Met Trp Phe Asp Phe Ala Gln
1 5 10 15
Arg Pro Pro Leu Gln Ile Pro Gln Ala His Arg Asp Ile Phe Asn His
20 25 30
Ile Ala Asn Val Lys Ala Ala Lys Phe Asn Asp Lys Met Thr Arg Ser
35 40 45
Arg Asn Asp Thr Asn Thr Ile Thr Gly Thr Asp Ser Thr Leu His Val
50 55 60
Glu Lys Arg Arg Leu Leu Asn Ala Val Leu Xaa Gly Lys Ser Phe His
65 70 75 80
Ser Met Glu Pro Leu Leu Val Lys Leu Val Thr His Trp Cys Lys Leu
85 90 95
Leu Ile Asn Gly Pro Cys Thr Ala Trp Ser Thr Pro Arg Gly Asn Val
100 105 110

<210> 26863
<211> 154
<212> PRT
<213> A.fumigatus

<400> 26863
Glu Val Leu Ser Ala Leu Ser Trp Gln Arg Ser Thr Tyr Thr Asp Cys
1 5 10 15
Ser Ala Asp Ser Ser Pro Ile Arg Tyr Met Ser Ser Ser Ser Pro Thr
20 25 30
Arg Ala Gln Asn Arg Gln Ser Arg Arg Ser Asp Ile Pro Ser Ser Ser
35 40 45
Ser Gly Leu Phe Val Ser Ser Arg Pro Ser Ile Glu Ser Asn Arg Ala
50 55 60
Val Ser Arg Arg Ser Asp Leu His Ser Gly Gly Phe Leu Ser Ser Pro
65 70 75 80
Asn Arg Arg Arg Arg Val Phe Val Asp Ala Asn Gly Met Pro Ala Thr
85 90 95
Asp Gly Asp Pro Arg Ser Asp Ala Thr Phe Ser Asn Ile His Pro Asp
100 105 110
Thr Ser Glu Ala Glu Ala Leu Gly Gly Ser Ser Thr Arg Val Ile Trp
115 120 125
Gly Thr Asn Ile Ser Ile Gln Asp Ser Met Ser Ala Leu Val Phe Tyr
130 135 140
His Gly Ala Gly Arg Ser Arg Asp Cys Gly
145 150

<210> 26864
<211> 516
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (303),(514)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26864
Ser Ser Gly Ser Leu Leu Leu Gln Val Lys Met Thr Lys Lys Ser Val

```
1               5                   10                  15
Phe Asp Leu His Asp Ser Asn Met Ala Tyr Arg Leu Ser Gly Gln Leu
            20                  25                  30
Arg Gly Pro Thr Thr Pro Val Cys Ala Pro Ser Thr Ala Pro Ser Gln
        35                  40                  45
Thr Thr Thr Thr Thr Ser Phe Ser Pro Ala Asp Tyr Ala Gln Pro Phe
    50                  55                  60
Cys Asp Phe Met Thr Ala His Pro Thr Ile Phe Gln Ala Val Asp Gly
65                  70                  75                  80
Phe Thr Lys Glu Leu Glu Ser Lys Gly Tyr Lys Arg Leu Pro Glu Arg
                85                  90                  95
Glu Ala Trp Thr Ser Lys Leu Gln Arg Gly Gly Lys Tyr Tyr Cys Thr
            100                 105                 110
Arg Asn Gly Ser Ala Phe Ile Ala Phe Ser Val Gly Lys Asn Tyr Gln
        115                 120                 125
Ser Gly Asn Gly Leu Ala Ile Val Ala Gly His Ile Asp Ala Leu Thr
    130                 135                 140
Ala Arg Leu Lys Pro Val Ser Lys Leu Pro Thr Lys Ala Gly Phe Val
145                 150                 155                 160
Gln Leu Gly Val Ala Pro Tyr Ala Gly Gly Leu Asn Glu Thr Trp Trp
                165                 170                 175
Asp Arg Asp Leu Ser Ile Gly Gly Arg Val Leu Val Arg Asp Pro Thr
            180                 185                 190
Ser Gly Lys Val Glu Ser Lys Leu Val Lys Leu Asp Trp Pro Ile Ala
        195                 200                 205
Arg Ile Pro Thr Leu Ala Pro His Phe Gly Ala Pro Ser Gln Gly Pro
    210                 215                 220
Phe Asn Lys Glu Thr Gln Met Val Pro Ile Val Gly Ile Asp Asn Ser
225                 230                 235                 240
Asp Leu Phe Gln Gln Gln Val Ser Pro Thr Ala His Ser Ser Ser Gly
                245                 250                 255
Ile Lys Pro Gly Ser Phe Ala Ala Thr Gln Pro Glu Arg Leu Val Lys
            260                 265                 270
Ile Ile Ser Lys Glu Leu Gly Ile Thr Asp Tyr Asp Thr Ile Leu Ser
        275                 280                 285
Trp Glu Leu Glu Leu Tyr Asp Ser Gln Pro Ala Arg Leu Gly Xaa Leu
    290                 295                 300
Glu Lys Asp Leu Ile Phe Ala Val Arg Ile Asp Asp Lys Leu Cys Cys
305                 310                 315                 320
Tyr Ala Ala Gln Gln Ala Leu Leu Ala Ser Ser Asp Asp Thr Ser Thr
                325                 330                 335
Gly Ser Ile Lys Met Val Gly Met Phe Asp Asp Glu Glu Ile Gly Ser
            340                 345                 350
Leu Leu Arg Gln Gly Ala Arg Ser Asn Phe Met Ser Ser Val Ile Glu
        355                 360                 365
Arg Ile Thr Glu Ala Phe Ala Ser Ser Asn Tyr Gly Pro Asn Leu Leu
    370                 375                 380
Ser Gln Thr Val Ala Asn Ser Phe Phe Val Ser Ser Asp Val Ile His
385                 390                 395                 400
Ala Val Asn Pro Asn Phe Leu Asn Val Tyr Leu Glu Asn His Ala Pro
                405                 410                 415
Arg Leu Asn Val Gly Val Ala Val Ser Ala Asp Pro Asn Gly His Met
            420                 425                 430
Thr Thr Asp Ser Val Ser Tyr Ser Phe Ile Lys Arg Val Ala Asp Arg
        435                 440                 445
Cys Gly Ser Thr Leu Gln Val Phe Gln Ile Arg Asn Asp Ser Arg Ser
```

```
    450                 455                 460
Gly Gly Thr Ile Gly Pro Met Thr Ser Ala Arg Ile Gly Met Arg Ala
465                 470                 475                 480
Ile Asp Val Gly Ile Pro Gln Leu Ser Met His Ser Ile Arg Ala Thr
                485                 490                 495
Thr Gly Ser Leu Asp Pro Gly Leu Gly Val Lys Leu Phe Thr Gly Phe
            500                 505                 510
Cys Xaa Leu Ala
        515
```

<210> 26865
<211> 133
<212> PRT
<213> A.fumigatus

<400> 26865

```
Thr Asp Pro Ser Ala Lys Leu Tyr Ser Ile Ile Cys Thr Lys Val Leu
1               5                   10                  15
Trp Phe Asn Gln Ala His Lys Ser Arg Lys Ile Arg Thr Ser Thr Thr
            20                  25                  30
Phe His Arg Pro Lys Thr Leu Gln Leu Ser Arg Ser Pro Lys Tyr Pro
        35                  40                  45
Arg Lys Ser Ile Pro His Glu Pro Arg Leu Asp Ala His Lys Val Val
    50                  55                  60
Leu Tyr Pro Leu Asn Thr Glu Ser Ala Met Asn Asn Ile Glu Glu His
65                  70                  75                  80
Asn Thr Leu Val Phe Ile Val Asp Val Lys Ala Asn Lys Arg Gln Ile
                85                  90                  95
Lys Leu Ala Leu Lys Lys Leu Tyr Asp Val Asp Thr Val Lys Val Asn
            100                 105                 110
Thr Leu Val Arg Tyr Glu Thr Leu Val Phe Val Val Leu Met Ile Leu
        115                 120                 125
Pro Glu Thr Val Phe
    130
```

<210> 26866
<211> 60
<212> PRT
<213> A.fumigatus

<400> 26866

```
Phe Gly Val Trp Ala Ala Val His His Leu Ala Asp Val Cys Trp Lys
1               5                   10                  15
Lys Cys Ile Thr Gly Lys Ile Ser Ser Gly Arg Leu Gly Gln Gly Glu
            20                  25                  30
Glu Ser Cys Ala Gln Asn Cys Val Glu Arg Trp Met Asp Thr Asn Phe
        35                  40                  45
Ala Val Leu Lys His Leu Glu Thr Leu Arg Gly Gln
    50                  55                  60
```

<210> 26867
<211> 124
<212> PRT
<213> A.fumigatus

<220>

<221> UNSURE
<222> (70)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26867
Lys Leu Ile Leu Val Leu Val Val Met Gly Glu Tyr Thr His His Lys
1 5 10 15
Ala Thr Gln Gly Val Glu Thr Ile Val Val Pro Cys Ser Asp Met Ser
20 25 30
Gly Val Val Ile Gln Val Gly Glu Gly Val Thr Ala Trp Lys Ala Gly
35 40 45
Asp Arg Val Leu Ser Thr Phe Leu Pro Asp His Gln Thr Gly Gln Val
50 55 60
Thr Glu Lys Glu Leu Xaa Arg Gly Leu Gly Leu Pro Leu Asp Gly Val
65 70 75 80
Leu Ala Thr His Arg Val Phe Pro Glu Tyr Ala Leu Val Arg Ala Ser
85 90 95
Cys Leu Phe Asp Ala Arg Arg Arg Leu Leu His Phe Pro Leu Ala Ser
100 105 110
Val Asp Gly Val Gly Ser Leu Ile Met Gly Ile Pro
115 120

<210> 26868
<211> 63
<212> PRT
<213> A.fumigatus

<400> 26868
Ser Ile Asp Leu Ser His Pro Ile Glu Ser Cys Ala Phe Ala Arg Cys
1 5 10 15
Leu Arg Ile Thr Glu Arg Asn Ser Phe Gln Pro Pro Pro Asn Thr Tyr
20 25 30
Ala Pro Phe Cys Gln Lys Ala Asp Ala Arg Cys Met Cys Leu Phe Asp
35 40 45
His Ala Ile Pro Gly Glu Ser Ile Tyr Ala Leu Phe Val Asp Glu
50 55 60

<210> 26869
<211> 324
<212> PRT
<213> A.fumigatus

<400> 26869
Lys Leu Arg Arg Gly Gln Gly Ile Thr Pro Leu Ser Val Ile Pro Pro
1 5 10 15
Val Tyr Phe Glu Asp Asp Phe His Leu Glu Asn Pro Arg Thr Phe Asp
20 25 30
Val Val Ser Glu Lys Ser Glu Val Val Arg Pro Gln Lys Leu Pro Gly
35 40 45
Lys Asp Gly Gln Gly Thr Asn Glu Ser Ala Ala Glu Thr Ala Ile Thr
50 55 60
Gly Arg Lys Ala Leu Ala Thr Asn Ala Ile Leu Gln Glu Lys Leu Ser
65 70 75 80
Trp Tyr Met Asp Thr Val Glu Val His Leu Ile Ser Ser Ile Ser Ser
85 90 95
Ala Ser Lys Ser Phe Phe Thr Ala Leu Gly Ser Leu Arg Glu Leu His

```
            100                 105                 110
Ser Glu Ala Ala Asp Ser Val Lys Arg Ile Gln Ile Leu Arg Lys Asp
        115                 120                 125
Leu Gln Lys Ile Asp Arg Glu Met Ala Leu Gly Gly Leu Lys Ile Val
    130                 135                 140
Asn Leu Arg Arg Arg Arg Glu Asn Val Arg Met Leu Ala Asp Ala Val
145                 150                 155                 160
Ser Gln Leu Arg Asp Ala Val Gln Ser Val Ala Arg Cys Glu Glu Leu
                165                 170                 175
Val Glu Asn Gly Gln Ile Glu Glu Ala Ala Asp Ser Leu Glu Glu Val
            180                 185                 190
Glu Arg Leu Met Ala Gly Glu Gln Ser Thr Asn Ser Asp Glu Asp Gly
        195                 200                 205
Ala Ser Arg Asp Arg Ser Arg Lys Pro Val Asp Leu Arg Arg Leu Lys
    210                 215                 220
Ala Leu Glu Gly Ala Ser Asp Asp Leu Ala Gln Leu Arg Tyr Arg Ile
225                 230                 235                 240
Gly Met Gly Tyr Glu Asn Arg Phe Leu Asn Asp Leu Leu Gly Asp Leu
                245                 250                 255
Arg Lys His Val Glu Asn Val Pro Ser Asp Val Thr Leu Gln Arg Trp
            260                 265                 270
Gly Ser Ser Phe Gln Arg Gln Arg Gly Ala Gln Arg Ser Gly Ala Ser
        275                 280                 285
Ala Ser Pro Ala Tyr Met Lys Phe Asp Asp Asp Met Arg Ser Arg Leu
    290                 295                 300
His Thr Asn Leu Ile Gly Leu Ala Arg Ala Gln Tyr Thr Thr Pro Ala
305                 310                 315                 320
Ala Thr Ser Phe
```

<210> 26870
<211> 70
<212> PRT
<213> A.fumigatus

```
<400> 26870
Thr Ala Val Leu Arg Glu Met Lys Gly Leu Ile Arg Lys His Met Pro
1               5                   10                  15
Ser Ser Ser Asp Asp Asp Asn Glu Ser Val Val Ser Val Ser Thr His
            20                  25                  30
Arg Ser Gln Gln Arg Cys Gln Gln Glu Lys Ser Ser Ile Leu Ala Arg
        35                  40                  45
Asn Leu Arg Ala Leu Tyr Ala Glu Asp Ala Tyr Tyr Met Leu Thr Arg
    50                  55                  60
Val Tyr Thr Gly Ile Ser
65                  70
```

<210> 26871
<211> 75
<212> PRT
<213> A.fumigatus

```
<400> 26871
Ile Val Gln Glu Pro Val Phe Val Ser His Ala Tyr Pro Val Pro Gln
1               5                   10                  15
Leu Arg Lys Val Ile Arg Ser Ala Phe Lys Gly Leu Glu Ser Pro Gln
```

```
            20                  25                  30
Val Asp Arg Leu Pro Arg Ser Val Ser Arg Cys Thr Ile Leu Val Ala
        35                  40                  45
Ile Gly Gly Leu Leu Pro Ser His Gln Ser Phe Tyr Phe Phe Lys Thr
    50                  55                  60
Val Cys Gly Phe Leu Asp Leu Pro Val Leu Asn
65                  70                  75

<210> 26872
<211> 554
<212> PRT
<213> A.fumigatus

<400> 26872
Ala Asp Pro Ser Ser Pro Val Val Lys Thr Leu Arg Ala Arg Phe Ser
1               5                   10                  15
Asn Val Asp Asn Asn Leu Gln Gln Arg Ile Thr Asp Glu Ser Glu Gly
            20                  25                  30
Ala Cys Cys Val Lys Trp His Thr Leu Glu Ala Met Asp Pro Ser Tyr
        35                  40                  45
Ile Ser Thr Ala Leu Asp Arg Cys Glu Arg Arg Ile Asp Ile Phe Gln
    50                  55                  60
Gly Pro Ile Cys Ala Val Glu Ile Phe Asp Phe Pro His Glu Gln Ile
65                  70                  75                  80
Phe Phe Ile Ala Ala His His Leu Val Ile Asp Phe Val Ser Gln Gln
                85                  90                  95
Ile Leu Leu Lys Asp Leu Asp Ser Leu Leu Ala Gly Glu Glu Leu Ser
            100                 105                 110
Thr Pro Arg Pro Leu Ser Phe Gln Ala Trp Ser Leu Lys Gln Ile Glu
        115                 120                 125
Tyr Gly Ser Asn Leu Ala Leu Ser Pro Gln Ala Val Leu Pro His His
    130                 135                 140
Glu Asn Val Pro Leu Ala Asn Leu Asn Tyr Trp Gly Ile Ala Ala Met
145                 150                 155                 160
Asp Ser Cys Tyr Ala Asp Ser Ala Val Arg Val Leu Glu Phe Asp Ser
                165                 170                 175
Thr Val Thr Ser Ser Leu Val Gly Asp Ala Asn Arg Ala Phe Asn Ser
            180                 185                 190
Glu Pro Ile Glu Leu Phe Ile Ala Ser Leu Leu His Ser Phe Ala Asn
        195                 200                 205
Thr Phe Thr Asp Arg Ser Ala Pro Ala Ile Phe Lys Glu Gly His Gly
    210                 215                 220
Arg Gln Thr Arg Glu Pro Arg Leu Asp Pro Ser Ser Thr Val Gly Trp
225                 230                 235                 240
Phe Thr Thr Ile Thr Pro Ile Ala Leu Ala Val Ser Pro Gln Leu Ser
                245                 250                 255
Thr Phe Glu Asp Thr Leu Arg Arg Val Lys Asp Ile Cys Arg Ala Ile
            260                 265                 270
Pro Ala Asn Gly Phe Asp Tyr Phe Thr Ser Arg Phe Leu Asn Ala Ser
        275                 280                 285
Gly Ser Ser Ala Phe Gln Ser His Gly Pro Met Met Glu Ile Val Leu
    290                 295                 300
Asn Tyr Ala Gly Val Leu Asn Asn Val Gln Gln Gly Gly Thr Leu Phe
305                 310                 315                 320
Cys Pro Ile Ala Thr Glu Glu Gln Arg Gln Met Arg Tyr His Asp Ile
                325                 330                 335
```

```
Asn Pro Gln Leu Arg Arg Phe Ala Val Phe Asp Ile Tyr Ala Gln Val
            340                 345                 350
Ala Gly Gly Lys Leu Ser Phe Thr Phe Ala Tyr Ser Pro Ser Leu Asn
        355                 360                 365
Tyr Gln Asp Arg Ile Ser Ala Trp Ile Glu Ser Leu Arg Arg Leu Leu
    370                 375                 380
Glu Ala Ile Ser Val Asp Leu Pro Ala Lys Gln Pro Gln Lys Thr Leu
385                 390                 395                 400
Ala Asp Tyr Pro Arg Ala Arg Leu Asp Tyr Thr Ala Leu Glu Arg Leu
                405                 410                 415
His Lys Asp Ile Ile Pro Ser Leu Tyr Pro Ala Lys Leu Asp Asp Val
            420                 425                 430
Trp Glu Cys Ser Pro Thr Gln Thr Val Met Leu Arg Ala Arg Ser Tyr
        435                 440                 445
Gln Pro Leu Phe Phe Ser Pro His Phe Ile Trp Lys Ile Ala Gly Thr
    450                 455                 460
Arg Ala Ser Glu Gly Asn Arg Glu Arg Leu Thr Lys Ala Trp Lys Arg
465                 470                 475                 480
Ile Val Ala Arg His Ser Val Leu Arg Ser Val Phe Thr Ser Gln Leu
                485                 490                 495
Thr Ala Thr Tyr His Gln Ile Val Leu Ala Asn Pro Pro Phe Phe Ile
            500                 505                 510
Thr Trp Ala Asp Met Ala Gly Lys Glu Ser Pro Ser Glu Ala Leu Arg
        515                 520                 525
Arg Leu Pro Pro Leu Pro Ser Asp Glu Leu His Leu Ala Phe Arg Leu
    530                 535                 540
Thr Ala Ser Glu Asp Asp Glu Gly Asp Leu
545                 550
```

<210> 26873
<211> 160
<212> PRT
<213> A.fumigatus

<400> 26873

```
Val Ser Pro Thr Thr Ala Ile Pro Val Trp Ser Val Ala Val Thr Thr
1               5                   10                  15
Val Val Ala Val Leu Leu Ala Leu Ile Pro Ile Gly Ser Ala Val Ala
            20                  25                  30
Phe Asn Asp Leu Cys Ala Met Ser Ile Thr Gly Leu Phe Leu Ser Tyr
        35                  40                  45
Ile Met Val Ala Val Leu Leu Leu Trp Arg Arg Thr Thr Gly Ala Ile
    50                  55                  60
Ser Leu Thr Ala Gly Ala Asp Glu Thr Val Asn Thr Ile Gly Ala Lys
65                  70                  75                  80
Leu Val Trp Gly Pro Phe Arg Ile Pro Gly Val Trp Gly Ile Val Ile
                85                  90                  95
Asn Val Phe Ala Ile Ile Tyr Cys Val Ile Ala Ile Phe Phe Ser Met
            100                 105                 110
Trp Pro Thr Tyr Ser Glu Val Thr Val Gln Thr Met Asn Phe Ser Ser
        115                 120                 125
Val Gly Thr Val Ser Val Ile Leu Leu Ser Val Ile Tyr Tyr Val Leu
    130                 135                 140
Arg Ala Arg His Val Tyr Glu Gly Pro Ile Val Glu Thr Val Pro Arg
145                 150                 155                 160
```

<210> 26874
<211> 129
<212> PRT
<213> A.fumigatus

<400> 26874
Gln Ser Asp Gly Glu Glu Thr Met Ser Asn Pro Pro Val Ala Ala Ala
1 5 10 15
Asp Glu Val Glu Val Ser Ala Asp Ala Gly Ala Gly Gly Gln Met Ser
20 25 30
Val Leu Asp Ala Leu Lys Gly Val Leu Arg Ile Ala Leu Ile His Asp
35 40 45
Gly Leu Ala Arg Gly Leu Arg Glu Ala Ala Lys Ala Leu Asp Arg Arg
50 55 60
Gln Ala His Met Cys Val Leu Asn Glu Gly Cys Glu Glu Glu Ala Tyr
65 70 75 80
Lys Lys Leu Val Ile Ala Leu Cys Ser Glu His Lys Ile Pro Leu Ile
85 90 95
Lys Val Pro Asp Gly Lys Met Leu Gly Glu Trp Val Gly Leu Cys Met
100 105 110
Tyr Ser Pro Tyr Pro Phe Leu Trp Arg Glu Thr Ser Asp Val Pro Trp
115 120 125
Asp

<210> 26875
<211> 92
<212> PRT
<213> A.fumigatus

<400> 26875
Val Ser Trp Phe Pro Ala Cys Lys Ser Ser Ser Thr Val Phe Arg Leu
1 5 10 15
Arg Ser Gln Ala Thr Leu Lys Met Met Pro Met Lys Gln Ala Glu Arg
20 25 30
Ile Lys Gly Ile Leu Lys Ser Ile Ser Leu Asp Asn Ile Tyr Leu Pro
35 40 45
Ser Asp Pro Gly Gly Ala Ile Asp Leu Thr Val Asp Ala Gly Glu Tyr
50 55 60
Gln Ala Arg Val Ala Asn Ala Ile Ala Glu Ile Ala Lys Gly Arg Tyr
65 70 75 80
Thr Lys Ala Ile Pro Ser Arg Lys Val Pro Leu Asp
85 90

<210> 26876
<211> 133
<212> PRT
<213> A.fumigatus

<400> 26876
Thr Arg Val Phe Gly Pro Gln Leu Arg Phe Pro Glu Ile Ser Leu Ala
1 5 10 15
Leu Arg Arg Gln Asp Ala Gln Ile Ile Ser Tyr Ala Ser Ala Phe Leu
20 25 30
Ala Gln Thr Gly Pro Ala His Trp Glu Thr Leu Leu Arg Ala Arg Ala
35 40 45

```
Ile Glu Thr Gln Cys Tyr Ile Ile Ala Ala Ala Gln Ala Gly Gln His
    50                  55                  60
Asn Lys Gly Arg Ala Ser Tyr Gly His Ala Met Ile Val Asn Pro Trp
65                  70                  75                  80
Gly Glu Val Val Ala Lys Leu Gly Glu Glu Pro Lys Glu Pro Gln Ile
                85                  90                  95
Ala Thr Ala Glu Ile Asp Phe Asp Phe Phe Ser Arg Val Arg Thr Lys
            100                 105                 110
Met Arg Leu Ser Arg Gly Val His Gly Ser Pro Val Lys Ile Ile Thr
        115                 120                 125
Phe Leu Pro His Ser
    130
```

<210> 26877
<211> 205
<212> PRT
<213> A.fumigatus

<400> 26877

```
Arg Thr Ser Ile Ser Pro Phe Phe Arg Phe Arg Leu Pro Pro Phe Phe
1               5                   10                  15
Lys Leu Asn Ser Val Pro Ser Pro Leu Asp Thr Pro Ser Ser Met Ala
            20                  25                  30
Arg Phe Gly Gln Gln Ile Ile Leu Pro Gly Ala Glu Phe Pro Leu Glu
        35                  40                  45
Thr Ala Val Ala Leu Leu Asp Tyr Tyr Ser Lys Ala Asp Tyr Tyr Val
    50                  55                  60
Tyr Glu Arg Asp Asp Ile Trp Tyr Leu Gly Leu Gly Ala His Ala Ser
65                  70                  75                  80
Leu Val Val Asp Pro Lys Gly Gln Thr Ala Thr Glu Ile Asp Ser Glu
                85                  90                  95
Gly Arg Lys Glu Ser Ser Thr Ile Leu Asn Leu Leu Thr Gly Gln Val
            100                 105                 110
Arg Gln Phe Val Ser Lys Tyr Ser Ile His Gly Lys Ile Phe Gly Arg
        115                 120                 125
Ser Gly Ser Thr Thr Arg Arg Ala Ala Pro Gly Gln Ala Tyr Ala Pro
    130                 135                 140
Ser Gln Trp Pro Met Leu Ser Leu Met Val Pro Arg Val Gln Val Ile
145                 150                 155                 160
Ile Asp Arg Val Gln Ile Ala Val Thr Gly His Ala Glu Asn Asp Ala
                165                 170                 175
His Glu Ala Ser Arg Ala Asn Gln Arg His Pro Gln Ile Asp Leu Pro
            180                 185                 190
Gly Gln Tyr Leu Ser Pro Ile Arg Pro Arg Arg Arg Asp
        195                 200                 205
```

<210> 26878
<211> 323
<212> PRT
<213> A.fumigatus

<400> 26878

```
Leu Gln Trp Ile His Arg Leu Gln Phe Gly His Leu Pro Pro Thr Ala
1               5                   10                  15
Ser Val Thr Pro Thr Ala Pro Thr Pro Ser Ser Thr Leu Val Val Ser
            20                  25                  30
```

```
Gln Asn Pro Thr Ala Asp Gln Tyr Ala Asn Val Ser Gln Ala Ile Ala
        35                  40                  45
Ala Leu Arg Asn Asp Gly Gln Ala Tyr Thr Ile Tyr Ile Lys Ala Gly
    50                  55                  60
Thr Tyr Thr Glu Gln Ile Ser Ile Thr Arg Ala Gly Lys Val Thr Leu
65                  70                  75                  80
Arg Gly Glu Thr Ser Phe Lys Asn Asp Tyr Thr Gln Asn Leu Val Thr
                85                  90                  95
Ile Gln Phe Ser Tyr Gly Val Leu Thr Ser Ala Gly Gln Asp Glu Asn
            100                 105                 110
Thr Pro Val Ile Tyr Ala Lys Lys Thr Asp Gly Ser Gly Leu Ala Leu
        115                 120                 125
Tyr Asn Ile Asp Phe Val Asn Thr Tyr Pro Gln Thr Lys Asn Thr Ala
    130                 135                 140
Ala Leu Ala Ala Asp Phe Tyr Gly Ser Asn Met Ala Ala Tyr Gly Cys
145                 150                 155                 160
Ser Phe Ile Gly Tyr Gln Asp Thr Leu Leu Ala Asn Met Gly Val Gln
                165                 170                 175
Val Phe Ser Asn Cys Tyr Ile Glu Gly Ser Val Asp Phe Ile Trp Gly
            180                 185                 190
Phe Ser Thr Ala Tyr Phe His Gln Cys Tyr Ile Ala Ser Asn Thr Ala
        195                 200                 205
Gly Ala Tyr Ile Ala Ala Gln Ser Arg Ser Ser Ser Thr Ala Ala Gly
    210                 215                 220
Gly Tyr Val Phe Asp Ser Cys Tyr Val Thr Tyr Thr Asn Thr Tyr Gly
225                 230                 235                 240
Thr Thr Phe Gly Gln Thr Tyr Leu Gly Arg Pro Tyr Ser Gln Tyr Ser
                245                 250                 255
Ile Ala Val Tyr Met Asn Ser Tyr Leu Asp Lys His Ile Asn Ser Ala
            260                 265                 270
Gly Trp Ser Ile Trp Ser Thr Ser Ala Pro Gln Thr Asp His Val Thr
        275                 280                 285
Phe Gly Glu Tyr Asn Asn Ser Gly Pro Gly Ala Trp Ser Ser Ser Arg
    290                 295                 300
Ala Ser Leu Ala Thr Ser Ser Ser Gln Gly Cys Gln Ala Pro Arg Tyr
305                 310                 315                 320
Met Tyr Gln
```

<210> 26879
<211> 240
<212> PRT
<213> A.fumigatus

<400> 26879

```
Val Val Gly Glu Arg His Ser Glu Ala Tyr Glu Gly Thr Ser Val Thr
1               5                   10                  15
Val Asp Glu Met Glu Val Phe Arg Asn Trp Ala Gln Glu Ile Ser Arg
            20                  25                  30
Ser Asp Glu Glu Tyr Ile Gln Trp Glu Gln Asp Leu Gln Gln Asp Val
        35                  40                  45
Ala Glu Ala Trp Met Ala Leu Leu Leu Pro Leu Val Arg Asn Val Gln
    50                  55                  60
Gln Leu Arg Leu Val Tyr Pro Lys Glu Asn Lys Tyr Leu Asp Arg Met
65                  70                  75                  80
Met Gln Arg Ala Val Gln Arg Glu Lys Pro Phe Asp Thr Gln Pro Ala
```

```
                85                  90                  95
Phe Arg Ala Leu Arg Gln Val Ser Leu Gly His Leu Asp Asp Thr Leu
            100                 105                 110
Asp Ser Lys Gly Thr Tyr Ala Pro Ser Gln Val Leu Pro Phe Phe Gln
        115                 120                 125
Leu Pro Ser Met Arg Ala Val Ala Val Asp Ser Val Val Glu Ser Thr
    130                 135                 140
Ser Ala Asp Glu Gln Pro Gln Pro Glu Gln Glu Gln Glu Gln Glu Gln
145                 150                 155                 160
Glu Gln Glu Pro Ser Pro Thr Ser Ser Val Ser Glu Ile Val Leu Asn
                165                 170                 175
Ser Ser Ser Gly Ala Asn Gly Met Thr Ser Ile Val Ala Ala Cys Ser
            180                 185                 190
Ala Ile Arg Ser Phe Lys Tyr Gln His Ser Asp Asp His Leu Leu Ala
        195                 200                 205
Glu Gly Tyr Gln Pro Ala Ala Phe Tyr Arg Ser Leu Ser Ala Ser Lys
    210                 215                 220
His Thr Leu His Thr Leu Trp Leu Asp Ser Cys Gly Gly Ala Ser Pro
225                 230                 235                 240
```

<210> 26880
<211> 66
<212> PRT
<213> A.fumigatus

```
<400> 26880
Gly Ile Arg Ser His Met Asn Gly Trp Val Arg Ala His Gln Val Gly
1               5                   10                  15
Leu Val Lys Asn Leu Arg Leu Ala Ser Asn Trp Pro Ile Ile Lys Cys
            20                  25                  30
Asp Asp Ala Ser Ala His Val Ser Cys Ile Asn Tyr Leu Ala Ala Cys
        35                  40                  45
Gly Ser Phe Met Thr Arg Leu His Ala Ser Ile Ala Met Leu Thr Thr
    50                  55                  60
Ser Ile
65
```

<210> 26881
<211> 158
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (9)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 26881
Thr His Leu Lys Ser Gln Tyr Phe Xaa Arg Asp Gln Cys Tyr Leu Trp
1               5                   10                  15
Arg Ser Tyr Ser Gln His Asp Tyr Ser Leu Ser Glu Val Cys Tyr Phe
            20                  25                  30
Leu Arg Thr Lys Gly Arg Glu Leu Pro Leu Lys Leu Leu Lys Ile Leu
        35                  40                  45
Trp Thr Phe Ser Ile Trp Leu Glu Ser Thr Ala Ile Leu Pro Gln Leu
    50                  55                  60
```

```
Phe Met Leu Gln Arg Thr Gly Glu Ala Asp Thr Ile Thr Thr His Tyr
65                  70                  75                  80
Leu Phe Ala Leu Gly Leu Tyr Arg Ala Leu Tyr Ile Pro Asn Trp Ile
                85                  90                  95
Tyr Arg Tyr Phe Ala Glu Asn Arg Phe Gln Pro Ile Pro Val Val Ala
            100                 105                 110
Gly Ile Val Gln Thr Leu Leu Tyr Ser Asp Phe Phe Tyr Ile Tyr Tyr
        115                 120                 125
Thr Lys Trp Val Asn Cys Thr Arg Ile Ile Phe Asn Asp Arg Leu Met
    130                 135                 140
Lys Asn Arg Val Met Lys Gly Lys Lys Phe Ser Leu Pro Val
145                 150                 155
```

<210> 26882
<211> 562
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (549)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26882

```
Asn Ala Thr Ala Asp Pro Ser Ser Pro Val Val Lys Thr His Lys Glu
1               5                   10                  15
Leu Cys Arg Gly Leu Gly Leu Cys Lys Gly Arg Lys Phe Asp Ser Glu
            20                  25                  30
Pro Ser Glu Lys Ser Thr Arg Thr Pro Ser Glu His Val Asn Ala Ser
        35                  40                  45
Glu Gly Glu Lys Ser Glu Arg Val Asn Ala Pro His Arg Lys Arg Lys
    50                  55                  60
Lys Glu Val Lys Glu Ser Gln Asp Ala Lys Arg Asn Gln Ala Ser Ala
65                  70                  75                  80
Gln Gln Arg Val Ala Arg Gln Glu Lys Glu Arg Arg Arg Leu Glu His
                85                  90                  95
Lys Met Lys Leu Met Gly Val Ser Asn Thr Asp Pro Thr Arg Gln Ala
            100                 105                 110
Val Ser Phe Gly Asp Pro Thr Ile Tyr Leu Asn Pro His Ile Gly Gln
        115                 120                 125
Arg Val Lys Pro His Gln Leu Asn Gly Ile Gln Phe Met Trp Arg Glu
    130                 135                 140
Leu Ile Gln Asp Glu Lys Gln Gln Gly Cys Leu Leu Ala His Thr Met
145                 150                 155                 160
Gly Leu Gly Lys Thr Met Gln Val Ile Ser Leu Leu Asp Thr Ile Ser
                165                 170                 175
Ala Ala Ala Ala Ser Asn Asp Pro Lys Ile Ser Glu Gln Val Pro Glu
            180                 185                 190
Cys Phe His Arg Ser Gln Thr Leu Ile Leu Cys Pro Ser Ser Leu Ile
        195                 200                 205
Asp Asn Trp Tyr Glu Glu Phe Leu Met Trp Thr Pro Glu Glu Ser Arg
    210                 215                 220
Ile Gly Pro Leu Arg Lys Val Thr Ala Ser Met Ile Ala Val Ser Glu
225                 230                 235                 240
Arg Leu Arg Glu Val Ser Asp Trp Asp Lys Glu Gly Gly Ile Leu Ile
                245                 250                 255
```

```
Met Ser Tyr Asp Ile Phe Arg Lys Trp Ile His Asn Lys Glu Thr Lys
            260                 265                 270
Lys Met Asp Lys Pro Leu Arg Asp Asp Glu His Ala Asn Val Lys Lys
        275                 280                 285
Trp Leu Leu Glu Gly Pro Asn Ile Ile Val Ala Asp Glu Ala His Lys
    290                 295                 300
Met Lys Asn Ser Ser Ser Gly Ile Ser Arg Ala Ala Val Gln Phe Arg
305                 310                 315                 320
Ser Lys Ser Arg Ile Ala Leu Thr Gly Ser Pro Leu Ala Asn Asn Leu
                325                 330                 335
Thr Asp Tyr Phe Thr Met Val Asp Trp Ile Ala Lys Gly Tyr Leu Gly
            340                 345                 350
Glu Phe Pro Glu Phe Lys Ala Asn Tyr Val Glu Pro Ile Glu Glu Gly
        355                 360                 365
Leu Tyr Val Asp Ser Thr His Tyr Glu Arg Arg Lys Ser Leu Lys Lys
    370                 375                 380
Leu Gln Val Leu Lys Glu Ile Leu Glu Pro Lys Val Asn Arg Ala Ala
385                 390                 395                 400
Ile Thr Val Leu Glu Gly Asp Met Pro Pro Lys Val Glu Phe Val Ile
                405                 410                 415
Thr Val Pro Leu Thr Glu Leu Gln Arg Ala Ala Tyr Asp Ser Tyr Val
            420                 425                 430
Asp Ser Val Val Gln Gly Lys Thr Glu Val Gly Thr Ala Lys Leu Trp
        435                 440                 445
Thr Trp Met Ala Ile Leu Gly Leu Cys Asn Asn His Pro Ala Cys Phe
    450                 455                 460
Arg Asp Lys Leu Leu Ser Arg Ala Asn Glu Ala Gln Ser Ala Gly Ser
465                 470                 475                 480
Ser Leu Asp Glu Met Leu Pro Gly Asp Glu Pro Ile Thr Gln Ala Gly
                485                 490                 495
Ile Pro Asp Ser Glu Lys Leu Val Ser Glu Gln Glu Arg Leu Phe Ala
            500                 505                 510
Asn Val Pro Asp Met Asn Ala Leu Asn Leu Ser Tyr Arg Ala Gln Leu
        515                 520                 525
Leu Asp Arg Ile Ile Ser Glu Ser Ile Lys Gly Gly Asp Lys Val Leu
    530                 535                 540
Val Phe Ser His Xaa Ile Pro Thr Leu Asn Tyr Val Glu His Val Leu
545                 550                 555                 560
Lys Asn
```

<210> 26883
<211> 110
<212> PRT
<213> A.fumigatus

<400> 26883

```
Gln Ile Thr Arg Gly Lys Trp Tyr Lys Asp Gly Asp Lys Asp Ala Glu
1               5                   10                  15
Ile Thr Ser Glu Asp Val Gln Gln Lys Thr Ala Pro Pro Gly Gly Ser
            20                  25                  30
Val Asn Val Asn Ser Cys Gly Arg Ser Asp Ala Ser Ser Gly Thr Thr
        35                  40                  45
Gly Gly Phe Asp Leu Tyr Asp Gly Asn Thr Lys Ile Gly Arg Val His
    50                  55                  60
Trp Asp Cys Pro Trp Gly Ser Lys Thr Asn Asp Phe Asp Val Gly Glu
```

```
65                  70                  75                  80
Arg Asn Lys Asn Tyr Trp Val Glu Ile Gly Thr Trp Asn Lys Tyr Gly
                85                  90                  95
Gly Ala Ile Gly Thr Val Asp Val Glu Val Gly Arg Lys Arg
            100                 105                 110
```

<210> 26884
<211> 277
<212> PRT
<213> A.fumigatus

<400> 26884

```
Asp Val Pro Lys Glu Pro Arg Ser Ser Ile Ala Ala Thr Thr Leu Pro
1               5                  10                  15
Ala Gly Val Pro Glu Pro Thr Pro Phe Phe Pro Ala Ser Glu Gln Gly
            20                  25                  30
Pro Glu Pro Val Thr Thr Asn Leu Pro Ser Ser Thr Glu Pro Ala Asp
        35                  40                  45
Ala Val Ser Leu Ser Ser Phe Val Val Val Ala Pro Ser Asp Val His
    50                  55                  60
Lys Ala Ser Leu Pro Thr Thr Ser Ser Leu Ser Asp Ser Pro Pro Asn
65                  70                  75                  80
His Glu Ser Asn Thr Asp Ile Arg Lys Ser Val Pro Ser Pro Thr Ser
                85                  90                  95
Tyr Asn Gln Thr Ser Gly Leu Ser Ser Ile Asp Gly Leu Ser Ser Thr
            100                 105                 110
Glu Leu Ser Thr Thr Pro Trp Ser Ser Glu Val Ala Thr Thr Pro Thr
        115                 120                 125
Val Glu Thr Gly Phe Leu Val Glu Thr Pro Thr Ser Asn Thr Val Thr
    130                 135                 140
Ala Ala Phe Pro Ser Ala Thr Asn Pro Ser Gln Asn Phe Ser Asp His
145                 150                 155                 160
Asp Ser Glu Asp Val Arg Asn Arg His Thr Leu Arg Thr Ile Leu Gly
                165                 170                 175
Ser Ile Phe Gly Thr Val Gly Leu Ile Ala Val Ile Leu Leu Met Cys
            180                 185                 190
Phe Leu Ile Tyr Arg Tyr Arg Arg Arg Lys Pro Arg Asp Gly Arg Ser
        195                 200                 205
Ile Gly Gly Ser Glu Lys Leu Leu Arg Asp Gly Arg His Ser Ala Asp
    210                 215                 220
Ser Trp Ala Ser Ser Gln His Ala Phe Leu Ser Arg Thr Ser Ser Leu
225                 230                 235                 240
Ser Asp Ala Pro Ser Ala Pro Asp His His Val Pro Ala Leu Asn Met
                245                 250                 255
Ala Tyr Ala His Val Arg Pro Gly Ser Ser His His Leu Pro Ala Gly
            260                 265                 270
Leu Lys Val Arg Gln
        275
```

<210> 26885
<211> 125
<212> PRT
<213> A.fumigatus

<400> 26885

```
Leu Ile Arg Gln Arg Ala Asn Asn Val Asp Pro Tyr Leu Arg Glu Thr
```

```
1               5                   10                  15
Arg Leu Lys Ser Phe Leu Glu Pro Ile Arg Lys Ala Trp Gln Glu Glu
            20                  25                  30
Glu Phe Arg Thr Thr Ser Ser Ser Phe Glu Gly Phe Cys Asp Met Leu
        35                  40                  45
Gly Leu Gln Asn Val Gly Pro Tyr Met Gln Lys Asn Gln Ala Gln Lys
    50                  55                  60
Leu Glu Asp Trp Ser Ala Val Pro Leu Asp Asn Glu Gly Lys Gln Ile
65                  70                  75                  80
Pro Glu Thr Met Thr Arg Glu Phe Gln Val Leu Ser Leu Arg Pro Thr
                85                  90                  95
Leu Gly Asp Leu Thr Leu Ser Leu Ile Arg Ala Pro Ala Thr Thr Leu
            100                 105                 110
Lys Gly Thr Lys Ile Ser Ser Gln Ser Pro Thr Arg Tyr
        115                 120                 125
```

<210> 26886
<211> 62
<212> PRT
<213> A.fumigatus

<400> 26886

```
Val Ala Phe Gln Arg Leu Trp Asp Thr Tyr Phe Leu Thr Arg Asn Trp
1               5                   10                  15
Lys Thr Phe Tyr Asp Leu Leu Glu Pro Lys Ile Lys Glu Ile Thr Met
            20                  25                  30
Ala Asn Arg Val Asp Asp Lys Leu His Met Glu His Thr Ser Ile Leu
        35                  40                  45
Leu Ile Ile Met Tyr Gly His Leu Gln Ser Ser Ser Ala Leu
    50                  55                  60
```

<210> 26887
<211> 142
<212> PRT
<213> A.fumigatus

<400> 26887

```
Glu Ser Arg Arg Arg Arg Leu Arg Cys Ile Ala Met Met Met Ala Gln
1               5                   10                  15
Pro Phe Pro Ala His Gln Gly Met Pro Gln His Pro Gly Leu Pro Pro
            20                  25                  30
Gly His Pro Met Ala Pro Gly Gln His Pro Asn Ala His Pro Gly Ala
        35                  40                  45
Gly Met Val Gln Ala Val His Pro Ala Val Ser Ala Pro Gly Gly Pro
    50                  55                  60
Gln Val Thr Gln Gly Gly Pro Met Met Gly Met Pro Pro Gly Ala Gly
65                  70                  75                  80
Thr Thr Gly Pro Gly Gly Pro Val Gln Ala His Ala Leu Ser His Leu
                85                  90                  95
Gly Pro Ala Gln Ala His Leu Phe Gln Gln Pro Gln Phe Ala Gln Thr
            100                 105                 110
Cys Thr Ser Leu Ser Leu Cys Thr Thr Leu Ser Ile Trp Arg Gly Gly
        115                 120                 125
Gly Val Phe Thr Thr Gly Leu Glu Gly Pro Ser Val Leu Ile
    130                 135                 140
```

<210> 26888
<211> 166
<212> PRT
<213> A.fumigatus

<400> 26888
Arg Pro Gln Ser Leu Cys Ser Tyr Phe Val Arg Ile Leu Cys Leu Asn
1 5 10 15
Glu Ala Leu Val Gly Phe Ser Arg Leu Thr Arg Lys Gln Ser Ala Phe
20 25 30
Glu Asp Ser Arg Phe Thr Pro Ile Pro Gln Ser Leu Leu Pro Ser Leu
35 40 45
Ser Cys Ser Leu Thr Leu Leu Gly Ser Phe Glu Pro Cys Thr Asn Ala
50 55 60
Leu Asp Trp Ile Leu Gly Val His Gly Ile Arg Ile Ser Phe Ile His
65 70 75 80
Arg Gly Arg Arg Tyr Gly Ala Thr Tyr Leu Pro Asp Ile Ala Val Glu
85 90 95
Gln Gly Trp Thr Lys Glu Glu Thr Leu Glu Ser Leu Met Arg Lys Ala
100 105 110
Gly Trp Asp Gly Val Thr Thr Gly Gly Val Ala Arg Arg Leu Leu Arg
115 120 125
Gly Ser Ser Gly Gly Gly His Ser Gly Ser Ser Lys Pro Trp Glu Gln
130 135 140
Val Ser Asp Phe Arg Val Val Lys Tyr Gln Gly Leu Lys Ala Ser Ala
145 150 155 160
Ser Tyr Ala Glu Trp Gln
165

<210> 26889
<211> 232
<212> PRT
<213> A.fumigatus

<400> 26889
Ser Gln Trp Val Ala Phe Ala Glu Val Arg Val Glu His Arg Phe His
1 5 10 15
Cys Phe Gly His Arg Lys Met Ala Ser Pro Ala His Cys Ile Tyr Cys
20 25 30
Phe Glu Cys Leu Ala Ala Ser Tyr Lys Arg His Glu Pro Ile Asp Leu
35 40 45
Ala Ala Val Glu Glu Leu Trp Glu Arg Tyr Glu Gln Ser Lys Lys Pro
50 55 60
Ala Ser Leu Gln Asp Ile Asn Asn Pro Val Ser Gln Arg Asp Ser Ala
65 70 75 80
Asp Leu Gly Arg Glu Val Val Val Glu Glu Glu Glu Glu Glu Asp Asp
85 90 95
Asp Asp Ala Asp Glu Glu Leu Asp Thr Thr Gln Arg Gly Ser Met Lys
100 105 110
Ser Lys Ser Ser Arg Pro His Ser Ile Lys Leu Pro Ser Val Ser Arg
115 120 125
Leu Gln Ser Gln Leu Ser Ser Asp Ser Ser Ser Val Ser Thr Thr Pro
130 135 140
Ser Val Met Ser Thr Ser Ser Ser Arg Ser Ile Leu Ser Gly Ser Thr
145 150 155 160
Ala Ala Thr Thr Pro Ile Ser Glu Ser Thr Gln Pro Glu Met Ala Glu

```
                165                 170                 175
Thr Arg Gln Gln Arg Leu His Asp Gln Arg Tyr Pro Leu Phe Val Thr
            180                 185                 190
Trp Asn Thr Leu Ser Lys Asn Gly His Lys Ser Leu Arg Gly Cys Ile
        195                 200                 205
Gly Thr Phe Asp Ala His Glu Leu Ala Glu Gly Leu Arg Ala Tyr Ala
    210                 215                 220
Leu Thr Ser Tyr Val Ser Phe Ala
225                 230
```

<210> 26890
<211> 71
<212> PRT
<213> A.fumigatus

<400> 26890

```
Ser Leu Phe Lys Met Ser Ser Phe Met Phe Thr Cys Lys Ser Arg Leu
1               5                   10                  15
Ser Asp Pro Val His Ser Gly Tyr Lys Ser Met Leu Trp Leu Phe Ser
            20                  25                  30
Tyr Glu Asn Phe Gly Pro Leu Leu Ser Ser His Leu Met Asp Ile Ile
        35                  40                  45
Phe Met Tyr Arg Ser Ile Ser Phe Pro Pro Pro Glu Asp Ile Tyr Thr
    50                  55                  60
Ser Ile Val Arg His Asp Ile
65                  70
```

<210> 26891
<211> 61
<212> PRT
<213> A.fumigatus

<400> 26891

```
Tyr Arg Ile Leu Arg Leu Cys Arg Phe Tyr Lys Asn Ser Glu Cys Ile
1               5                   10                  15
His Thr Asp Gln Leu Val Ser Tyr Gln Asn Gln Arg Glu Val Ala Gln
            20                  25                  30
Gly Ile Lys Arg Ala Phe Gln Asp Ile Pro Gly Leu Lys Arg Glu Asp
        35                  40                  45
Leu Phe Ile Val Arg Arg Ala Gln Ser Pro Lys Leu Pro
    50                  55                  60
```

<210> 26892
<211> 106
<212> PRT
<213> A.fumigatus

<400> 26892

```
Gln Leu Gln Thr Ser Lys Leu Trp Asn Ser Gln His His Pro Asp Asp
1               5                   10                  15
Val Glu Lys Ala Leu Asp Asp Cys Leu Ala Glu Leu Glu Leu Asp Tyr
            20                  25                  30
Leu Asp Leu Tyr Leu Val His Trp Pro Ser Ser Phe Lys Arg Gly Asp
        35                  40                  45
Glu Tyr Phe Pro Leu Val Lys Asp Ser Pro Ile Pro Glu Gly Asp Val
    50                  55                  60
```

```
Glu Ile Asp Asp Ser Ile Ser Ile Val Asp Thr Trp Lys Ala Met Ile
65                  70                  75                  80
Lys Leu Pro Lys Ser Lys Ala Arg Ala Val Gly Val Ser Asn His Thr
                85                  90                  95
Ile Glu His Val Ser His Arg His His Asn
            100                 105
```

<210> 26893
<211> 120
<212> PRT
<213> A.fumigatus

<400> 26893

```
Phe Leu Gln Ala Phe Gly Asn Asn Met Leu Gly Leu Pro Leu Leu Ile
1               5                   10                  15
Ala Ser Asp Glu Phe Lys Ala Val Ala Ala Asp Val Pro Lys Arg Leu
            20                  25                  30
Gly Gln Glu Val Ser Pro Ala Gln Val Ile Leu Ala Trp Ser Gln Val
        35                  40                  45
Gly Gly His Ser Val Ile Pro Lys Ser Val Thr Pro Glu Arg Ile Arg
    50                  55                  60
Ser Asn Phe Gln Glu Ile Glu Leu Thr Pro Glu Glu Val Glu Arg Val
65                  70                  75                  80
Ser Ala Leu Gly Lys Gln Pro Arg Arg Phe Asn Ile Pro Tyr Ile Ala
                85                  90                  95
Asn Lys Pro Arg Trp Asp Ile Asn Ile Phe Gly Glu Glu Glu Glu Lys
            100                 105                 110
Pro Ala Thr His Lys Val Ile Ile
        115                 120
```

<210> 26894
<211> 231
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (224)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26894

```
Ala Leu Tyr Ser Val Arg Arg Ala Pro Arg Leu Trp Gln Arg Asp Ile
1               5                   10                  15
Ser Lys Ala Leu Glu Glu Ile Gly Leu Gln Arg Ile Asp Thr Asp Ser
            20                  25                  30
Cys Leu Tyr Thr Asp Asp Lys Thr Val Val Leu Val Phe Met Asp Asp
        35                  40                  45
Ile Leu Phe Leu Tyr His His Lys Ser Lys Lys His Ala Asp Asn Leu
    50                  55                  60
Ile Trp Lys Leu Gln Lys Gln Tyr Lys Phe Gln Asp Leu Gly Glu Gly
65                  70                  75                  80
Asp Ser Phe Leu Asn Ile Lys Ile Thr Arg Asp Gln Met Lys Arg Lys
                85                  90                  95
Leu Trp Leu Ser Gln Arg Ala Tyr Ile Glu Lys Ile Val Ala Arg Tyr
            100                 105                 110
His Leu Asp Leu Thr Asn Gln Lys Ala Arg Thr Pro Ala Thr Thr Asp
```

```
        115                 120                 125
Arg Leu Arg Pro Tyr Asn Gly Lys Ala Thr Val Asn Lys Ile His His
    130                 135                 140
Tyr Gln Ser Lys Ile Arg Ser Ile Leu Tyr Ala Ala Val Thr Thr His
145                 150                 155                 160
Leu Asp Ile Ala Lys Ile Thr Ser Asp Leu Ser Arg Tyr Leu Leu Asn
                165                 170                 175
Pro Gly Pro Ala His Phe Asp Ala Ala Asn Arg Ile Ile Leu Tyr Leu
            180                 185                 190
Ser Ser Thr Lys Asp Tyr Ala Leu Glu Tyr Gly Ser Asp Leu Thr Gly
        195                 200                 205
Asn Ile Phe Ile Ile Thr Ser Asn Ala Ala Tyr Val Phe Thr Thr Xaa
    210                 215                 220
Phe Arg Gly Val Pro Ser Ile
225                 230
```

<210> 26895
<211> 96
<212> PRT
<213> A.fumigatus

<400> 26895

```
Trp Tyr Gly Thr Ala Leu Thr Thr Ser Gly Lys Leu Thr Ala Gly Glu
1               5                   10                  15
Val Leu Arg Thr Phe Trp Ala Cys Leu Thr Ala Ala Gln Ser Ile Glu
            20                  25                  30
Leu Ala Leu Pro Gln Val Ile Val Met Glu Lys Gly Lys Val Ala Ala
        35                  40                  45
Ile Met Leu Lys Asp Leu Leu Asn Asp Arg Arg Val Lys Lys Arg Pro
    50                  55                  60
Glu Glu Leu Glu Gly Ala Ser Tyr Pro Arg Tyr Cys Glu Gly Asp Ile
65                  70                  75                  80
Glu Val Cys Asp Val Ser Phe Pro Ala Asn Asn Ser Cys Pro Val Phe
                85                  90                  95
```

<210> 26896
<211> 394
<212> PRT
<213> A.fumigatus

<400> 26896

```
Ser Ser Gln Pro Asp Arg Pro Ile Leu Ser Ser Val Ser Phe Phe Phe
1               5                   10                  15
Pro Ala Gly Glu Thr Thr Phe Val Ile Gly Glu Ser Gly Ser Gly Lys
            20                  25                  30
Ser Thr Leu Gly Gln Leu Leu Ala Arg Leu Tyr Met Pro Thr Ser Gly
        35                  40                  45
Glu Ile Leu Ile Asp Gly Asn Ala Ile Gln Ala Leu Ser Leu Asn Trp
    50                  55                  60
Ile Arg Asn Asn Ile Thr Leu Val Asp Gln Gln Ser Val Leu Phe Asn
65                  70                  75                  80
Glu Ser Val Leu Thr Asn Ile Ala Phe Gly Arg Arg Ala His Glu Thr
                85                  90                  95
Val Thr Lys Gly Asp Leu Arg Glu Cys Ile Asp Leu Ala Met Leu Arg
            100                 105                 110
Asp Thr Ile Asp Ser Leu Pro Asn Gly Leu Asp Thr Cys Val Gly Pro
```

```
        115                 120                 125
Gly Gly Ser Phe Leu Ser Gly Gly Gln Arg Gln Arg Val Ala Ile Ala
    130                 135                 140
Arg Ala Arg Leu Arg Asp Thr Pro Ile Leu Ile Met Asp Glu Pro Thr
145                 150                 155                 160
Ser Ala Leu Asp Gly Ile Asn Arg Ile Ala Val Met Lys Ala Ile Arg
                165                 170                 175
Glu Trp Arg Arg Gly Lys Thr Thr Ile Ile Ile Thr His Asp Met Ser
            180                 185                 190
Gln Ile Val Asp Gln Asp Tyr Val Tyr Val Leu Glu His Gly Ser Val
        195                 200                 205
Val Gln Ser Gly Tyr Arg His Glu Leu Glu Asn Ser Pro Ala Lys Glu
    210                 215                 220
Lys Tyr Phe Arg Phe Ser Glu Arg Gln Ile Leu Ser Lys Ser His Pro
225                 230                 235                 240
Lys Pro Glu Val Pro Tyr Val Asn Gly Glu Thr Gln Glu Ile Ile Asp
                245                 250                 255
Phe Pro Asn Thr Ile Cys Val Ser Asn Phe Gly Phe Lys Glu Thr Pro
            260                 265                 270
Val Leu Ser Arg Arg Ile Pro Ser Gln Pro Lys Asn Thr Gln Leu Phe
        275                 280                 285
Asp Arg Arg Met Glu Glu Thr Gln Leu Ala Ala Gly Leu Arg Asn Val
    290                 295                 300
Val Lys Ala Ala Ser Gln Ala Glu Ile Ser Ile Pro Asp Gly Val Ala
305                 310                 315                 320
Ile Pro Met Cys Glu Leu Ser Met Ala Gln Ser Arg Arg Ser Leu Ile
                325                 330                 335
Ser Ala His Arg Leu Arg Leu His Arg Ala Ser Leu Pro Pro Pro Val
            340                 345                 350
Pro Ala Ile Asn Asp Ser Arg Pro Ile Lys Arg Pro Gln Tyr Ala Gly
        355                 360                 365
Gly Asp Thr Pro Leu Ser Gly Pro His Arg Leu Ser Met Lys Pro Asp
    370                 375                 380
His Ala Asp Leu Ile Ala Gln Pro Ser Pro
385                 390
```

<210> 26897
<211> 292
<212> PRT
<213> A.fumigatus

<400> 26897

```
Glu Asp Ala Ser Ser Arg Phe Glu Gly Leu Pro Arg Glu Asp Gly Arg
1               5                   10                  15
Ile Ala Ser Gly Ser Gly Pro Lys Gly Val Trp Phe Asp Leu Phe Gly
            20                  25                  30
Ser Ala Phe Val Val Phe Glu Leu His Thr Leu Phe Ala Leu Ser Val
        35                  40                  45
Thr Leu Leu Val Val Ala Pro Leu Val Leu Leu Val Thr Ser Ile Ala
    50                  55                  60
Leu Ala Arg Ala Asp Lys Met Tyr Leu Phe Arg Ser Ser Ala Ser Pro
65                  70                  75                  80
Glu Asp Ser Asp Gly Ser Glu Val Val Pro Leu His Gly Val Arg Gly
                85                  90                  95
Phe Phe Arg Phe Pro Phe Leu Leu Val Ile Pro Thr Ala Val Thr Val
            100                 105                 110
```

```
Gly Leu Ala Tyr Leu Val Thr Lys Phe Asn Pro Tyr Ile Ile His Ser
        115                 120                 125
Ser Glu Tyr Ala Val Trp Ser Met Met Ile Ser Ala Trp Val Phe Leu
    130                 135                 140
Ala Trp Phe Val Ser Arg Val Ala Asp Phe Ala Arg Pro Ser Ala Phe
145                 150                 155                 160
His Arg Val Tyr Thr Leu Thr Trp Leu Phe Leu Val Glu Trp Val Phe
                165                 170                 175
Leu Val Ile Ser Thr Val Tyr Glu Asn Gln Tyr Gly Leu Ala Gly Gly
            180                 185                 190
Tyr Phe Val Leu Phe Val Phe Ala Gly Thr Phe Leu Ala Thr Trp Ile
        195                 200                 205
Ser Tyr Leu Glu Leu Phe Ala Leu Pro Arg Lys Ser Asp Tyr Ala Thr
    210                 215                 220
Gln Leu Ala Leu Pro Ser Arg Arg Thr Ser Ser His Gly Ser Arg Leu
225                 230                 235                 240
Gly Thr Ala Ser Gly Glu Asp Val Glu Asp Gly Glu Asp Glu Asp Asp
                245                 250                 255
Asp Gly Thr Thr Ala Glu Ala Thr Glu Thr Thr Ser Leu Leu Arg Gly
            260                 265                 270
Gln Arg Thr Thr Phe Ala Asn Tyr Val Arg Ser Ser Pro Gln Gly Pro
        275                 280                 285
Lys His Pro Arg
    290
```

<210> 26898
<211> 154
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (35),(59)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26898

```
Ile Phe Leu Pro Glu Pro Gln Pro Glu Thr Thr Ala Cys Thr Ile Glu
1               5                   10                  15
Thr Ala Thr Thr Asp Pro Pro Ser Gly Gly Leu Thr Thr Ser Gln Pro
            20                  25                  30
Ser Ala Xaa Thr Ile Ser Ser Ser Ser Val Asp Asp Tyr Thr Ser Gly
        35                  40                  45
Met Ser Gln Ser Ala Ser His Pro Ser Ile Xaa Ser Val Ile Ser Gly
    50                  55                  60
Ala Ser Ser Phe Ser Gly Asp Gly Ser Leu Lys Asp Lys Glu Cys Asp
65                  70                  75                  80
Gln Gly Val Ala Val Pro Ser Ile Leu Arg Thr Gly Glu Thr Val Lys
                85                  90                  95
Ala Arg Leu Leu Arg Pro Gln Arg Ser His Glu Asp Asp Glu Ser Arg
            100                 105                 110
Tyr Tyr Cys Asp Asp Glu Thr Asp Ser Glu Asp Asp Ser Glu Asp Glu
        115                 120                 125
Val Leu Val Ile Gly Arg Lys Lys Pro Ser Pro Gln Lys Pro Ala Met
    130                 135                 140
Cys Gly Ala Gln Ala Phe Lys Pro Lys Ser
145                 150
```

<210> 26899
<211> 515
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (364),(371),(479)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26899

```
Glu Asp Gln Val Ala Glu Thr Asp Ala Thr Glu Leu Asp Asp Ala Arg
1               5                  10                  15
Glu Leu Ser Lys Thr Val Gly Thr Pro Ala Phe Tyr Ala Pro Glu Val
            20                  25                  30
Cys Tyr Thr Gly Asp Asp Phe Glu Glu Thr Ile Gly Ser Val Pro Lys
        35                  40                  45
Ile Thr Gly Ala Ile Asp Val Trp Ser Leu Gly Val Thr Leu Tyr Gly
    50                  55                  60
Met Ile Phe Gly Arg Leu Pro Phe Val Ser Asp Asp Glu Tyr Ser Met
65                  70                  75                  80
Phe Gln Thr Ile Val Lys Lys Asp Val Phe Ile Pro Arg Lys Arg Leu
                85                  90                  95
Gln Pro Val Glu Val Asp Pro Glu Ser Ile Ser Gln Trp Pro Arg Tyr
            100                 105                 110
Ser Asn Asn Asn Lys Arg Met Glu Glu Glu Leu Val Tyr Glu Glu Ile
        115                 120                 125
Asp Asp Glu Leu Tyr Asp Leu Leu Lys Arg Leu Leu Thr Lys Asp Pro
    130                 135                 140
Val Lys Arg Ile Thr Val Lys Glu Ile Lys His His Pro Trp Val Leu
145                 150                 155                 160
His Gly Leu Pro Asn Pro Arg Ala Trp Ile Glu Glu Thr Asp Pro Gly
                165                 170                 175
Tyr Gln Ser Lys Gly Lys Lys Ile Glu Val Ser Asn Glu Glu Val Thr
            180                 185                 190
Thr Ala Val Ser Lys Val Pro Phe Ile Gln Arg Val Arg Ser Asn Val
        195                 200                 205
Ala Lys Leu Ser Asn Tyr Leu Thr Gly Arg Ser Lys Asp Lys Asp Lys
    210                 215                 220
Glu Ser Arg Lys Arg Thr Ser Ser Thr Thr Pro Ser Ile Asp Ser Ser
225                 230                 235                 240
Ala Ser Ser Asn Ala Ser Leu Gly Lys Tyr Ile Leu Asp Gly Arg Arg
                245                 250                 255
Gly Ser Leu Arg Glu Glu Asp Leu Tyr Arg Pro Ala Arg Leu Ala Thr
            260                 265                 270
Arg Asp Ala Glu His Pro Leu Ser His Ser Val Thr Ala Ser Pro Val
        275                 280                 285
Gly Arg Asp Asn Gln Thr Ser Tyr Phe Asp Asp Leu Arg Thr Asp Ala
    290                 295                 300
Thr Leu Asp Arg Thr Pro Arg Pro Asp Pro Pro His Arg Ala Thr Ser
305                 310                 315                 320
Thr Leu Ser Thr Ala Gly Ser Ala Lys Thr Ile Arg Pro Asp Trp Thr
                325                 330                 335
Val Thr Pro Cys Ala Ser Gln Arg Val Ser Ala Pro Ser Lys Ile Glu
            340                 345                 350
```

```
Asn His Gly Thr Thr His Val Gly Gly Leu Leu Xaa Gly Ala Gly Arg
        355                 360                 365
Arg Leu Xaa Arg Gly Leu Gln Thr Arg Lys Trp Arg Ser Asp Arg Ser
    370                 375                 380
Ile Ser Gly Asp Thr Ala Asp Ser Val Ser Leu Asp Gly Asp Arg His
385                 390                 395                 400
Ser Glu Pro Ser Leu Ala Leu Ser Val Ala Ser Ala Val Gly His Val
                405                 410                 415
Gln Gly Ser Asn Phe Leu Gln Asp Glu Asp Ser His Tyr Phe His Ala
            420                 425                 430
Gly Ser Leu Ser Ala Ala Glu Ser Gly His Arg Arg Asn Arg Ser His
        435                 440                 445
His Leu Thr Thr Lys Ser Ser His Glu Pro Phe Gln Phe Ala Lys Asp
    450                 455                 460
Val Leu Leu Lys Lys Arg Arg Ser Asp Ile Tyr Gln Ala Pro Xaa Asp
465                 470                 475                 480
Asp Gln Val Pro Pro Glu Ile Lys Ser Lys Ser Thr Asp Ser Leu Asn
                485                 490                 495
Ile Leu Thr Arg Ala Ala Thr Arg Asp Asn Ser Met His Asp Arg Asn
            500                 505                 510
Cys His His
        515
```

<210> 26900
<211> 73
<212> PRT
<213> A.fumigatus

<400> 26900

```
Ile Phe His Ser Leu Thr Glu Asp Tyr Asn Leu Glu Leu Gln Tyr Arg
1               5                   10                  15
Lys Pro Phe Leu Asp Ile Trp Arg Asp Glu Lys Asp Asp Pro Glu Leu
            20                  25                  30
Gly Pro Leu Ser Glu Arg Met Gly Val Arg Asp Arg Val Thr Gly Lys
        35                  40                  45
Leu Leu Met Thr Glu Glu Glu Lys Glu Ala Ala Ser Glu Ser Leu Tyr
    50                  55                  60
Cys Gly Gln Val Val Leu Trp His Asp
65                  70
```

<210> 26901
<211> 137
<212> PRT
<213> A.fumigatus

<400> 26901

```
Arg Gly Ser Ile Gln Cys Ser Leu Ser Ile Asn Ala Phe Glu Ser Glu
1               5                   10                  15
Glu Lys Ala Arg Gln Met Leu Arg Asn Val Ala Gly Cys Leu Lys Lys
            20                  25                  30
Gly Gly Arg Phe Leu Gly Val Cys Pro Asn Ser Asp Val Ile Ser Ala
        35                  40                  45
Arg Val Ser Glu Ile Asn Ala Lys Lys Lys Ala Arg Gln Ala Gln Ala
    50                  55                  60
Lys Lys Glu Lys Ser Asp Glu Ala Pro Glu Asp Gly Glu Val Glu Glu
65                  70                  75                  80
```

```
Asp Asp Gly Lys Val Glu Trp Gly Asn Gln Ile Tyr Arg Val Arg Phe
                85                  90                  95
Pro Ile Thr Pro Pro Glu Asp Gly Val Phe Arg Pro Pro Phe Gly Trp
            100                 105                 110
Lys Tyr Ser Tyr Phe Met Glu Glu Ala Val Glu Glu Val Pro Glu Tyr
        115                 120                 125
Val Val Pro Trp Glu Ala Phe Arg Ala
    130                 135
```

<210> 26902
<211> 95
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (81),(86)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26902

```
Arg Asp Ala Gly Ala Asn Ser Pro Ala Gly Ile Gly Arg Ala Ser Ala
1               5                   10                  15
His Gln Tyr Ala His Asn Gly Ala Lys Ala Val Tyr Leu Cys Asp Phe
            20                  25                  30
Thr Asp Thr His Leu Glu Thr His Lys Arg Glu Ile Glu Ser Leu Tyr
        35                  40                  45
Pro Gly Val Asp Val Gln Ile Arg Val Phe Asp Ala Ala Glu Glu Asp
    50                  55                  60
Ala Val Lys Ala Val Val Ala Asp Ala Leu Ala Leu Phe Thr Trp Pro
65                  70                  75                  80
Xaa Trp Pro Thr Gly Xaa Arg Thr Ala Ser His Thr Ala Ala Pro
                85                  90                  95
```

<210> 26903
<211> 151
<212> PRT
<213> A.fumigatus

<400> 26903

```
Cys Asp Ser Leu Val Leu Phe Ile Asn Pro Pro Ser Gly Ile Leu Phe
1               5                   10                  15
Ile Phe Ile Leu Gly Thr Leu Thr Leu Leu Ile Gly Met Ala Leu Ala
            20                  25                  30
Trp Ala Trp Gly Val Ile Thr Met Lys Ala Ala Leu Ala Ala Arg Pro
        35                  40                  45
Gln Thr Glu Thr Leu Ala Arg Leu Gln Met Leu Gly Gln Glu Ala Ala
    50                  55                  60
Arg Gln Ala Asn Ala Thr Gly Gln Ser Ala Ala Ser Val Gln Ser Gln
65                  70                  75                  80
Leu Val Tyr Asp Gly Phe Met Leu Asp Ala Arg Val Ser Val Ile Tyr
                85                  90                  95
Phe Ala Met Thr Cys Val Phe Ile Tyr Phe Leu Val Arg Tyr Ile Leu
            100                 105                 110
Val Leu His Phe Tyr Gln Val Thr Asp Met Arg Lys Lys Lys Arg Pro
        115                 120                 125
Gly Cys Ala Pro Arg Ile Pro Ser Ser Arg Ser Ser Arg Ser Ser Gly
```

130 135 140
Pro Ser Leu Pro Ile Cys Ser
145 150

<210> 26904
<211> 303
<212> PRT
<213> A.fumigatus

<400> 26904
Ser Ser Ser Asn Arg Pro Ala Ala Pro Val Leu Pro Lys Arg Ala Asn
1 5 10 15
Pro His Leu Leu Asn Leu Lys Pro Glu Pro Glu Thr Pro Arg Leu Ser
20 25 30
Pro Arg Ala Met Thr Val Leu Gly Val Ser Ala Leu Thr Ile Ser Thr
35 40 45
Tyr Cys Gly Tyr Leu Tyr Ala Ser Tyr Arg Arg Glu Val Ser Asn Ala
50 55 60
Lys Ser Leu Asp Val Pro Gln Asp Val Ser Asp Arg Tyr Asn Arg Thr
65 70 75 80
Ala Pro Asn Phe Asp Ala Glu Val Glu Met Ser Glu Lys Val Met Arg
85 90 95
Met Gly Lys Lys Arg Gln Asp Leu Val Arg Lys Ala Arg Gly Asn Val
100 105 110
Leu Glu Val Ser Cys Gly Thr Gly Arg Asn Leu Glu Tyr Tyr Asp Leu
115 120 125
Gly Glu Arg Arg Gly Phe Asp Glu Asp Gly Lys Ala Val Ile Arg Gly
130 135 140
Cys Arg Ser Val Thr Phe Val Asp Leu Ser Pro Gln Met Ile Glu Val
145 150 155 160
Ala Arg Ser Lys Phe Glu Lys Leu His Pro Asn Phe Lys Asn Val Thr
165 170 175
Phe Arg Ala Gln Asp Ala Lys Asp Val Val Pro Pro Ser Ala Gly Glu
180 185 190
Lys Pro Ala Tyr Tyr Asp Thr Ile Val Gln Thr Met Gly Leu Cys Ser
195 200 205
Met Pro Asp Pro Val Gly Thr Leu Arg His Leu Gly Ser Ile Thr Glu
210 215 220
Pro Asn Lys Gly Gln Ile Phe Leu Leu Glu His Gly Arg Ser Tyr Tyr
225 230 235 240
Asp Trp Leu Asn Asn Ile Leu Asp Asn Leu Ala Pro Ala His Ala Asp
245 250 255
Arg His Gly Cys Trp Trp Asn Arg Asp Ile Gly Glu Ile Val Arg Gln
260 265 270
Ser Gly Leu Glu Ile Val Glu Glu Lys Arg Trp His Phe Gly Thr Thr
275 280 285
Trp Lys Tyr Val Leu Arg Pro Val Arg Glu Ser Gln Asp Ala Lys
290 295 300

<210> 26905
<211> 244
<212> PRT
<213> A.fumigatus

<400> 26905
Ala Asp Ser His Val Gly Cys Gly His Thr Lys Gly Lys Ser Val Val

```
1               5                   10                  15
Ser Arg Gly Glu Ala Tyr Ala Arg Val Gln Ala Ala Cys Asp Ala Arg
            20                  25                  30
Asn Glu Gly Gln Asp Ile Phe Ile Leu Ala Arg Thr Asp Ala Leu Ile
        35                  40                  45
His Gly Trp Asp Glu Ala Ile Thr Arg Ala Lys Glu Phe Lys Arg Ile
    50                  55                  60
Gly Val Asp Ala Val Phe Val Glu Ala Leu Pro Asp Arg Glu Ala Met
65                  70                  75                  80
Lys Arg Cys Ser Glu Glu Ile Gly Ile Pro Val Phe Ala Asn Ile Ile
                85                  90                  95
Glu Gly Gly Lys Thr Glu Asn Leu Ser Ala Leu Glu Leu Ala Gln Leu
            100                 105                 110
Gly Phe Cys Ala Val Ala Tyr Pro Trp Thr Leu Val Ala Ala Lys Leu
        115                 120                 125
Lys Ser Ile Arg Glu Thr Leu Asp Asp Leu Lys Lys Ser Met Thr Ile
    130                 135                 140
Gly Ala Pro Pro Met Ile Leu Gly Tyr Ser Glu Val Cys Glu Gly Val
145                 150                 155                 160
Gly Phe Asn Arg Tyr Trp Val Cys Tyr Ile Leu Ser Asn Leu Ser Phe
                165                 170                 175
Arg Lys Thr Tyr His Met Leu Thr Met Ala Arg Leu Val Lys Gln Asp
            180                 185                 190
Met Ser Met Met Arg Thr Gly Trp Ser Ile Ile Leu Lys Thr Glu Leu
        195                 200                 205
Gly Arg Ala Arg Lys Val Pro Tyr Ile Met Thr Val Arg Arg Glu Arg
    210                 215                 220
Leu Phe Arg Arg Cys Cys Ile Ser Phe Pro Val Ile Tyr Gly Cys Cys
225                 230                 235                 240
Trp Ser Ser Arg
```

<210> 26906
<211> 103
<212> PRT
<213> A.fumigatus

<400> 26906

```
Ile Val Leu Arg Ile Arg His Asn Leu Met Val Tyr Arg Ser Gly Ser
1               5                   10                  15
Ile Ala Phe Glu Lys Val Leu Ser Asn Tyr Ala Ile Leu Lys Thr Val
            20                  25                  30
Thr Pro Ala Glu Asp Val Arg Gly Asp Thr Leu Trp Ala Ser Gly Tyr
        35                  40                  45
Glu Ala Tyr Asn Gln His Ser Pro Ala Trp Lys Lys Phe Ala Glu Gly
    50                  55                  60
Leu Thr Ala Thr His Tyr Gln Ser Thr Phe Asn Asn Val Ile Arg Asn
65                  70                  75                  80
Gln Asp Met Glu Leu Ile Thr Glu Asn Arg Gly Asn Leu Gly Asn Ser
                85                  90                  95
Gly Val Ile Ser Lys Ala Ser
            100
```

<210> 26907
<211> 133
<212> PRT

<213> A.fumigatus

<400> 26907
Cys Phe Glu Ser Ser Thr Arg Asn Pro Lys Gln Asn Ser Phe Ala Gln
1 5 10 15
Ala Leu Gln Leu Arg Thr Asn Ser Pro Ser Arg Leu Ile Arg Arg Ser
20 25 30
Gln Gly Ser Pro Lys Ser Phe Leu Pro Gly Lys Pro His Ala Lys Trp
35 40 45
Leu Trp Ala Asn Gln Ile Arg Gly Tyr Ile Pro Met Glu Asn Met Cys
50 55 60
Arg Lys Ile Gln Glu Leu Val Arg Val Thr Ala Ser Pro Val Met Ala
65 70 75 80
Asp Gly Asp Thr Gly Tyr Gly Ser Pro Met Asn Val Lys Arg Thr Val
85 90 95
Glu Cys Phe Ala Ala Asp Gly Ala Ala Gly Ile Met Ile Glu Asp Gln
100 105 110
Thr Trp Pro Lys Arg Arg Phe Pro Phe Ser Pro Gly Asp His Phe Thr
115 120 125
Leu Ser Trp Leu Ser
130

<210> 26908
<211> 112
<212> PRT
<213> A.fumigatus

<400> 26908
Gly Arg Arg Asp Lys Tyr Glu Ile Pro Ser Gln Leu Met Leu Ile Val
1 5 10 15
Ile Ser Gln Gln Asn Ser Ile His Gln Ile Gly Met Val Glu Lys Gly
20 25 30
Leu Phe Leu Val Thr Leu Arg Asn Trp Gln Ile Leu Gly Thr Ser Phe
35 40 45
His Leu Glu Asp Gln Gln Gln Pro Tyr Met Thr Gly Lys Asp Met Gln
50 55 60
His Leu Leu Asn Asn Leu Ser Leu Arg Thr Val Met Ile Tyr Gly Thr
65 70 75 80
Phe Leu Ala Leu Pro Ser Ser Val Phe Lys Ile Ile Asp Gln Pro Val
85 90 95
Leu Ile Ile Leu Ile Ser Cys Phe Thr Ser Leu Ala Ile Val Ser Met
100 105 110

<210> 26909
<211> 78
<212> PRT
<213> A.fumigatus

<400> 26909
Lys His Leu Val Pro Phe Phe Leu Leu Ser Tyr Phe Thr Phe Ile Asp
1 5 10 15
Phe Tyr Phe Tyr Phe Ile Phe Ser Phe Leu Ser Ser Lys Ile Phe Phe
20 25 30
Ser Lys Ile Ser Asn Leu Tyr Leu Gln Asp Gly Asn Pro Asn Thr Ile
35 40 45
Tyr Pro Phe Lys Tyr Phe Leu Arg Thr Ser Val Ala Arg Ala Arg Asn

```
    50                  55                  60
Ala Lys Gly Gln Ala Gly Pro Glu Glu Ala Val Asn Gly Thr
65                  70                  75

<210> 26910
<211> 66
<212> PRT
<213> A.fumigatus

<400> 26910
Ser Gly Thr Gln Arg Leu Gln Ile Ser His Tyr Gln Ser Ser Phe Ala
1               5                   10                  15
Leu Gln Val Ile Ile Ile Val Val Gln Glu Pro Ile His Val Ile Ile
            20                  25                  30
Pro Phe Ile Thr Ser Phe Leu Leu Leu Leu Gly Ile Gln Ile Phe Ala
        35                  40                  45
Leu Phe Arg Leu Leu Pro Leu Gly Leu Gly Ile Ile Val Val Val Asp
    50                  55                  60
Ile Gly
65

<210> 26911
<211> 365
<212> PRT
<213> A.fumigatus

<400> 26911
Ala Gln Thr Lys Leu Asn Ala Phe Phe Val Lys Pro Lys Pro Pro Ala
1               5                   10                  15
Gln Pro Thr Asp Asp Thr Ala Ser Asp Ser Pro Lys Ile Pro Ile Ala
            20                  25                  30
Asp Gly Val Ser Lys Ser Thr Ser Gln Asn Pro Thr Pro Pro Gln Ser
        35                  40                  45
Asp Tyr Gln Arg Glu Phe Pro Asp Phe Phe Leu Gln Ser His Thr Arg
    50                  55                  60
Ile Ala Pro Pro His Gln Phe Glu Arg Asp Pro Gln Ala Leu Ser His
65                  70                  75                  80
Val Arg Glu Arg Val Asp Ala Cys Leu Gln Ser Tyr Arg Asn Gly Ser
                85                  90                  95
Ala Glu Pro Leu Ser Phe Arg Pro Ser Glu Leu Phe Arg Leu Met Pro
            100                 105                 110
Tyr Asn Arg Arg Arg Gly Arg Gln Ala Ala Ser Val Lys Glu Ile Leu
        115                 120                 125
Leu Arg Met Gln Ser Leu Glu Gln Ser Asp Pro Asp Ser Ala Arg Arg
    130                 135                 140
Ala Gln Glu Leu Leu Arg Arg Ile Lys Met Lys Ser Leu Lys Phe Gly
145                 150                 155                 160
Glu Asp Val Arg Pro Pro Tyr Gln Gly Thr Phe Thr Lys Thr Leu Pro
                165                 170                 175
Glu Ser Ala Ala Ile Lys Leu Met Arg Asn Pro Phe His Arg Gly Leu
            180                 185                 190
Pro Asp Ile Asn Tyr Asp Tyr Asp Ser Glu Ala Glu Trp Glu Glu Pro
        195                 200                 205
Glu Glu Gly Glu Asp Leu Asp Ser Glu Glu Glu Glu Glu Gly Ser Asp
    210                 215                 220
Glu Gly Asp Asp Asp Met Asp Gly Phe Leu Asp Asp Asp Asp Asp Asn
```

```
225                 230                 235                 240
Leu Glu Gly Lys Arg Arg Leu Ile Val Gly Asp Leu Glu Pro Leu Ser
                245                 250                 255
Thr Gly Leu Arg Trp Gln Gly Glu Gly Gly Asp His Glu Leu Glu Met
            260                 265                 270
Tyr Arg Ile Gln Thr Thr Met Asp Ser Val Thr Phe Pro Ile Asp Pro
        275                 280                 285
Phe Ser Thr Ala Tyr Trp Gln Lys Pro Lys Pro Thr Glu Gln Leu Pro
    290                 295                 300
Thr Gly Gly Cys Gly Pro Leu His Ser Pro Phe Ile His Gly Pro Phe
305                 310                 315                 320
Leu Pro Ala Leu Asn Ser Gln Thr Cys Trp Pro Leu Phe Pro Ala Ala
                325                 330                 335
Gly Asn Pro Thr Pro Pro Val Glu Pro Glu Gly Gly Pro Gly Gln Ile
            340                 345                 350
Ser Thr Ile Asp Asn Pro Lys Pro Ile Gly Pro Pro Phe
        355                 360                 365
```

<210> 26912
<211> 257
<212> PRT
<213> A.fumigatus

```
<400> 26912
Asn Arg Arg Asp Arg Cys Glu Thr Arg Asp Trp Pro Ser Pro Leu Glu
1               5                   10                  15
Arg Tyr Leu Ser Ser Leu Pro Ser Leu Val Trp Thr Thr Gly Pro Val
            20                  25                  30
Gln Cys Ser Leu Asp Gln Asp Ala Phe Pro Lys Phe Asn Cys Leu Ile
        35                  40                  45
Ala Ala Pro Val Val Phe Glu Tyr Ser Pro Pro Arg Ser Pro Ala His
    50                  55                  60
Ala Gly Ile Met Thr Gly Ala Pro Pro Tyr Asn Pro Gln Ser Pro Thr
65                  70                  75                  80
Gln Gln Pro Arg Phe Pro Val Tyr Ser Pro Pro Asn Lys Asn Arg Ser
                85                  90                  95
Tyr Tyr Pro Asn Asn Asp Gln Tyr Gln Gln His Ala Pro Leu Thr Pro
            100                 105                 110
Pro Ala Phe Ala Pro Gln Ala Ser Leu Ser Arg Ser Pro His Tyr Ser
        115                 120                 125
His Ala Pro Ser Pro Leu Pro Ala Thr Leu Pro Pro Leu Asn Gly Gly
    130                 135                 140
Ala Pro Pro Pro Gly His His Pro Glu Pro Ser Ser Gln Tyr Gln Thr
145                 150                 155                 160
His Ser Ser Ala Gly Thr Pro Gln Phe Ser Leu Ala Lys Pro Tyr Ser
                165                 170                 175
Ala Ser Arg Met Ser Ser Lys Gly Ala Ser Ser Tyr Asn His Ser Thr
            180                 185                 190
Ala Ser His Ala Val Pro Ser Ala Arg Met Glu Ser Leu Ser Gln Ser
        195                 200                 205
Pro Pro Lys Lys Glu Thr Glu Pro Leu Tyr Pro Ile Gly Gly Asn Gly
    210                 215                 220
Ala Pro Gly Tyr Ser Ser Ser Met Met Arg Glu Pro Arg Pro Ala Ser
225                 230                 235                 240
Pro Pro Arg Glu Thr Val Arg Pro His Tyr Glu His Tyr Gly Lys Arg
                245                 250                 255
```

Met

<210> 26913
<211> 186
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (183),(184)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26913
Lys His Ala Arg Ala Ala Asp Pro Met Ser Phe Ala Ser Ile Leu Ser
1 5 10 15
Gly Pro Thr Glu Glu Thr Ser Pro Ile Lys Gln Pro Ser Leu Pro Glu
20 25 30
Ala Leu Pro Gly Pro Ala Thr Thr Ile Thr Pro Ala Pro Pro Thr Leu
35 40 45
Ala Pro Val Pro Ala Arg Arg Arg Leu Thr Pro Pro Pro Val Thr His
50 55 60
Ala Leu Pro Pro Thr Ser Gln Leu Lys Val Lys Glu Pro Glu Pro Ile
65 70 75 80
Ser Pro Ala Ala Leu Pro Arg Leu Glu Lys Lys Pro Ser Ala Glu Lys
85 90 95
Arg Arg Arg Asn Val Glu Gln Glu Pro Lys Ser Ala Glu Ala Leu Pro
100 105 110
Val Ala Ser Thr His Gly Ala Phe Glu Pro Thr Lys Ala Ala Arg Val
115 120 125
Ser Asn Arg Lys Thr Leu Thr Glu Arg Asp Ala Glu Ala Ile Asn Lys
130 135 140
Ile Ile Ala Glu Ile Asp Asn Ala Asp Lys Ser Asp Val Glu Ser Pro
145 150 155 160
Gly Phe Glu Val Glu Tyr Gly Arg Tyr Met Val Lys Arg Ser Ser His
165 170 175
Gly Ala Gly Arg Ile Gln Xaa Xaa Leu Ile
180 185

<210> 26914
<211> 99
<212> PRT
<213> A.fumigatus

<400> 26914
Ala Val Gly Ile Pro Leu Leu Thr Ser Pro Ile Cys Ser Arg Arg Arg
1 5 10 15
Met Glu Gly Cys Ala Pro Ile Trp Glu Leu Lys His Asp Ala Thr Leu
20 25 30
Lys Gln Phe Ser Arg Gly Gln Leu Lys Gln Pro Leu Asp Ala Ser Gly
35 40 45
Leu Phe Asn Gln Ser Asp Val Arg Glu Thr Val Lys Arg Trp Asp Glu
50 55 60
Glu Tyr Glu Leu Glu Ala Val Leu Gly Arg Ile Asp Asn Asp Pro Asn
65 70 75 80
Ser Ile Thr Ala Arg Trp Asn Glu Ser Arg Arg Ser His Gln Lys Glu

85 90 95

Ala Gly Leu

<210> 26915
<211> 308
<212> PRT
<213> A.fumigatus

<400> 26915

```
Leu Asn Ser Leu Arg Thr Met Ala Thr Thr Pro Ile Asn Gly His Ala
1               5                  10                  15
Thr Lys Ser Pro Ser Leu Asp Ala Ala Glu Ala Arg Arg Leu Lys His
            20                  25                  30
Asn His Ala Asp Val Val Ile Ile Gly Ala Gly Val Leu Gly Cys Ala
        35                  40                  45
Leu Ala Val Ala Leu Gly Arg Gln Gly Arg Ser Val Ile Leu Leu Glu
    50                  55                  60
Ala Ser Leu Lys Glu Pro Asp Arg Ile Val Gly Glu Leu Leu Gln Pro
65                  70                  75                  80
Gly Gly Val Gln Ala Leu Glu Lys Leu Gly Leu Arg Asp Cys Leu Glu
                85                  90                  95
Gly Ile Asp Ser Ile Pro Val Lys Gly Tyr Tyr Val Ser Tyr Phe Asn
            100                 105                 110
Asp Pro Val Pro Ile Pro Tyr Pro Lys Pro Thr Pro Ala Ser Pro Pro
        115                 120                 125
Pro Glu Gly Arg Cys Phe His His Gly Arg Phe Val Met Lys Leu Arg
    130                 135                 140
Glu Ala Ala Met Ala Cys Pro Asn Val Ser Val Val Glu Thr Lys Ala
145                 150                 155                 160
Thr Asp Leu Val Thr Cys Ser His Thr Gln Gln Val Leu Gly Val Glu
                165                 170                 175
Cys Thr Ser Lys Asp Asn Val Arg Ala Cys Tyr Phe Gly His Leu Thr
            180                 185                 190
Val Val Ala Asp Gly Tyr Ala Ser Lys Phe Arg Lys Gln His His Pro
        195                 200                 205
His Thr Pro Lys Val Ser Ser Arg Phe Trp Gly Leu Glu Leu Ile Asp
    210                 215                 220
Thr Lys Leu Pro Met Pro Tyr Tyr Gly His Val Leu Leu Ser Asp Asn
225                 230                 235                 240
Ala Pro Ile Leu Leu Tyr Gln Ile Gly Thr His Glu Thr Arg Ile Leu
                245                 250                 255
Val Asp Ile Pro Glu Asn Leu Pro Ser Ala Ser Val Lys Asn Gly Gly
            260                 265                 270
Val Lys Ser His Met Arg Asn Val Val Leu Pro Ser Leu Pro Glu Ser
        275                 280                 285
Val Gln Pro Ala Phe Ile Ala Ala Leu Glu Gln Gly Gln Leu Arg Ser
    290                 295                 300
Met Pro Asn Ser
305
```

<210> 26916
<211> 131
<212> PRT
<213> A.fumigatus

<400> 26916
Ser Ser Ser Ala Arg Ser Ser Pro Thr Ser Lys Ala Leu Glu Arg Arg
1 5 10 15
Ser Arg Asn Ala Glu Met Glu Arg Lys Ile Ile Glu Leu Arg Lys Gln
20 25 30
Ile Ala Ser Val Gln Ala Asn Pro Ala Ala Met Thr Pro Gln Gln Thr
35 40 45
Cys Ala Ser Leu His Ser Ala His Val Thr Pro Lys Gln Glu Ser Ser
50 55 60
His Val Ser Pro Ala Gly Val Tyr His Thr Pro Ser Ala Ile Ser Ser
65 70 75 80
Asp Gln Tyr Met Gly Ser His Glu Ala Val Ala Ser Leu Leu Asp Leu
85 90 95
Arg Ser Gly Phe Glu Gly Ser Asn Tyr Met Arg Asn Gly Asn Leu Phe
100 105 110
Lys Arg Ile Glu Asp Val Val Val Ala Pro Glu Lys Val Thr Glu Leu
115 120 125
Phe Asp Leu
130

<210> 26917
<211> 299
<212> PRT
<213> A.fumigatus

<400> 26917
Gly Phe Leu His Arg Ser Tyr Gln Asn Arg Phe Phe Met Phe Tyr His
1 5 10 15
Pro Phe Leu Pro Phe Leu Asp Arg Gln Arg Ala Pro Asp Asp Tyr Tyr
20 25 30
Ser Val Ser Pro Leu Leu Phe Trp Thr Ile Ile Ser Val Gly Ala Arg
35 40 45
Arg Tyr Gln Thr Asp Thr His Leu Leu Asn Ser Leu Ala Gly Pro Val
50 55 60
Thr Arg Leu Val Trp Ser Thr Leu Ala Asp Ile Pro Gln Ser Tyr His
65 70 75 80
Val Val Lys Ala Leu Cys Leu Leu Cys Ser Trp Pro Phe Pro Thr Ser
85 90 95
Ser Thr Ser Thr Asp Pro Thr Phe Met Leu Cys Gly Met Met Met Gln
100 105 110
Val Ala Met Gln Leu Gly Leu His Arg Pro Ser His Thr Gln Asp Phe
115 120 125
Ser Lys Phe Arg Val Glu Leu Ile Glu Glu Glu Leu Arg Asp Lys Val
130 135 140
Arg Thr Trp Ala Ile Cys Asn Val Val Ala Gln Arg Tyr Val Arg Ile
145 150 155 160
Leu Leu Leu Ser Trp Thr Ser Ala Leu Thr Asp Ser Ser Val Ala Thr
165 170 175
Gly Tyr Gly Gln Pro Pro Ser Thr Leu Tyr Asp Trp Thr Leu Ser Ala
180 185 190
Ser Gly Ser Val Asp Pro Asn Phe Lys Leu Pro Glu Asp Ile Arg Arg
195 200 205
Arg Leu Asp Val Glu Ile Phe Cys Asp Lys Val Thr Lys Thr Leu Tyr
210 215 220
Thr Asn Arg Arg Asp Pro Val Gly Leu Cys Ser Asp Gln Glu Arg Ser
225 230 235 240

```
Thr Leu Ile Ser Phe Leu Ser Arg Asp Phe Asp Asp Leu Glu Asp Gln
                245                 250                 255
Val Lys Ser Arg Thr Asp Gly Lys His Ser Gln Leu Val Pro Thr Cys
            260                 265                 270
Asp Thr Pro Leu Met Trp Ile Ser Tyr Asn Arg Pro Leu Ser Ala Cys
        275                 280                 285
Cys Gln Ser Pro Ser Ala Pro Val Gly Ile Leu
    290                 295
```

<210> 26918
<211> 340
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (43),(46),(59),(60)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26918

```
Gln Asn Ala Ile Phe Asn Gln Cys Arg Leu Thr Gly Ala Ala Ser Pro
1               5                   10                  15
Val Trp Cys Leu Ile Arg Met Pro Leu Val Arg Asn Gly Ser Ser Ser
            20                  25                  30
Arg Gly Ala Gly Gln Lys Trp Val Glu Gly Xaa Tyr Asp Xaa Leu Phe
        35                  40                  45
Arg Gln Cys Leu Gln Gly Thr His Thr Leu Xaa Xaa Asp Asp Phe Phe
    50                  55                  60
Ala Asp Gln Asp Ile Glu Pro Tyr Gln Trp His Asp Gln Phe Thr Gly
65                  70                  75                  80
Ser Ala Thr Lys Arg Ile Val Arg Ile Glu Ala Leu Ala Ala Arg Met
                85                  90                  95
Leu Ala Thr Val Met Arg Gly Ser Ser Ile Leu Glu Ala Gly Asp Val
            100                 105                 110
Ser Ala Leu Glu Ser Arg Phe Leu Ala Phe Arg Asp Gly Phe Ser Arg
        115                 120                 125
Leu Val Ser Glu Ala Ile Glu Asp Pro Ala Val Val Gly Phe Lys Ser
    130                 135                 140
Val Ile Cys Tyr Arg Thr Gly Leu Asn Val Gln Pro Thr Asp Glu Asp
145                 150                 155                 160
Ala Gly Val Leu Leu Gln Ser Phe Ala Arg Thr Ile Arg Thr Ser Glu
                165                 170                 175
Ala Gly Tyr Arg Val Glu Asp Lys Pro Leu Asn Asp Trp Leu Val Arg
            180                 185                 190
Gln Thr Leu Asp Leu Leu Gln Ala Ser Lys Ser Ser Ser Lys Asp Cys
        195                 200                 205
Lys Asn Lys Pro Leu Gln Leu His Thr Gly Leu Gly Asp Asn Asp Ile
    210                 215                 220
Ser Leu Val Leu Ala Asn Pro Ala Tyr Leu Gln Pro Leu Ile Ala Arg
225                 230                 235                 240
Tyr Pro Gln Val Asp Phe Val Leu Leu His Ser Ser Tyr Pro Tyr Thr
                245                 250                 255
Arg Glu Ala Gly Tyr Leu Ala Cys Val Tyr Pro Asn Val Tyr Leu Asp
            260                 265                 270
Leu Gly Glu Val Phe Pro Met Val Ser Arg Asp Ala Glu Glu Ser Ile
        275                 280                 285
```

```
Ile Arg Asp Ser Leu Asp Ile Val Pro Thr Lys Arg Leu Leu Trp Ser
    290                 295                 300
Thr Asp Gly His Phe Phe Pro Glu Thr Phe Tyr Leu Gly Asn Lys Gln
305                 310                 315                 320
Phe Arg Asp Val Leu Glu Lys Ala Cys Pro Val Val Cys Phe His Asp
                325                 330                 335
Val Pro Ala Phe
            340
```

<210> 26919
<211> 354
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (77),(127),(231),(263),(269),(270),(274),(276),(277),(278)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26919

```
Leu Ser Gln Val Phe Val Asp Tyr Val Arg Gln Gly Asp Trp Thr Val
1               5                   10                  15
Thr Gln Ala Lys Glu Ala Ala Ala Asp Ile Leu Phe His Asn Ala Asn
            20                  25                  30
Arg Leu Tyr Asp Leu Asn Glu Gln Pro Ser Phe Asp Gln Ile Ser Lys
        35                  40                  45
Pro Ile Thr Ile Ser Ser Thr His Thr Leu Glu Thr Phe Met Arg Cys
    50                  55                  60
Asn Pro Asp Val Lys Tyr Val Trp Met Gln Trp Val Xaa Tyr Thr Ala
65                  70                  75                  80
Thr Thr Arg Leu Arg Ile Phe Pro Ile Leu Glu Phe Ala Lys Ile Val
                85                  90                  95
Arg Lys Gln Arg Arg Ile Gly Ile Ser Leu Cys Val Phe Trp Met Leu
            100                 105                 110
Gln Asp Asp Ser Met Thr Pro Glu Gly Thr Thr Thr Gly Gln Xaa Tyr
        115                 120                 125
Met Glu Pro Asp Leu Thr Ser Leu Ser Pro Asn Val Gly Leu Gly Ser
    130                 135                 140
Lys Ser Ala Thr Val Met Thr Phe Trp Arg Ser Glu Glu Asn Lys Pro
145                 150                 155                 160
Leu Glu Gly Cys Pro Arg Thr Ala Leu Gln Asn Ile Val Asp Lys Leu
                165                 170                 175
His Thr Asp His Gly Ile Ala Val Thr Cys Gly Phe Glu Ile Glu Val
            180                 185                 190
Ile Phe Leu Arg Pro Asp Thr Asp Pro Ser Thr Gly Glu Thr Arg Tyr
        195                 200                 205
Leu Pro Ala Val Thr Asn His Ser Trp Ser Gln Met Thr Ser Asp Thr
    210                 215                 220
Arg Arg Met Leu Pro Leu Xaa Glu Glu Ile Ala Asp Thr Leu Thr Ala
225                 230                 235                 240
Ile Gly Ile Pro Leu Glu Gln Leu Glu Ser Gly Trp Ala Gly Gly Arg
                245                 250                 255
Leu Glu Phe Val Leu Pro Xaa Asn Ser Pro Leu Pro Xaa Xaa Asp Thr
            260                 265                 270
Val Xaa Lys Xaa Xaa Xaa Val Val Ala Asn Val Ala Glu Arg His Gly
        275                 280                 285
```

```
Leu Arg Ala Thr Leu His Pro Arg Pro Leu Pro Asn Phe Ala Gly Thr
    290                 295                 300
Ala Ser His Ala His Val Ser Ile Ser Pro Ser Thr Asn Glu Asp Ser
305                 310                 315                 320
Phe Leu Ala Gly Val Leu Ala His Phe Pro Ala Leu Leu Ala Cys Thr
                325                 330                 335
Leu Ala Gln Glu Thr Ser Tyr Gly Arg His Asp Gly Ala Gly Arg Lys
            340                 345                 350
Arg Asp
```

<210> 26920
<211> 72
<212> PRT
<213> A.fumigatus

<400> 26920

```
Pro Ala Cys Cys Asp Cys Gly Arg Val Cys Thr Glu Trp Leu Thr Asp
1               5                   10                  15
Ile His Tyr Gln Ile Thr Ser Thr Lys Val Phe Asn Gln Val Val Phe
            20                  25                  30
Lys Glu Tyr Ala Thr Ala Ser Ile Gly Arg Lys Phe Thr Ser Leu Phe
        35                  40                  45
Pro Gly Leu Gly Tyr Ala Ala Gly Tyr Lys Val Ser Thr Asp Thr Asn
    50                  55                  60
Leu Arg Gly Pro Glu Ser Met Cys
65                  70
```

<210> 26921
<211> 66
<212> PRT
<213> A.fumigatus

<400> 26921

```
Tyr Ser Lys Val Leu Gln Arg Ile Tyr Lys Tyr Gly Gly Gln Pro Phe
1               5                   10                  15
Val Arg Asp Tyr Leu Ala Lys His His Gly Ser Asp Phe Asp Arg Ala
            20                  25                  30
Phe Gly Lys Gly Thr Gly Lys Ala Ile Met His Ala Thr Ala Gly Arg
        35                  40                  45
Ser Ala Ile Tyr Arg Asn Leu Gly Thr Ile Cys Ala Ala Phe Ala Asp
    50                  55                  60
Leu Gln
65
```

<210> 26922
<211> 78
<212> PRT
<213> A.fumigatus

<400> 26922

```
Gly Leu Tyr Val Gln Leu Ser Leu Thr Tyr Asn Ser Leu Ile Gly Ile
1               5                   10                  15
Gly Glu Ile Ile Leu Leu Pro Leu Asp Val Leu Lys Ile Lys Arg Gln
            20                  25                  30
Thr Asn Pro Asp Ala Phe Arg Gly Arg Gly Leu Phe Lys Ile Ile Ser
```

```
        35                  40                  45
Asp Glu Gly Met Gly Leu Tyr Arg Gly Ala Gly Trp Thr Ala Ala Arg
    50                  55                  60
Asn Ala Pro Gly Ser Phe Ala Val Cys Ser Ser Gln Leu Gly
65                  70                  75
```

<210> 26923
<211> 118
<212> PRT
<213> A.fumigatus

<400> 26923

```
Lys Thr Asp Arg Ser Ile Gln Leu Phe Gly Gly Ser Ala Phe Ala Lys
1               5                   10                  15
Glu Tyr Ile Tyr Gly Leu Lys Asp Tyr Asn Lys Ala Thr Trp Gly Gln
            20                  25                  30
Asn Phe Val Ala Ser Ile Cys Gly Ala Ser Ala Ser Leu Val Val Ser
        35                  40                  45
Ala Pro Leu Asp Val Ile Lys Thr Arg Ile Gln Asn Arg Asn Phe Glu
    50                  55                  60
Asn Pro Glu Ser Gly Phe Arg Ile Val Ser Asn Met Met Lys Asn Glu
65                  70                  75                  80
Gly Phe Thr Ser Phe Phe Lys Gly Leu Thr Pro Lys Leu Leu Met Thr
                85                  90                  95
Gly Pro Lys Leu Val Phe Ser Phe Trp Leu Ala Gln Thr Leu Ile Pro
            100                 105                 110
Ala Phe Gly Gln Val Val
        115
```

<210> 26924
<211> 279
<212> PRT
<213> A.fumigatus

<400> 26924

```
Pro Phe Arg Gln Asp Pro Ala Gln Thr Glu Asn Phe Asp Ser Ser Val
1               5                   10                  15
Ser Ile Leu Ser Val Cys Ile Thr His Tyr Asn Gln Thr Asp Arg Met
            20                  25                  30
Ser Tyr Gln Pro Ala Ile Met Ser Ala Ser Leu Gly Arg Ala Trp Leu
        35                  40                  45
His Asp Leu Ala Tyr Lys Ile Asp Gln Ala Ala Glu Ala Gly Phe Lys
    50                  55                  60
Gly Leu Glu Ile Phe Tyr Glu Asp Leu Glu Tyr Glu Ala Arg Lys Leu
65                  70                  75                  80
Ser Gly Thr Asp Asn Pro Thr Ala Thr His Leu Leu Ala Ala Ala Ala
                85                  90                  95
His Ile His Gly Met Cys Ser Thr His Gly Ile Thr Ile Ile Gly Leu
            100                 105                 110
Gln Pro Phe Leu Phe Tyr Glu Gly Leu Lys Asp Arg Thr Gln His Ala
        115                 120                 125
Gln Leu Leu Glu Lys Met Lys Leu Trp Leu Gln Leu Ala Lys Ser Leu
    130                 135                 140
His Thr Asn Thr Ile Gln Ile Pro Ala Asn Phe Leu Pro Ala Glu Gln
145                 150                 155                 160
Leu Ile Asp Asp Arg Asp Leu Ile Ala Ser Asp Leu Arg Leu Leu Ala
```

```
                165                 170                 175
Asp Leu Gly Ala Ala Glu Thr Pro Ala Ile Arg Phe Ala Tyr Glu Pro
            180                 185                 190
Leu Cys Trp Ser Thr His Ile Asp Thr Ile Glu Lys Ala Trp Asp Val
        195                 200                 205
Val Arg Arg Val Asp Arg Pro Asn Phe Gly Val Cys Leu Asp Thr Phe
    210                 215                 220
Asn Ile Ala Gly Arg Val Trp Gly Asp Pro Ala Ala Pro Thr Gly Arg
225                 230                 235                 240
Thr Glu Asn Ala Asp Gln Gln Leu Gln Ile Thr Leu Glu Trp Met Val
                245                 250                 255
Lys Glu Val Asp Val Glu Thr Val Phe Cys Leu Leu His Gly Asp Arg
            260                 265                 270
Lys Asp Pro Asp Leu Arg Lys
        275
```

<210> 26925
<211> 348
<212> PRT
<213> A.fumigatus

```
<400> 26925
Arg Pro Gly Pro Gly Pro Thr Met Leu Phe Asn Arg Gly Arg Ala Ile
1               5                   10                  15
Val Val Gln Gly Pro Gly Ser Leu Trp Gly Gly Pro Ile Ile Ser Thr
            20                  25                  30
Leu Thr Cys Leu Val Lys Asp Tyr His Gly Met Leu Val Cys Arg Leu
        35                  40                  45
Leu Leu Gly Ile Val Glu Ala Pro Phe Tyr Pro Gly Ala Leu Phe Met
    50                  55                  60
Ile Ser Leu Phe Tyr Asn Arg Lys Glu Ala Thr Thr Arg Met Ala Ile
65                  70                  75                  80
Leu Tyr Thr Gly Asn Met Leu Ala Ser Ser Phe Ser Gly Leu Ile Ala
                85                  90                  95
Ala Gly Ile Phe Ala Gly Leu Asp Gly Val His Gly Leu Ala Gly Trp
            100                 105                 110
Arg Trp Leu Phe Leu Val Gln Gly Ile Thr Thr Phe Ala Val Ala Ile
        115                 120                 125
Ala Ala Phe Phe Leu Leu Pro Asn Ser Pro Leu Lys Thr Arg Trp Leu
    130                 135                 140
Ser Pro Glu Glu Arg Gln Met Ala Tyr Asp Arg Ile Ala Arg Asp Thr
145                 150                 155                 160
Thr Gln Lys Glu Asn Arg Thr Ser Pro Trp Lys Gly Leu Arg Glu Ala
                165                 170                 175
Cys Ile Asp Tyr Arg Thr Trp Leu Phe Ala Leu Gln Cys Asn Leu His
            180                 185                 190
Leu Ser Ala Asn Gly Phe Lys Asn Phe Met Pro Thr Val Val Lys Thr
        195                 200                 205
Leu Gly Phe Asn Ser Thr Ile Thr Leu Val Leu Thr Cys Pro Pro Tyr
    210                 215                 220
Leu Val Ala Thr Phe Ala Ser Val Ile Val Ser Trp Ser Ser Gly His
225                 230                 235                 240
Phe Asn Glu Arg Thr Trp His Ile Thr Ile Ser Lys Leu Leu Ala Ile
                245                 250                 255
Ile Gly Phe Ala Val Ala Cys Ser Thr Leu Asn Ile Ala Ala Arg Tyr
            260                 265                 270
```

```
Phe Ala Met Ile Leu Phe Val Gly Ala Thr Tyr Gly Val Asn Asn Ile
        275                 280                 285
Asn Leu Ala Trp Thr Ala Ala Thr Leu Gly Gln Thr Asp Glu Lys Lys
    290                 295                 300
Ala Val Ala Ile Ala Ile Thr Asn Thr Leu Gly Glu Ser Gly Glu Arg
305                 310                 315                 320
Val His Ala Leu Ser Val Ala Gly Cys Gly Cys Ala Pro Phe Leu Gln
                325                 330                 335
Ser His Val Leu His Pro Trp Val Pro Thr Gly Cys
            340                 345
```

<210> 26926
<211> 369
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (8)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26926

```
Pro Asp Gly Pro Arg Phe Asn Xaa Ser Ser Thr Ser Pro Arg Glu Glu
1               5                   10                  15
Lys Asp Arg Pro Gly Asp Asn Asp Val Pro Ala Pro His Thr Ala Ala
            20                  25                  30
Ser Val Ala Gly Gln His Glu Trp Ala Glu Phe His His Leu Pro Gly
        35                  40                  45
Arg Lys Phe Glu Asp Phe Ala Leu Val Lys Gln Glu Ile Glu Ala Glu
    50                  55                  60
Thr Ala Arg Ile Ala Gly Asn Asn Lys Gly Ile Asn Arg Gln Pro Ile
65                  70                  75                  80
Asn Leu Lys Ile Phe Ser Pro His Val Leu Asn Leu Thr Met Val Asp
                85                  90                  95
Leu Pro Gly Leu Thr Lys Val Pro Ile Gly Asp Gln Pro Ser Asp Ile
            100                 105                 110
Glu Lys Gln Thr Arg Thr Leu Ile Leu Glu Tyr Ile Ala Lys Pro Asn
        115                 120                 125
Ser Ile Ile Leu Ala Val Ser Pro Ala Asn Val Asp Leu Val Asn Ser
    130                 135                 140
Glu Ala Leu Lys Leu Ala Arg Gln Val Asp Pro Met Gly Arg Arg Thr
145                 150                 155                 160
Ile Gly Val Leu Thr Lys Leu Asp Leu Met Asp His Gly Thr Asn Ala
                165                 170                 175
Met Asp Ile Leu Ser Gly Arg Val Tyr Pro Leu Lys Leu Gly Phe Ile
            180                 185                 190
Gly Val Val Asn Arg Ser Gln Gln Asp Ile Gln Ser Gly Lys Ser Leu
        195                 200                 205
Ser Glu Ala Leu Gln Ala Glu Ala Glu Phe Phe Arg His His Pro Ala
    210                 215                 220
Tyr Arg Asn Met Ala Asn Arg Cys Gly Thr Gln Phe Leu Ala Lys Thr
225                 230                 235                 240
Leu Asn Thr Thr Leu Met Ala His Ile Arg Asp Arg Leu Pro Asp Ile
                245                 250                 255
Lys Ala Arg Leu Asn Thr Leu Met Gly Gln Thr Gln Gln Glu Leu Ala
            260                 265                 270
```

```
Ser Tyr Gly Asn Lys Gln Phe Ser Gly Glu Glu His Arg Gly Ser Leu
        275                 280                 285
Ile Leu Gln Leu Met Thr Arg Phe Ala Ser Ser Phe Ile Ser Ser Ile
    290                 295                 300
Asp Gly Thr Ser Ser Glu Ile Ser Thr Lys Glu Leu Cys Gly Gly Ala
305                 310                 315                 320
Gln Ile Tyr Tyr Ile Phe Asn Ser Val Phe Gly Asn Ser Leu Glu Thr
                325                 330                 335
Ile Asp Pro Thr His Asn Leu Thr Val Ser Asp Ile Arg Thr Val Ile
            340                 345                 350
Lys Asn Ser Thr Gly Pro Pro Pro Ser Leu Phe Gly Ser Arg Thr Cys
        355                 360                 365
Val
```

<210> 26927
<211> 328
<212> PRT
<213> A.fumigatus

```
<400> 26927
Ser Ala Arg Pro Ser Thr Pro Gly Glu Asp Leu Val Gly Phe Gly Leu
1               5                   10                  15
Thr Met Glu Gly Gln Glu Gly Asn Glu Ile Met Tyr Asp Leu Leu Leu
            20                  25                  30
Asp Gln Ala Trp Ser Arg Gln Pro Ile Asp Thr Asp His Tyr Phe His
        35                  40                  45
Asn Trp Ala Lys Thr Arg Tyr Ser Ser Gly Val Arg Gly Ser Ala Val
    50                  55                  60
Pro Glu Glu Leu Tyr Gln Ala Trp Asp Ile Leu Arg Ile Thr Ala Tyr
65                  70                  75                  80
Asn Asn Thr Asn Leu Thr Ser Thr Ala Val Ser Lys Ser Ile Phe Glu
                85                  90                  95
Leu Gln Pro Ser Ile Ser Gly Leu Leu Asn Arg Thr Ser His His Pro
            100                 105                 110
Thr Thr Val Ser Tyr Asp Pro Ala Ala Leu Val Gln Ala Trp Arg Leu
        115                 120                 125
Met Asp Ser Ala Ala Ser Lys Ala Pro Ser Leu Trp Ser Gln Pro Ala
    130                 135                 140
Phe Leu Tyr Asp Met Val Asp Ile Thr Arg Gln Val Met Ser Asn Ala
145                 150                 155                 160
Phe Ile Pro Val Tyr Thr Asn Leu Val Ser Thr Tyr Gln Ala Gly Gly
                165                 170                 175
Ser Val Ser Thr Asp Gly Ser Asn Leu Ile Gln Leu Leu Arg Asp Leu
            180                 185                 190
Asp Ser Val Leu Ser Thr Asn Asp Asn Phe Arg Leu Ser Thr Trp Ile
        195                 200                 205
Gln Ser Ala Arg Ser Trp Val Arg Asn Asp Thr Glu Ala Asp Phe Tyr
    210                 215                 220
Glu Tyr Asn Ala Arg Asn Gln Val Thr Leu Trp Gly Pro Lys Gly Glu
225                 230                 235                 240
Ile Asn Asp Tyr Ala Ser Lys Gln Trp Gly Gly Leu Val Ser Ser Tyr
                245                 250                 255
Tyr Ile Pro Arg Trp Gln Lys Phe Leu Asn Tyr Leu Glu Asn Thr Gln
            260                 265                 270
Ala Ser Lys Tyr Asn Ala Thr Gln Ile Glu Ala Gln Leu Phe Asp Phe
```

```
        275                 280                 285
Glu Leu Lys Trp Gln Glu Glu Thr Ser Lys Pro Thr Arg Ala Lys Thr
    290                 295                 300
His Asp Leu Arg Ser Val Leu Ala Lys Val Arg Arg Arg Trp Pro Ser
305                 310                 315                 320
Val Phe Gly Asp Gln Asn Ser Pro
                325
```

<210> 26928
<211> 439
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (45)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26928

```
Leu Ala Pro Tyr Gly Thr Lys Gly Thr Ser Thr Trp Arg Val Ser Cys
1               5                   10                  15
Lys Thr Gly Asp Val Phe His Val Arg Tyr Leu Leu Thr Ala Leu Gly
            20                  25                  30
Leu Leu Thr Lys Ala Asn Tyr Pro Asp Leu Pro Gly Xaa Gln Thr Phe
        35                  40                  45
Arg Gly Glu Ile Arg His Thr Ser Ala Trp Asp Thr Asp Leu Asp Leu
    50                  55                  60
Lys Gly Lys Arg Val Gly Leu Val Gly Val Val Ser Ser Gly Val Gln
65                  70                  75                  80
Leu Val Pro Ala Val Glu Asp Thr Val Gln Ser Leu His Val Phe Ile
                85                  90                  95
Ser Arg Pro Gln Leu Cys Val Pro Ser Gly Asp Arg Ala Leu Thr Ala
            100                 105                 110
Glu Glu Arg Glu Ala Ile Phe Arg Asp Phe Pro Gln Ile Trp Ser Glu
        115                 120                 125
Ala Arg Thr Ser Arg Val Ala Ile Gly Phe Pro Glu Leu Ser Arg Glu
    130                 135                 140
Ala Met Ala Leu Cys Pro Ala Asp Arg Glu Ala Ala Phe Glu Arg Leu
145                 150                 155                 160
Trp Glu Ala Gly Ser Gly Leu Gln Phe Leu Phe Gly Gly Phe Thr Asp
                165                 170                 175
Leu Leu Thr Asp Pro Val Ala Asn Glu Glu Ala Cys Lys Phe Ile Arg
            180                 185                 190
Arg Lys Ile Lys Ala Ile Val Lys Asp Pro Gln Lys Arg Lys Val Leu
        195                 200                 205
Thr Pro Asp Glu Pro Tyr Ala Arg Arg Pro Leu Cys Ala Asn Gly Phe
    210                 215                 220
Tyr Glu Gln Phe Asn Arg Asp Asn Val Phe Ala Val Asp Ile Arg Ala
225                 230                 235                 240
His Pro Ile Val Lys Ile Glu Ala Glu Gly Ile Arg Thr Ala Asp Gly
                245                 250                 255
Lys Leu His Glu Leu Asp Val Ile Ile Phe Ala Thr Gly Tyr Asp Ala
            260                 265                 270
Met Asp Gly Ala Tyr Val Arg Val Asp Ile Gln Gly Arg Lys Ser Gly
        275                 280                 285
Glu Thr Leu Arg Asp Phe Trp Lys Ala Lys Gly Pro Ala Thr Tyr Leu
```

```
    290                 295                 300
Gly Ile Phe Val Pro Gly Phe Pro Asn Leu Met Met Ile Asn Gly Pro
305                 310                 315                 320
Gln Thr Pro Phe Ala Asn Ile Pro Pro Val Ser Glu Glu Asn Val Asn
                325                 330                 335
Phe Ile Val Asp Leu Ile Lys Arg Ala Glu Glu Ile Ser Gln Arg Met
            340                 345                 350
Asn Arg Pro Cys Leu Val Glu Ala Thr Glu Glu Ala Gln Arg Lys Trp
        355                 360                 365
Gly Glu His Cys Asp Glu Ile Ala Asn Ser Thr Leu Leu Lys Gln Val
    370                 375                 380
Pro Gln Trp Leu Phe Gly Asn Asn Val Pro Gly Lys Lys Val Ser Thr
385                 390                 395                 400
Leu Phe Tyr Phe Gly Gly Val Gly Arg Phe Arg Ala Leu Ile Ala Asp
                405                 410                 415
Ile Lys Ala Thr Gly Phe Thr Gly Phe Lys Glu Pro Leu Ser Arg Lys
            420                 425                 430
Ser Glu Pro Arg Pro Leu Leu
        435
```

<210> 26929
<211> 74
<212> PRT
<213> A.fumigatus

<400> 26929

```
Arg Tyr Met Gly Lys Lys His Val Leu Phe Thr Asp Ile Glu Ile Val
1               5                   10                  15
Gln Asn Glu Leu Ser Glu Leu Gln Val Val Gln Ser Leu Pro Leu Leu
            20                  25                  30
Val Thr Met Ile Ile Arg Ser Pro Val Tyr Gln Ala Lys Lys Leu Arg
        35                  40                  45
Lys Asp His Ala Ala Phe Asp Thr Ile Glu Glu Gly Thr Gly Ala Ala
    50                  55                  60
Lys Tyr Leu Val Lys Leu Leu Leu Gly Arg
65                  70
```

<210> 26930
<211> 560
<212> PRT
<213> A.fumigatus

<400> 26930

```
Asp Ile Thr Ser Pro Ser Arg Arg Ser Gly Val Leu Ala Tyr Leu Asn
1               5                   10                  15
Arg Tyr Leu Pro Lys Leu Gly Ile Thr Asp Arg Arg Pro Ser Lys Gly
            20                  25                  30
Asp Gly Ser Asn Phe Glu Asp Met Pro His Asp Met Arg Val Ala Val
        35                  40                  45
Asp Ser Val Ile Met Pro Glu Pro Gly Leu Leu Ile Arg Cys Phe Ala
    50                  55                  60
Ser Gly Leu Val Asp Glu Gln Ile Leu Val Gln Arg Asn Phe Leu Asp
65                  70                  75                  80
Leu Leu Val Thr His Leu Pro Leu Ser Ser Pro Ile Leu Gln Ser Arg
                85                  90                  95
Ile Thr Asp Asp Asp Leu Gln Arg Leu Met Ile Ala Ala Val Gly Val
```

```
                100                 105                 110
Val Ala Arg Arg Asp Met Ser Leu Asn Arg Arg Leu Trp Ala Trp Phe
        115                 120                 125
Leu Gly Pro Glu Ala Ala Ser Asp Gln Pro Ser Phe Glu Gly Glu Gly
    130                 135                 140
Thr Thr Gly Ser Tyr Ala Val Asp Asp Glu Gln Leu Ser Gln Ser Glu
145                 150                 155                 160
Tyr Phe Ser Gln Phe Gly Leu Lys Ala Leu Val Lys Ser Leu Leu Arg
                165                 170                 175
Leu Asn Glu Gln Asp Ala Arg Thr Pro Ser Glu Arg Ala Lys Pro Phe
            180                 185                 190
Arg Ile Ser Leu Ser Leu Met Asp Arg Trp Glu Val Gly Gly His Ile
        195                 200                 205
Val Pro Ala Val Phe Leu Pro Leu Met Arg Asn Ile Gln Ala Phe Gly
    210                 215                 220
Lys Ser Ser Ser Lys Gln Gln Phe Asp Glu Val Phe Arg Ser Ala Ser
225                 230                 235                 240
Ala Phe Phe Asp Gly Val Glu Ser Gly Val Ile Phe Ser Glu Leu Leu
                245                 250                 255
Gly Leu Ile Asp Trp Arg Ser Asp Asn His Cys Asn Lys Lys Arg Gln
            260                 265                 270
Ala Leu Asp Asp Leu Gln Leu Ala Gln Phe Ile Leu Asp Asn Phe Asn
        275                 280                 285
Val Arg Glu Glu Asp Met Leu Leu Thr His Val Pro Leu Leu Val Leu
    290                 295                 300
Thr Ile Leu Val Lys Leu Ser Glu Leu Ser Ser Asn Thr Arg Asn Phe
305                 310                 315                 320
Glu Ile Ala Pro Asp Glu Leu Leu Glu Leu Ser Asn Gly Leu Met Arg
                325                 330                 335
Val Met Asn Ser Leu Thr Thr Leu Leu Thr Glu Arg Ala Phe Ala Arg
            340                 345                 350
Lys Ser Glu Ser Ala Lys Val Ile Ala Asp Asn Ser Leu Met Asp Ile
        355                 360                 365
Ser Asp Met Asp Ile Met Lys Arg Ile His Asn Phe Tyr Asp Gln Ser
    370                 375                 380
Arg Ser Ser Leu Asp Leu Pro Pro Leu Pro Phe Leu Pro Arg Gln Leu
385                 390                 395                 400
Gly Asp Leu Ile Thr Arg Lys Ala His Asp Leu Ala Ala Ser Ala Leu
                405                 410                 415
Glu Lys Ser Asn Gly Ser Ile Pro Ile Gln Glu Ile Leu Thr Leu Leu
            420                 425                 430
Val Ala Leu Leu Lys Arg Leu Pro Lys Ser Phe Val Phe His Asp Arg
        435                 440                 445
Arg Phe Tyr Leu Ala Ile Cys Ser Arg Leu Lys Ile Asp Gln Ala Glu
    450                 455                 460
Gln Ser Thr Pro Ser Phe Ser Thr Ile Ser Ser Ile Val Ser Ala Val
465                 470                 475                 480
Thr Ser Leu Tyr Phe Ile Gln Ala Pro Gly Tyr Tyr Ile Ser Tyr Glu
                485                 490                 495
Asp Val Ala Gly Leu Ile Pro Thr Leu Val Arg His Leu Trp Gln Phe
            500                 505                 510
Leu Ser Pro Ala Ser Pro Lys Phe His Val Glu Ala Val Arg Cys Leu
        515                 520                 525
Trp His Leu His Ser Val Ser Trp Ser Asp His Ile Val Glu Ala Ser
    530                 535                 540
Ile Thr Ser Leu Met Gly Leu His Gln Gly Gln Lys Gly Arg Ser Arg
```

545 550 555 560

<210> 26931
<211> 117
<212> PRT
<213> A.fumigatus

<400> 26931
Ser Tyr Asn Gly Tyr Tyr Gly Asp Asn Asn Asp Thr Glu Ser Thr Asp
1 5 10 15
Leu Pro Ser Ala Gly Thr Leu Ser Leu Pro Thr Val Glu Gly Glu Pro
20 25 30
Gln Lys Phe Thr Glu Leu Gly Leu Ser Asp Lys Thr Leu Lys Ala Ile
35 40 45
Asn Asp Met Gly Phe Glu Thr Met Thr Glu Ile Gln Arg Arg Thr Ile
50 55 60
Pro Pro Leu Leu Ala Gly Arg Asp Val Leu Gly Ala Ala Lys Thr Gly
65 70 75 80
Ser Gly Lys Thr Leu Ser Phe Leu Ile Pro Ala Val Glu Met Leu Ser
85 90 95
Ala Leu Arg Phe Lys Pro Ile Asn Gly Lys Asp Ile Leu Pro Leu Cys
100 105 110
Val Arg Ala Ala Cys
115

<210> 26932
<211> 244
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (114)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26932
Ser Thr Ala Thr Gly Phe Gly Ile Arg Gln Leu Leu Thr Cys Thr His
1 5 10 15
Ser Ser His Thr Tyr Gly Ile Val Ile Gly Gly Ala Asn Arg Arg Ala
20 25 30
Glu Ala Glu Lys Leu Met Lys Gly Val Asn Leu Leu Ile Ala Thr Pro
35 40 45
Gly Arg Met Leu Asp His Leu Gln Asn Thr Gln Gly Phe Val Phe Lys
50 55 60
Asn Leu Lys Thr Leu Val Ile Asp Glu Ala Asp Arg Ile Leu Glu Val
65 70 75 80
Gly Phe Glu Asp Glu Met Arg Gln Ile Val Lys Ile Trp Pro Ser Glu
85 90 95
Glu Arg Gln Thr Met Leu Phe Ser Ala Thr Gln Thr Thr Lys Val Glu
100 105 110
Asp Xaa Ala Arg Ile Ser Leu Arg Pro Gly Pro Leu Tyr Ile Asn Val
115 120 125
Asp His Arg Lys Glu His Ser Thr Val Glu Gly Leu Glu Gln Gly Tyr
130 135 140
Val Ile Cys Glu Ala Asp Lys Arg Phe Leu Leu Leu Phe Ser Phe Leu
145 150 155 160

```
Lys Arg Asn Leu Lys Lys Lys Ile Ile Val Phe Phe Ser Ser Cys Asn
                165                 170                 175
Cys Val Lys Tyr His Ala Glu Leu Leu Asn Tyr Ile Asp Leu Pro Val
            180                 185                 190
Leu Glu Leu His Gly Lys Gln Lys Gln Gln Lys Arg Thr Asn Thr Phe
        195                 200                 205
Phe Glu Phe Cys Asn Ala Lys Gln Gly Thr Leu Ile Cys Thr Asp Val
    210                 215                 220
Ala Ala Arg Gly Leu Asp Val Ser His Ser Ser Thr Thr His Arg Leu
225                 230                 235                 240
Ser Ala Leu Cys
```

<210> 26933
<211> 97
<212> PRT
<213> A.fumigatus

<400> 26933

```
Pro Ser Phe Gln Ile Pro Ala Val Asp Trp Ile Ile Gln Phe Asp Pro
1               5                   10                  15
Pro Asp Asp Pro Arg Asp Tyr Ile His Arg Val Gly Arg Thr Ala Arg
            20                  25                  30
Gly Thr Asn Ala Lys Gly Arg Ser Leu Met Phe Leu Gln Pro Ser Glu
        35                  40                  45
Val Gly Phe Leu Lys His Leu Lys Glu Ala Arg Val Pro Val Val Glu
    50                  55                  60
Phe Glu Phe Pro Ala Asn Lys Ile Val Asn Val Gln Ser Gln Leu Glu
65                  70                  75                  80
Lys Leu Ile Gly Gln Asn Val Phe Thr Pro Gly Cys Lys Glu Thr Arg
                85                  90                  95
Ser
```

<210> 26934
<211> 73
<212> PRT
<213> A.fumigatus

<400> 26934

```
Ile Phe Ile Ile Thr Leu Glu Asp Leu Lys Ala Thr Leu Lys Ile Arg
1               5                   10                  15
Lys Ala Gln Lys Glu Asp Pro Thr Asn Leu Leu Ser Asn Lys Phe Lys
            20                  25                  30
Asp Tyr Thr Asn Ile Phe Phe Ser Lys Lys Ala Lys Arg Leu Leu Leu
        35                  40                  45
Tyr Tyr Leu Tyr Asn Tyr Asn Ile Lys Leu Leu Glu Gly Lys Thr Pro
    50                  55                  60
Leu Phe Ser Ser Leu Tyr Thr Ile Phe
65                  70
```

<210> 26935
<211> 79
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (9)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26935
Phe Gly Cys Val Val Leu Gln Ser Xaa Ala Ser Pro Cys Asp Phe Leu
1 5 10 15
Val Pro Ile Met Ile Ala Asp Cys Asp Arg Leu Phe Ser Asp Ser Phe
20 25 30
Met Leu Leu Lys Ala Arg Arg Thr Arg Ala Val Leu Glu Gly His Gln
35 40 45
Glu Pro Gln Asp Lys Leu Asp Met Ala Thr Gln Ala Ala Leu Leu Leu
50 55 60
Gln His Val Pro Leu Ser Ser Arg Ser Val Pro Thr Asn Ser Cys
65 70 75

<210> 26936
<211> 145
<212> PRT
<213> A.fumigatus

<400> 26936
Leu Ala Asp His Phe Gln Cys Ala Lys Leu Met Leu Gly Ala Ile Asp
1 5 10 15
Ser Ser Tyr Asp Thr Lys Asp Glu Lys Ala Ser Gly Arg Pro Ser Gly
20 25 30
Pro Gly Gly Pro Gly Gly Pro Pro Pro Pro Gly Pro Pro Gly Gln Tyr
35 40 45
Gly Gly Tyr Asn Pro Gly Gln Asn Tyr Gly Gln Gln Pro Gly Tyr Tyr
50 55 60
Asn Gln Pro Pro Pro Ser Gly Tyr Asn Gln Pro Gly Ala Tyr Gly Gln
65 70 75 80
Gly Gln Gly Tyr Asn Gln Ala Arg Tyr Ala Gln Ser Gln Gly Gly Pro
85 90 95
Pro Gln Pro Gly Tyr Gly Gln Thr Tyr Gly Gly Tyr Gly Ala Pro Pro
100 105 110
Ser Asp Pro Tyr Gly Arg Pro Pro Ser Gly Pro Pro Pro Gly Gly Tyr
115 120 125
Pro Pro Gln Gln Arg Pro Pro Tyr Gly Gln Pro Pro Pro Pro Pro Arg
130 135 140
Tyr
145

<210> 26937
<211> 303
<212> PRT
<213> A.fumigatus

<400> 26937
Arg Gln Leu Tyr Ala Pro Gln Gly Ala Pro Tyr Gln Gly Gly Pro Gly
1 5 10 15
Gly Pro Pro Gly Ala Pro Gly Gln Ala Gly Tyr Gly Tyr Pro Gly Gly
20 25 30
Ala Pro Pro Pro Ala Arg Ala Thr Glu Gln Gln Ile Gly Ala Tyr Lys
35 40 45

```
Gln Leu Leu Ile Gly Thr Ile Gln Glu Lys Asn Leu Gln Thr Phe Tyr
    50                  55                  60
Pro Pro Asp Lys Leu Asp Arg Leu Val Gln Ser Leu Ala Asn Glu Ala
65                  70                  75                  80
Pro Ala Lys Ile Asp Arg Leu Val His Glu Trp Ser Val Pro Gln Glu
                85                  90                  95
Val Ala Met Asp Val Met Lys Leu Ala Leu Phe Asp Val Ile Leu Tyr
            100                 105                 110
Val Asp Asp Ser Gly Ser Met Glu Phe Glu Glu Lys Gly Met Arg Lys
        115                 120                 125
Glu Gln Leu Arg Gln Ile Leu Gly Ile Val Ala Thr Gly Ala Ser Thr
    130                 135                 140
Phe Asp Gln Asp Gly Ile Ser Val Arg Phe Met Asn Ser Asn Glu Val
145                 150                 155                 160
Gly Asp Gly Ile Arg Ser Val Asp Asp Val Asn Met Leu Val Ser Arg
                165                 170                 175
Val Arg Phe Ala Gly Leu Thr Pro Leu Gly Thr Ser Leu Arg His Lys
            180                 185                 190
Val Ile Glu Pro Met Val Val Gly Pro Ala Arg Ala Gly Arg Leu Gln
        195                 200                 205
Lys Pro Val Leu Ile Ile Thr Ile Thr Asp Gly Gln Pro Ala Gly Glu
    210                 215                 220
Pro His Asp Thr Val Ala Asn Thr Ile Arg Tyr Ala Ser Glu Glu Val
225                 230                 235                 240
Ser Arg Thr Gln Tyr Gly Arg Gly Ala Val Ser Phe Gln Phe Ser Gln
                245                 250                 255
Val Gly Thr Asp Thr Lys Ala Arg Glu Phe Leu Ala Ser Leu Asp Glu
            260                 265                 270
Asp Pro Gln Ile Gly Gly Leu Ile Asp Cys Thr Ser Ser Lys Tyr Trp
        275                 280                 285
Arg Ala Cys Asn Ser Ser Leu Ala Gln Cys Thr Arg Leu Thr Glu
    290                 295                 300
```

<210> 26938
<211> 62
<212> PRT
<213> A.fumigatus

<400> 26938

```
Cys Ile Ser Tyr Val Val Arg Val Val Thr Thr Arg Val Arg Leu Leu
1               5                   10                  15
Ile Met Cys Cys Thr Val Glu Tyr Val Ser Arg Gly Asp Tyr Thr Thr
            20                  25                  30
Pro Ala Gly Val Leu Thr Ala Arg Thr Ala Ala Thr Ala Ser Trp Thr
        35                  40                  45
Thr Ala Asp Pro Ser Ser Pro Val Val Lys Thr Glu Gln Asn
    50                  55                  60
```

<210> 26939
<211> 114
<212> PRT
<213> A.fumigatus

<400> 26939

```
Leu Met Val Arg Thr Gly Leu Thr Met Ala Ala Val Pro Ala Pro Lys
1               5                   10                  15
```

```
Thr Ser Ile Ser Leu Pro Ser Ser Glu Ala Ser Ala Thr Ser Asp Ile
            20                  25                  30
Leu Ile Leu Arg Ser Asp Thr Val Gln Pro Leu Gly Thr Ser Leu Ser
        35                  40                  45
Arg Ala Ser Ala Lys Thr Glu Ser Leu Val Thr Pro Ser Arg Met Val
    50                  55                  60
Pro Ser Lys Gly Ala Val Thr Ser Ser Phe Cys Pro Val Ser Leu Phe
65                  70                  75                  80
Phe Lys Ala Met Lys Arg Phe Ile Val Pro Thr Ser Val Thr Tyr Ser
                85                  90                  95
Ser Ser Pro Asn Ser His Arg Phe Cys Trp Lys Pro Arg Glu Ala Ala
            100                 105                 110
Phe Ser
```

<210> 26940
<211> 241
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (16)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 26940
Arg Pro Ser Leu Thr Ser Asp Ser Ala Arg Gly Tyr Ser Ser Ile Xaa
1               5                   10                  15
Arg Pro Thr Met Ile Gly Thr Gln Asn Thr Leu Gly Val Gly Pro Pro
            20                  25                  30
Gly Ser Ala Phe Leu Phe Val Ile Ala Ser Pro Val Gly Pro Tyr Tyr
        35                  40                  45
Pro Thr Gly Phe Lys Ala Ile Ser Leu Glu Ala Thr Asp Tyr Ala Val
    50                  55                  60
Arg Ala Trp Pro Gly Gly Val Gly Asp Lys Lys Leu Gly Ala Asn Tyr
65                  70                  75                  80
Ala Pro Cys Ile Val Pro Gln Leu Lys Ala Ala Ser Arg Gly Phe Gln
                85                  90                  95
Gln Asn Leu Trp Leu Phe Gly Asp Glu Glu Tyr Val Thr Glu Val Gly
            100                 105                 110
Thr Met Asn Leu Phe Ile Ala Leu Lys Asn Lys Glu Thr Gly Gln Lys
        115                 120                 125
Glu Leu Val Thr Ala Pro Leu Asp Gly Thr Ile Leu Glu Gly Val Thr
    130                 135                 140
Arg Asp Ser Val Leu Ala Leu Ala Arg Glu Arg Leu Val Pro Lys Gly
145                 150                 155                 160
Trp Thr Val Ser Glu Arg Lys Ile Arg Met Ser Glu Val Ala Glu Ala
                165                 170                 175
Ser Glu Glu Gly Arg Leu Ile Glu Val Phe Gly Ala Gly Thr Ala Ala
            180                 185                 190
Ile Val Ser Pro Val Arg Thr Ile Ser Tyr Arg Gly Lys Met Val Asp
        195                 200                 205
Cys Gly Leu Lys Lys Asn Glu Glu Ala Gly Glu Val Ala Leu Gln Met
    210                 215                 220
Lys Asn Trp Ile Glu Gly Ile Gln Tyr Gly Asp Glu Glu His Pro Trp
225                 230                 235                 240
```

Arg

<210> 26941
<211> 528
<212> PRT
<213> A.fumigatus

<400> 26941

```
Lys Tyr Pro Lys Leu Asp Gly Arg Asp Ile Gly Asn Ser Pro Thr Arg
1               5                  10                  15
His Val Cys Arg Phe Arg Gln His Asn Arg Tyr Val Ser Asn Val Leu
            20                  25                  30
Thr Pro Cys Ala Val Ser Ala Gly Thr Asp Gln Cys Leu Ser Arg Ser
        35                  40                  45
Met Gly Asp Leu Ile Gly Phe Glu Gly Tyr Leu Asn Thr Thr Thr Pro
    50                  55                  60
Phe Ser Val Lys Glu His Lys Ala Leu Trp Lys Thr Asp Arg His Tyr
65                  70                  75                  80
Val Asp Phe His Phe Gly Asn Asp Tyr Asn Glu Thr Cys Asp Tyr Pro
                85                  90                  95
Arg Phe Trp Asn Glu Thr Gly Trp Pro Val Asp Gln Ser Val Arg Asp
            100                 105                 110
Gln Leu Asn Gly Cys Tyr Asp Ser Asp Phe Asp Gln Tyr Gly Asp Arg
        115                 120                 125
Glu Ala Phe Gly Val Tyr Pro Asp Trp Gln Arg Gln Leu Ala Lys Phe
    130                 135                 140
Ala Ser Val Gln Asp Arg Leu Arg Glu Trp Asn Pro Ser Val Arg Gln
145                 150                 155                 160
Arg Leu Thr Arg His Ser Cys Met Ile Ile Glu Ala Leu Asp Ile Asp
                165                 170                 175
Gly Phe Arg Tyr Asp Lys Ala Thr Gln Ala Thr Val Asp Ala Leu Gly
            180                 185                 190
Glu Met Ser Leu Ala Tyr Arg Glu Cys Ala Arg Lys Val Gly Lys Asn
        195                 200                 205
Asn Phe Phe Ile Ser Gly Glu Ile Thr Gly Gly Asn Thr Phe Gly Ser
    210                 215                 220
Ile Tyr Leu Gly Arg Gly Arg Gln Pro Asn Gln Tyr Leu Lys Ser Ala
225                 230                 235                 240
Ile Asp Ala Met Asn Met Thr Asn Leu Ser Asp His Gln Tyr Phe Leu
                245                 250                 255
Arg Glu His Gly His Glu Ala Ile Asp Ala Ala Ala Phe His Tyr Ser
            260                 265                 270
Ile Tyr Arg Ser Leu Thr Arg Phe Leu Gly Leu Asp Gly Asn Leu Ala
        275                 280                 285
Ala Gly Tyr Asp Thr Pro Val Asp Trp Thr Asp Ala Trp Asn Leu Met
    290                 295                 300
Val Ile Ser Asn Asp Met Ile Asn Ala Asn Thr Gly Lys Phe Asp Pro
305                 310                 315                 320
Arg His Met Tyr Gly Ala Thr Asn Gln Asp Val Phe Arg Trp Pro Ala
                325                 330                 335
Ile Glu Tyr Gly Val Glu Arg Gln Leu Leu Ala Leu Phe Ile Thr Thr
            340                 345                 350
Leu His Leu Pro Gly Ile Pro Leu Leu Leu Trp Gly Glu Glu Gln Ala
        355                 360                 365
Phe Tyr Ile Leu Asp Ala Thr Ala Ser Asn Tyr Ile Tyr Gly Arg Gln
```

```
    370                 375                 380
Ala Met Ser Pro Ala Thr Ala Trp Lys Thr His Gly Cys Phe Gln Leu
385                 390                 395                 400
Thr Pro Ser Gln Tyr Tyr Asn Trp Pro Ile Gln Lys Gly Arg Gln Gly
                405                 410                 415
Cys His Asp Glu Thr Ala Thr Tyr Asp His Arg Asp Pro Ser His Pro
            420                 425                 430
Val Arg Asn Ile Ile Lys His Met Tyr Gln Met Arg Glu Asn Tyr Leu
        435                 440                 445
Val Leu Asn Asp Gly Trp Trp Leu Gln Lys Leu Ser Lys Gln Thr Arg
    450                 455                 460
Glu Ile Tyr Leu Pro Gly Ser Asn Ser Thr Pro Thr Glu Thr Gly Met
465                 470                 475                 480
Trp Ser Ile Leu Arg Gly Val Thr Pro Gly Ile Gln Ser Leu Gly Ser
                485                 490                 495
Asp Lys Asp Asp Gln Pro Val Trp Leu Val Tyr Gln Asn Glu Asn His
            500                 505                 510
Thr Val Asp Tyr Ser Ala Thr Arg Pro Gly Leu Glu Gly Ile Ala Tyr
        515                 520                 525
```

Sequence Listing

<210> 26942
<211> 275
<212> PRT
<213> A.fumigatus

<400> 26942

```
Gly Arg Cys Pro Ser Ser Pro Val Val Lys Thr Leu Arg Ile Tyr Ala
1                   5                   10                  15
Ala Met Phe Ala Gly Gln Ser Arg Val Ala Leu Asp Thr Ala Val Glu
            20                  25                  30
Leu Glu Ala Ser Ile Pro Glu Glu Leu Leu Arg Ile Glu Ser Pro Pro
        35                  40                  45
Met Ala Asp Trp Leu Glu Gly Phe Leu Ala Val Lys Val His Val Leu
    50                  55                  60
Val Arg Phe Gly Arg Trp Glu Asp Ile Leu Ala Leu Glu Leu Pro Gln
65                  70                  75                  80
Asp Gln Asp Leu Tyr Cys Val Thr Thr Ala Met Ile His Tyr Ala Lys
                85                  90                  95
Gly Val Ala Ser Ala Ala Leu Gly Arg Val Asp Glu Ala Asp Gln Glu
            100                 105                 110
Arg Thr Glu Phe His Lys Ala Phe Asp Arg Val Pro Pro Ser Arg Thr
        115                 120                 125
Leu Phe Asn Asn Thr Cys Arg Asp Ile Leu Ala Ile Ala Glu Ala Met
    130                 135                 140
Leu Asp Gly Glu Ile Glu Tyr Arg Arg Gly Asn Ile Asp Ala Ala Phe
145                 150                 155                 160
Lys His Leu Arg Gln Ser Ile Ala Leu Asp Asp Gly Leu Pro Tyr Asp
                165                 170                 175
Glu Pro Trp Gly Trp Met Gln Pro Thr Arg His Ala Tyr Gly Ala Leu
            180                 185                 190
Leu Leu Glu Gln Gly Gln Val Glu Lys Ala Ala Glu Val Tyr Gly Ala
        195                 200                 205
Asp Leu Gly Met Asp Asp Thr Leu Pro Arg Ala Leu Gln His Pro Asn
    210                 215                 220
Asn Val Trp Ser Leu His Gly Tyr His Glu Cys Leu Thr Arg Leu Gly
225                 230                 235                 240
```

```
Arg Leu Ala Glu Ala Arg Ile Ile Gln Gln Leu Lys Leu Ala Ala
                245                 250                 255
Ala Thr Ala Asp Val Pro Ile Arg Ser Ser Cys Phe Cys Arg Leu Glu
            260                 265                 270
Cys Cys Thr
        275
```

<210> 26943
<211> 210
<212> PRT
<213> A.fumigatus

<400> 26943

```
Tyr Ala Ile Ser Arg Ser Leu Pro Pro Arg Gly Glu Asn Glu Ile Ala
1               5                  10                  15
Lys Leu Leu Gly Ile Thr Val Pro Glu Leu Glu Ala Lys Phe Leu Ser
            20                  25                  30
Ala Phe Pro Val Gln Ala Glu Arg Phe Leu Leu Arg Gln Arg Ala Leu
        35                  40                  45
His Cys Phe Lys Glu Ala Arg Arg Val Leu Asp Phe Lys Ala Cys Leu
    50                  55                  60
Ala Lys Ala His Thr Leu Asp Glu Arg Arg Ile His Tyr Leu Gly Gln
65                  70                  75                  80
Leu Leu Asn Glu Ser Gln Glu Ser Cys Arg Ala Asp Tyr Asp Cys Ser
                85                  90                  95
Ala Pro Glu Val Asp Glu Ile Cys Ala Ile Ala Arg Arg Ala Gly Thr
            100                 105                 110
Trp Gly Ser Arg Leu Thr Gly Ala Gly Trp Gly Gly Cys Thr Val His
        115                 120                 125
Met Leu Pro Gln Ser Lys Val Glu Ala Val Thr Lys Ala Leu Lys Glu
    130                 135                 140
Glu Tyr Tyr Leu Lys Arg Leu Pro Asp Ile Ser Glu Glu Lys Leu Ala
145                 150                 155                 160
Gln Ala Met Val Ile Ser Lys Pro Ser Asn Gly Ser Phe Val Tyr Val
                165                 170                 175
Tyr Pro Cys Leu Asp Asp Val Phe Ile Val Pro Thr Glu Asn Ala Glu
            180                 185                 190
Ser Leu Thr Ala Phe Ala Arg Ile Thr Gly Ala Ala Ile Thr Ala Val
        195                 200                 205
Lys Ile
    210
```

<210> 26944
<211> 224
<212> PRT
<213> A.fumigatus

<400> 26944

```
Gly Cys Ser Thr Ser Trp Val Ile Ser Ser Lys Ala Leu Ile His His
1               5                  10                  15
Met Lys Gly Tyr Thr Glu Asn Asp Gly Gln Lys Arg Ile Glu Ala Tyr
            20                  25                  30
Leu Phe Gly Ser Pro Val Thr Leu Ala Asp Val Val Ser Ile Phe Gln
        35                  40                  45
Glu Leu Lys His Phe Gly Asn Gly Gly Leu Leu Leu Thr Gln Leu Leu
    50                  55                  60
```

```
His Leu Lys Arg Leu Ser Ala Ala Pro Cys Leu Leu Ala Gln Ala Leu
65                  70                  75                  80
Glu Cys Leu Leu Asp Lys Leu Asp Ile Leu Asp Pro Gln Leu Leu Ala
                85                  90                  95
Asp Asp Gly Gln Ile Thr Asp Gly Ile Asp Ile Thr Phe Asp Met Asp
            100                 105                 110
Asn Leu Ser Ile Val Glu Ala Ser Asp Asp Leu Glu Asp Gly Ile Asp
        115                 120                 125
Ser Thr Asp Val Gly Lys Glu Ser Ile Ser Gln Thr Ser Thr Ser Arg
    130                 135                 140
Gly Thr Ser Gly Gln Thr Gly Asp Ile Ile His Gly Gln Val Gly Gly
145                 150                 155                 160
Asn Leu Arg Leu Gly Leu Val Val Phe Ala Glu Pro Val Glu Ser Leu
                165                 170                 175
Ile Arg Asp Asp Asp Thr Ser Leu Phe Gly Ile Asp Ser Gly Ile Gly
            180                 185                 190
Glu Val Arg Arg Val Thr Gln Arg Arg Leu Gly Asp Gly Leu Glu Glu
        195                 200                 205
Cys Arg Leu Ala Asp Val Gly Gln Ser Asp Leu Ile Asn Ser His Cys
    210                 215                 220
```

<210> 26945
<211> 228
<212> PRT
<213> A.fumigatus

<400> 26945

```
Val Gly Leu Ala Asn Val Gly Lys Ser Thr Leu Phe Gln Ala Ile Thr
1               5                   10                  15
Lys Ser Ser Leu Gly Asn Pro Ala Asn Phe Pro Tyr Ala Thr Ile Asp
            20                  25                  30
Pro Glu Glu Ala Arg Val Ile Val Pro Asp Glu Arg Phe Asp Trp Leu
        35                  40                  45
Cys Glu His Tyr Lys Pro Lys Ser Gln Val Pro Ala Asn Leu Thr Val
    50                  55                  60
Tyr Asp Ile Ala Gly Leu Thr Arg Gly Ala Ser Thr Gly Ala Gly Leu
65                  70                  75                  80
Gly Asn Ala Phe Leu Ser His Ile Arg Ala Val Asp Ala Ile Phe Gln
                85                  90                  95
Val Val Arg Cys Phe Asp Asp Ala Glu Ile Ile His Val Glu Gly Asp
            100                 105                 110
Val Asp Pro Val Arg Asp Leu Thr Ile Ile Ser Glu Glu Leu Arg Ile
        115                 120                 125
Lys Asp Ile Glu Phe Val Glu Lys Ala Leu Glu Ser Leu Ser Lys Gln
    130                 135                 140
Thr Arg Arg Gly Gly Gln Ser Leu Glu Met Lys Lys Leu Arg Glu Glu
145                 150                 155                 160
Glu Ala Thr Val Ala Lys Val Leu Gln Phe Leu Lys Asp Gly Asn Asp
                165                 170                 175
Val Arg Lys Gly Asp Trp Thr Pro Lys Glu Val Cys Phe Tyr Ser Phe
            180                 185                 190
Leu Ser Ile Ile Phe Cys Ile Pro Phe His Met Met Asn Lys Ser Phe
        195                 200                 205
Ala Arg Tyr Asn Pro Ala Arg Arg Thr Ala Ser Ser Leu Ile Thr Thr
    210                 215                 220
Gln Arg Leu Ser
```

225

<210> 26946
<211> 120
<212> PRT
<213> A.fumigatus

<400> 26946
Ala Ile Ser Pro Ser Ile Asp Pro Ser Arg Ser Leu Leu Leu Phe Phe
1 5 10 15
Pro Ser Leu Ser Ser Ala His Cys Trp Trp Ala Leu Phe Ile Thr Ser
20 25 30
Pro Ala Pro Pro Ala Val Phe Leu Phe Leu Ser Leu Pro Leu Arg Leu
35 40 45
Glu Arg Ser Ala Ala Gly Ser Ala Phe Ala Ser Arg Leu His Gln Ser
50 55 60
Leu Pro Phe Phe Ser Pro Val Ser Ser Pro Tyr Phe Ser Ala Phe Ser
65 70 75 80
Arg Arg Ser Tyr Ser Ser Lys Lys Lys Lys Lys Met Pro Pro Lys Lys
85 90 95
Ala Val Val Gln Glu Lys Val Leu Leu Gly Arg Pro Gly Asn Asn Leu
100 105 110
Lys Ser Gly Ile Val Cys Glu His
115 120

<210> 26947
<211> 107
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (58)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26947
Val His Cys Glu Glu Arg Val Tyr Tyr Gly Ile Cys Gln Ser Gly Glu
1 5 10 15
Arg Arg Arg Gly Arg Glu Ile Met Arg Cys Leu Ala Glu Asn Val Ser
20 25 30
Lys Asp Leu Tyr Val His Ile Met Gly Gln Tyr His Pro Asp Ala His
35 40 45
Val Gly Lys Lys Lys Arg Thr Thr Arg Xaa Ala Ser Gln Glu Asp Arg
50 55 60
Thr Glu Phe Arg Tyr Ala Asp Ile Asn Arg Ala Val Arg Asp Glu Glu
65 70 75 80
Leu Gly Ser Val Lys Asp Ala Ala Val Ala Ala Gly Leu Trp Arg Phe
85 90 95
Cys Glu Val Asn Glu His Gly Gly Phe His Leu
100 105

<210> 26948
<211> 83
<212> PRT
<213> A.fumigatus

<400> 26948
Gln Ser Thr Thr Ala Ala Asn His Leu Lys Met Lys Pro Ile Ile Ala
1 5 10 15
Val Pro Ala Val Leu Ala Leu Ala His Arg Ala Trp Ser Arg Lys Thr
20 25 30
Leu Thr Pro Leu Gly Ile Ile Thr Ala Val Leu Thr Ala Ile Ala His
35 40 45
Val Leu His Pro Trp Ser Thr Pro Phe Ala Leu Leu Ala Val Phe Tyr
50 55 60
Leu Gly Gly Ser Lys Val Thr Lys Val Cys Tyr Met Pro Pro Phe Leu
65 70 75 80
Val Gly Ile

<210> 26949
<211> 128
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (36),(92),(105)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26949
Phe Trp Cys Ile Tyr Cys Lys Glu Arg Lys Val Ser Pro Leu Met Lys
1 5 10 15
Val Gly Asp Met Cys Ile Lys Ser Glu His Asp Leu Asn Trp Pro Ala
20 25 30
Arg Asp Leu Xaa Leu Asp Ile Tyr Arg Leu Asp Thr Ile Asp Ile Gly
35 40 45
Tyr Tyr Val Ser Lys Gly Pro Leu Asp Glu Arg Lys Pro Tyr Gly Ile
50 55 60
Leu Val Lys Leu Met Leu Phe Arg Pro Ser Ile Asn Met Gly Arg Ser
65 70 75 80
Tyr Leu Arg Val Gln Arg Gly Leu Thr Pro Asn Xaa Cys Ser Val Leu
85 90 95
Asp Ser Leu Asn Arg Phe Val Leu Xaa Lys Val Ser Leu Glu Gln Ile
100 105 110
Val Phe Ala Ser Leu Ile Ile Ser Pro Asn Trp Gly Leu Val Leu Thr
115 120 125

<210> 26950
<211> 118
<212> PRT
<213> A.fumigatus

<400> 26950
Cys Cys Ser Arg Arg Pro Arg Arg Lys Ser Thr Gly Ser Arg Gly Pro
1 5 10 15
Cys Ala Val Leu Arg Arg Asn Arg Leu Pro Thr Pro Gly Thr Asn Pro
20 25 30
Gly Glu Lys Lys Pro Ala Pro Pro Pro Thr Ser Gly Asn Ala Ala Val
35 40 45
Arg His Tyr Ile Leu Asn Trp Ala Phe Gly Arg Trp Thr Phe Thr Pro
50 55 60

```
Ser Glu Met Val Ala Glu Ser Ala Asp Pro Val Val Val Ala Arg Leu
65                  70                  75                  80
Thr Leu Ile Leu Ala Arg Tyr Glu Ser Gly Lys Trp Lys Lys Lys Leu
                85                  90                  95
Glu Ala Gly Gly Leu Ile Gln Leu Gly Glu Gly Ala Glu Gly Glu Ser
            100                 105                 110
Val Val Glu Arg Leu Val
        115
```

<210> 26951
<211> 71
<212> PRT
<213> A.fumigatus

<400> 26951

```
Gln Asn Leu Val Tyr Gln Ala Thr Lys Gln Thr Lys Leu Tyr Gly Ile
1               5                   10                  15
Pro Ala Phe His Ile Ile Tyr Pro Ile Thr Asn Arg Ile Thr Asp Lys
            20                  25                  30
Gln Met Asn Gln Val Gln Thr Ser Thr Asn Ser Gly Thr Phe Ser Asn
        35                  40                  45
Thr Pro Gly Ala Gln Ser His Arg Leu Arg Ser Arg Cys Lys Ser Pro
    50                  55                  60
Arg Gly Cys Pro Arg Ser Arg
65                  70
```

<210> 26952
<211> 307
<212> PRT
<213> A.fumigatus

<400> 26952

```
Gly Gln Ala Cys Lys Thr Ser Ser Tyr Leu Arg Tyr Ala Ala Lys Val
1               5                   10                  15
Gly Val Lys Gln Met Thr Leu Asp Asn Ala Asp Glu Leu Tyr Lys Ile
            20                  25                  30
Lys Ala Cys Tyr Pro Asp Ala Glu Leu Tyr Leu Arg Ile Leu Thr Asp
        35                  40                  45
Asp Ser Thr Ser Leu Cys Arg Leu Ser Met Lys Phe Gly Ala Ser Leu
    50                  55                  60
Asp Ile Ala Arg Gln Leu Leu Glu Leu Ala His Glu Leu Glu Leu Lys
65                  70                  75                  80
Val Val Gly Val Ser Phe His Val Gly Ser Gly Ala Glu Asp Pro Arg
                85                  90                  95
Ala Phe Leu Lys Ala Val Gln Asp Ala Arg Leu Val Phe Asp Gln Ala
            100                 105                 110
Ala Glu Val Gly His Glu Leu His Thr Leu Asp Val Gly Gly Gly Phe
        115                 120                 125
Cys Gln Asp Thr Phe Glu Lys Phe Ala Gly Ile Leu Ser Glu Ala Leu
    130                 135                 140
Asp Thr Tyr Phe Pro Pro His Ile Arg Val Ile Ala Glu Pro Gly Arg
145                 150                 155                 160
Tyr Tyr Val Ala Ser Ala Phe Thr Leu Ala Ala Asn Val Ile Ala Arg
                165                 170                 175
Arg Asp Val Arg Asp Pro Lys Asp Pro Ala Asn Asp Thr Tyr Met Leu
            180                 185                 190
```

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Tyr Leu Asn Asp Gly Val Tyr Gly Asn Phe Ser Asn Ile Ile Phe Asp
        195                 200                 205
His Gln His Pro Val Ala Lys Ile Leu Thr Cys Ser Gly Glu Thr Gln
    210                 215                 220
Pro Ser Ala Leu Asn Ala Ala Thr Ser Glu Gly Ile Ala Tyr Ser Ile
225                 230                 235                 240
Trp Gly Pro Thr Cys Asp Gly Ile Asp Val Ile Thr Gln Arg Ile Val
                245                 250                 255
Leu Pro Gly Leu Leu Asp Val Gly Asp Trp Leu Tyr Phe Glu Glu Met
            260                 265                 270
Gly Ala Tyr Thr Lys Cys Ser Ala Thr Arg Phe Asn Gly Phe Ser Asp
        275                 280                 285
Asn His Glu Val Ile Tyr Ile Ser Ser Glu Ala Gly Ala Thr Ala Leu
    290                 295                 300
Leu Glu Tyr
305

<210> 26953
<211> 73
<212> PRT
<213> A.fumigatus

<400> 26953
Arg Ser Leu His Val Val Val Val Ala Ser Thr Leu Phe Ser Ser Phe
1               5                   10                  15
Ser Val Ser Ser Lys Leu Ser Val His Pro Ala Val Ser Ile Phe Ser
            20                  25                  30
Ser Gly Ser Leu Phe Leu Ser Tyr Leu Leu Pro Leu Ser Pro Val Pro
        35                  40                  45
Ile Ala Phe Pro Ser Asn Ser Cys Pro Tyr Ile Arg Phe Val Ile Ile
    50                  55                  60
Leu Asp Glu Pro Arg Leu Tyr Pro Pro
65                  70

<210> 26954
<211> 60
<212> PRT
<213> A.fumigatus

<400> 26954
Gly Leu Phe Arg Pro Thr Leu Tyr Cys Ser Leu Ala Leu Pro Asp Arg
1               5                   10                  15
Ser Ser Arg Cys Leu Leu Trp Thr Phe Cys Ser Lys Pro Ser Ile Ala
            20                  25                  30
Ser Thr Thr Gln Gly Thr Asn Tyr Thr Thr Thr Thr Ile Thr Thr Asp
        35                  40                  45
Cys Ile Tyr Leu Leu His Ile Tyr Asn Tyr Leu Gln
    50                  55                  60

<210> 26955
<211> 156
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
```

<222> (153),(154)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26955
Gly Lys Tyr Leu Asp Ala Glu Gly Val Thr Asp Phe Val Pro Ile Ser
1 5 10 15
Phe Leu Gln Arg Ile Pro Ala Leu Thr Ser Trp Thr Thr Ala Glu Arg
20 25 30
Arg Ser Glu Thr His Arg Gln Phe Arg Ala Ala His Glu Gly His Arg
35 40 45
Pro His Ala Gly Leu Asp Ala Ser Arg Ala Ser Thr Gly Val Val Trp
50 55 60
Cys Thr Glu Arg Ala Ile Glu His Gly Tyr Ala Glu Asp Pro Ser Gly
65 70 75 80
Trp Ala Asn Leu Gly Gln Gly Ala Pro Glu Ala Asp Asp Glu Ile Glu
85 90 95
Gly Ser Phe Pro Arg Pro Thr Ser Ile Pro Ile Thr Ser Ala Ala Arg
100 105 110
Glu Tyr Gly Pro Thr Ala Gly Ile Lys Pro Leu Arg Ala Ala Val Ala
115 120 125
Arg Leu Tyr Asn Glu His Tyr Arg Gln Gly Lys Glu Ser Val Phe Thr
130 135 140
Thr Gly Leu Glu Gly Ala Ala Pro Xaa Xaa Asn Pro
145 150 155

<210> 26956
<211> 212
<212> PRT
<213> A.fumigatus

<400> 26956
Ala Arg Ser Trp Gln Leu Arg Gly Glu Asp Pro Arg Pro Pro Pro Ser
1 5 10 15
Ser Ser Leu Ser Leu Leu His Cys Arg Ala Pro Pro Pro Pro His Leu
20 25 30
Asn Leu His Arg Leu Tyr Leu Leu Lys Ala Pro Leu Leu Lys Lys Ile
35 40 45
His Ala Ile Val Ile Ser Ser Ala Phe Ile Leu Ser Thr Thr Ser Thr
50 55 60
Leu Trp Leu Lys Phe Ser Ala Ser Lys Leu Gly Ala Arg Cys Leu Pro
65 70 75 80
Ser Thr Cys Arg Ser Ser Thr Leu Val Pro Arg Ser Cys Ser Thr Val
85 90 95
Pro Arg Ser Leu Ala Ala Leu Pro Ser Lys Val Tyr Ser Ser Leu Leu
100 105 110
Leu Ser Asn Lys Thr His Ser Arg Phe Phe Ser Thr Pro Ser Arg Pro
115 120 125
Leu Tyr Asp Ala Met Asn Thr Asn Thr Thr Pro Ser Pro Ser Pro Gly
130 135 140
Pro Ala Ala Lys Ile Ser Ala Ser Pro Lys Pro Asn Ala Ser Ala Ala
145 150 155 160
Ala Gly Thr Lys Arg Lys Arg Ser Ala Pro Gly Lys Phe Tyr Ala Val
165 170 175
Lys Ala Gly Tyr Gln Pro Gly Ile Tyr Tyr Glu Trp Ser Asp Cys Leu
180 185 190
Thr Gln Val Thr Gly Tyr Lys Gly Ala Val Cys Lys Cys Arg Glu Ile

```
        195                 200                 205
Arg Leu Pro Ser
    210

<210> 26957
<211> 219
<212> PRT
<213> A.fumigatus

<400> 26957
Tyr Pro Ser Tyr Ser Ile Val Gln Ala Phe Pro Thr Tyr Glu Glu Ala
1               5                  10                  15
Asn Ala Phe Leu Thr Gly Thr Gln Leu Pro Ser Ala Arg Gly Ala Thr
            20                  25                  30
Pro Ser Ser Ser Glu Pro Thr Arg Phe Tyr Gly Ile Gln Arg Gly Arg
        35                  40                  45
Val Pro Gly Val Tyr Thr Asp Trp Ala Arg Ala Gln Glu Gln Ile Lys
    50                  55                  60
Gly Phe Ala Arg Pro Arg Tyr Lys Lys Phe Ser Thr Arg Glu Glu Ala
65                  70                  75                  80
Glu Glu Phe Val Arg Met Glu Gln Gly Ala Gly Ala Thr Phe Ala Gly
                85                  90                  95
Gly Thr Ala Thr Ser Gln Thr Gln Thr Leu Ala Gly Pro Pro Gly Leu
            100                 105                 110
Thr Asp Glu Ile Pro Lys Asp Glu Gln Gly Asn Ile Leu Glu Pro Gly
        115                 120                 125
Thr Gly Pro Leu Pro Pro Gly Ala Glu Asp Gly Phe Asp Pro Asn Val
    130                 135                 140
Leu Leu Asp Pro Ala Thr Gly Lys Val Val Tyr Lys Thr Lys Glu Gln
145                 150                 155                 160
Lys Ser Ala Thr Lys Thr Arg Pro Ile Gly Pro Pro Gly Met Leu Arg
                165                 170                 175
Ile Tyr Thr Asp Gly Ser Ala Leu Lys Asn Gly Arg Asp Thr Ala Ala
            180                 185                 190
Ala Gly Val Gly Val Phe Phe Gly Pro Gly Asp Thr Arg Phe Val Leu
        195                 200                 205
Ser Ile Leu Cys Arg Leu Tyr Ala Arg Leu Gln
    210                 215

<210> 26958
<211> 372
<212> PRT
<213> A.fumigatus

<400> 26958
Asp Thr Thr Pro Ser Cys Lys Ser Arg Thr Ser Pro Ile Pro Leu Ser
1               5                  10                  15
Glu Lys Pro Gly Cys Thr Leu Thr Leu Asp Thr Ser Asp Tyr Ala Glu
            20                  25                  30
Thr Lys Arg Ser Ser Glu Val Leu Asp Val Leu Ile Ser Met Leu Ser
        35                  40                  45
Glu Cys Asp Asn Val Pro Gly Ala Glu His Lys Phe Glu Asn Phe His
    50                  55                  60
Thr Lys Thr Ser Lys Gln Asn Lys Lys Leu Leu Ser Val Asn Ser His
65                  70                  75                  80
Lys Lys Gln Ala Gln Asn Ala Trp Leu Ala Ile Leu Gln Asn Asp Leu
```

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                85                  90                  95
Ser His Thr Gln Arg Lys Thr Leu Leu Arg Asn Met Val Tyr Thr Ile
            100                 105                 110
Glu Pro Trp Phe Asn Arg Pro Glu Leu Leu Met Asp Phe Leu Thr Asp
        115                 120                 125
Ser Tyr Asn Val Gly Gly Ala Thr Ser Leu Leu Ala Leu Ser Gly Leu
    130                 135                 140
Phe Tyr Leu Ile Arg Glu Lys Asn Leu Asp Tyr Pro Gln Phe Tyr His
145                 150                 155                 160
Lys Leu Tyr Ser Leu Leu Asp Ala Asp Leu Leu His Ser Lys His Arg
                165                 170                 175
Ser Arg Phe Phe Arg Leu Met Asn Thr Phe Leu Ser Ser Thr His Leu
            180                 185                 190
Pro Ala Thr Leu Ile Ala Ser Phe Ile Lys Arg Leu Ser Arg Leu Ala
        195                 200                 205
Leu Asn Ala Pro Pro Thr Ala Ile Val Val Ile Val Pro Phe Ile Tyr
    210                 215                 220
Asn Leu Leu Lys Asn His Pro Thr Cys Thr Phe Met Leu His Arg Val
225                 230                 235                 240
Val Arg Asp Glu Gln Thr Lys Ala Thr Leu Glu Ala Glu Gly Met Asp
                245                 250                 255
Asp Pro Phe Asp Val Asn Glu Gly Asp Pro Thr Arg Thr Met Ala Ile
            260                 265                 270
Glu Ser Ser Leu Trp Glu Ile Glu Thr Leu Gln Ser His Tyr His Pro
        275                 280                 285
Asn Val Ala Ala Ile Ala Arg Ile Ile Ser Glu Gln Phe Thr Lys Gln
    290                 295                 300
Ala Tyr Asn Leu Glu Asp Phe Leu Asp Tyr Thr Tyr Gln Gly Met Leu
305                 310                 315                 320
Gln Ala Glu Leu Gly Thr Glu Asp Lys Pro Phe Lys Arg Ile Pro Val
                325                 330                 335
Val Glu Tyr His Ile Pro Lys Arg Ile Phe Thr Asp Arg Leu Leu Glu
            340                 345                 350
Glu Asp Gly Gly Gln Asp Thr Ala Pro Gly Asn Phe Met Arg Gly Leu
        355                 360                 365
Trp Asn Phe Ala
    370
```

<210> 26959
<211> 96
<212> PRT
<213> A.fumigatus

```
<400> 26959
Thr Gly Leu Tyr Ala Pro Ser Leu Ala Val Ala Val Val Cys Pro Pro
1               5                   10                  15
Ser Gln Phe Leu Val Ala Thr Val Cys Phe Cys Val Gly Leu Leu Leu
            20                  25                  30
Tyr Pro Ala Ala Ala Phe Tyr Leu Pro Ser Ile Val Gly Thr Leu Gly
        35                  40                  45
Ser Cys Glu Ser Ala Ala Ile Thr Met Ala Arg Val Tyr Ala Asp Val
    50                  55                  60
Asn Glu His Met Pro Arg Ser Tyr Trp Asp Tyr Asp Ser Val Asn Ile
65                  70                  75                  80
Ser Trp Gly Val Leu Glu Asn Tyr Glu Val Val Arg Lys Ile Gly Lys
                85                  90                  95
```

<210> 26960
<211> 82
<212> PRT
<213> A.fumigatus

<400> 26960
Val Ser Leu Val Ser Phe Asn Phe Leu Ser Val Leu Thr Phe Leu Arg
1 5 10 15
Phe Leu Gly Thr Ala Tyr Ser Pro Gly Gly His Gly Ser Ser Leu Leu
20 25 30
Arg Pro Gly Ser Arg Ser Gly Val Ala Gly Arg Ser Glu Gln Cys Asp
35 40 45
Val Pro Ile Val Lys Pro Gly Val Ala Asp Leu Thr Ile Thr Ser Tyr
50 55 60
Ile Gln Gly Ser Thr Glu Pro Asn Ser Ala Pro Ala Val Ile Gln Leu
65 70 75 80
Arg Ser

<210> 26961
<211> 186
<212> PRT
<213> A.fumigatus

<400> 26961
Thr Tyr Leu Gly Gly Phe Trp Arg Thr Met Lys Trp Ser Ala Arg Leu
1 5 10 15
Val Ser Glu Gln Ile Gln Ser Leu His Leu Thr Gly Ala Leu Pro Leu
20 25 30
Ser Trp Met Thr Cys Ala Thr Leu Asn Ser Cys Ile Ser Lys Leu Thr
35 40 45
Ile Val Asn Thr Gly Arg Gly Lys Tyr Ser Glu Val Phe Glu Gly Ile
50 55 60
Asn Val Val Asn Tyr Gln Lys Cys Val Ile Lys Val Leu Lys Pro Val
65 70 75 80
Lys Lys Lys Lys Ile Lys Arg Glu Ile Lys Ile Leu Gln Asn Leu Ala
85 90 95
Gly Gly Pro Asn Val Val Ala Leu Leu Asp Val Val Arg Asp Ser Gln
100 105 110
Ser Lys Thr Pro Ser Leu Ile Phe Glu Tyr Val Asn Asn Thr Asp Phe
115 120 125
Arg Thr Leu Tyr Pro Arg Phe Thr Asp Tyr Asp Val Arg Phe Tyr Val
130 135 140
Tyr Glu Leu Leu Lys Ala Leu Asp Phe Cys His Ser Lys Gly Ile Met
145 150 155 160
His Arg Asp Val Lys Pro His Asn Val Met Ile Asp His Glu Lys Arg
165 170 175
Lys Val Ser Ser Ile Val Asp Val Pro Ser
180 185

<210> 26962
<211> 147
<212> PRT
<213> A.fumigatus

<400> 26962
Leu Arg Leu Ile Asp Trp Gly Leu Ala Glu Phe Tyr His Lys Gly Thr
1 5 10 15
Glu Tyr Asn Val Arg Val Ala Ser Arg Tyr Phe Lys Gly Pro Glu Leu
20 25 30
Leu Val Asp Phe Gln Glu Tyr Asp Tyr Ser Leu Asp Met Trp Ser Leu
35 40 45
Gly Ala Met Phe Ala Ser Met Ile Phe Arg Lys Glu Pro Phe Phe His
50 55 60
Gly Gln Asn Asn Ser Asp Gln Leu Val Lys Ile Ala Lys Val Leu Gly
65 70 75 80
Thr Glu Glu Leu Phe Glu Tyr Leu Asp Lys Tyr Asp Ile Glu Leu Asp
85 90 95
Pro Gln Tyr Asp Glu Ile Leu Ser Arg Tyr Pro Arg Lys Pro Trp His
100 105 110
Ser Phe Ile Asn Ala Asp Asn Gln Arg Phe Ile Ser Asp Glu Ala Ile
115 120 125
Asp Phe Leu Asp Lys Leu Leu Arg Tyr Asp His Ala Val Ser Leu Ala
130 135 140
Arg Leu Leu
145

<210> 26963
<211> 392
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (60)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26963
Leu Asn Phe Leu Pro Val Gly Ala Ile Gly Pro Thr Arg Pro Thr Glu
1 5 10 15
Leu Met Cys Ser Leu Glu Asp Ser Gly Thr Phe Arg Ile Pro Met His
20 25 30
Leu Trp Asn Ile Gln Thr Phe Arg Gly Thr Gly His Cys Thr Leu Tyr
35 40 45
Thr Pro Cys Ser Phe Asn Pro Leu Thr Val Asn Xaa Phe Val Pro Leu
50 55 60
Val Pro Glu Lys His Thr Ser Phe Ala Ser Arg Ile Ser Met Thr Gln
65 70 75 80
Asp Asn Thr Met Asp Leu Phe Lys Tyr Leu Asn Ala Asp Pro Ser Phe
85 90 95
Ile Thr Asn Leu Leu Gly Arg Pro Asp Tyr Trp Ala Pro Gln Thr Arg
100 105 110
Trp Thr Ser Asp Ser Asn Ser Asn Ile Leu Ala Cys Gly Pro Ile His
115 120 125
Leu Leu Pro Leu Ile Ser Arg His Gly Leu Thr Ser Thr Asp Phe Tyr
130 135 140
Cys Gln His Pro Arg Trp Asn Leu His Phe Gln Gly Ala Pro Leu Ser
145 150 155 160
Val Tyr Leu Arg Tyr Asp Ala Ala Leu Arg Leu Thr Ser Tyr Ile Ile
165 170 175
Ser His Lys Glu Gly Asp Ser Asn Ile Gln Ala Leu Gln Asn Ile Phe

```
            180                 185                 190
Asn Leu Ala Ile Lys Thr Ala Pro Ala Glu Gln Gly Thr Arg Ile Leu
        195                 200                 205
Leu Asp Asp Pro Phe Asp Leu Ala Val Ile Leu Ser Thr Leu Asn Phe
    210                 215                 220
Glu Ala Ser Lys Tyr His Ala Gln Arg Phe Arg Arg Tyr Met Trp Thr
225                 230                 235                 240
Gln Ile Asn Lys Val Asp Asp His Leu Ala Gly Leu Glu Thr Asn Asp
                245                 250                 255
Arg Arg Lys Leu Gly Glu Leu Thr Lys Glu Leu Gln Ile Ile Ser Gln
            260                 265                 270
Asn Ala Asp Ser His Leu Gly Asn Ala Asp Val Ala Ile Ile Thr Ala
        275                 280                 285
Thr Gly Ile Arg Thr Ala His Ala Arg Leu His Glu Ala Met Gly Ser
    290                 295                 300
Pro Ala Arg Val Phe Glu Arg Ala Ser Asp Ser Ile Thr Tyr Val Ile
305                 310                 315                 320
Glu Ser Met Gln Lys Gln Lys Ile Trp Phe Leu Asn Tyr Lys Asn Arg
                325                 330                 335
Lys Asp Ser Thr Met Ala Leu Val Tyr Asn Leu Val Thr Gln Gln Asp
            340                 345                 350
Ala Ala Ser Asn Ile Gln Leu Ala Ala Ser Met Lys Arg Asp Ser Thr
        355                 360                 365
Ser Met Asn Ala Ile Ala Ala Leu Thr Met Val Phe Leu Pro Gly Thr
    370                 375                 380
Phe Ile Ala Val Ser Asn Leu Arg
385                 390

<210> 26964
<211> 331
<212> PRT
<213> A.fumigatus

<400> 26964
Ser Leu Ile Leu Pro Ala Pro Arg Glu Asp Ser Gly Gly Thr Leu Cys
1               5                   10                  15
Ile Ala Pro Ser Glu Arg Leu Leu Asn Asn Leu Ala Glu Val Ile Asn
            20                  25                  30
Glu Met Asn Val Asn His Val Phe Leu Thr Pro Thr Val Ala Arg Leu
        35                  40                  45
Leu Asn Pro Lys Asp Val Pro Asn Leu Glu Ser Met Thr Val Gly Gly
    50                  55                  60
Glu Gln Leu Thr Arg Asp Val Val Thr Thr Trp Ala Ser Arg Val Thr
65                  70                  75                  80
Leu Arg Asn Gly Tyr Gly Pro Thr Glu Ala Ser Val Leu Val Thr Met
                85                  90                  95
Lys Asp Val Asp Thr Asp Thr Thr Gly Gly Asn Ile Gly Arg Pro Leu
            100                 105                 110
Ala Ser Val Gly Ala Ile Val Leu Glu Ala Asp Gly Val Arg Pro Val
        115                 120                 125
Pro Tyr Gly Ala Val Gly Glu Leu Cys Phe Phe Gly Pro Gln Leu Ala
    130                 135                 140
Gln Gly Tyr Phe Lys Lys Pro Asp Ile Thr Ser Ala Ala Phe Ile Glu
145                 150                 155                 160
Ser Glu Val Leu Asn Gly Arg Arg Leu Tyr Arg Ser Gly Asp Leu Ala
                165                 170                 175
```

```
Arg Tyr Leu Pro Asn Gly Asp Ile Glu Cys Leu Gly Arg Lys Asp Asp
            180                 185                 190
Gln Val Lys Ile Asn Gly His Arg Ile Glu Leu Gly Glu Ile Glu Gln
        195                 200                 205
Ala Phe Leu Arg Thr Gly Glu Ile Lys Asp Cys Val Leu Thr Val Trp
    210                 215                 220
Lys His Asn Ser Thr Ala His Leu Val Ala Val Ala Val Phe Asp Gly
225                 230                 235                 240
Ala Ser Ser Glu Lys Pro Gly Glu Val Leu Pro Leu Asp Gly Phe Ala
                245                 250                 255
Glu Asn Val Gln Arg Val Arg Ser Lys Leu Thr Gly Leu Thr Pro Tyr
            260                 265                 270
Met Ile Pro Lys Ala Ile Val Pro Leu Ser Ser Leu Pro Arg Leu Pro
        275                 280                 285
Phe Arg Gln Gly Gln Ser Gln Glu Ala Gln Gly Asp Gly Thr Val Ala
    290                 295                 300
Glu Ser Gly Arg Thr Asp Gln Val Leu Ile Arg Gln Gly Arg Arg Cys
305                 310                 315                 320
Ala Val Lys Gly Cys Gly Tyr Pro Ser Gly Val
                325                 330
```

<210> 26965
<211> 297
<212> PRT
<213> A.fumigatus

<400> 26965

```
Phe Leu Arg Gln Ser Ser Pro Phe Arg His Ser Gln Asp Phe Pro Ser
1               5                   10                  15
Gly Lys Ala Asn Arg Lys Lys Leu Lys Ala Met Val Gln Ser Leu Ser
            20                  25                  30
Gln Gly Glu Leu Thr Lys Phe Ser Phe Asp Lys Val Gly Ala Ala Gln
        35                  40                  45
Ser Lys Gly Ala Val Ile Pro Leu Ala Ser Glu Thr Gln Lys Val Leu
    50                  55                  60
Gln Gln Gly Trp Ile Glu Thr Leu Gln Leu Ala Asp Asp Asp Phe Gly
65                  70                  75                  80
Leu Glu Ala Asp Phe Leu Ser Leu Gly Gly Asp Ser Ile Ala Ala Ile
                85                  90                  95
Asn Leu Val Ser Trp Leu Arg Arg Lys Gln Leu Lys Ile Ser Val Arg
            100                 105                 110
Asp Val Leu Lys Tyr Thr Ser Leu Gly Ala Met Ala Asp Gln Leu Lys
        115                 120                 125
Gly Glu Ser Gly Asp Ala His Gln Ile Gln Lys Lys Thr Phe Thr Pro
    130                 135                 140
Pro Ser Glu Ile Asp Ala Ala Ile Ser Ala Ala Gly Leu Gln Ala Thr
145                 150                 155                 160
Glu Tyr Glu Tyr Ile Tyr Pro Cys Pro Pro Gly Gln Ala Glu Phe Leu
                165                 170                 175
Thr Gln Gly Ala His Pro Glu Ala Leu Trp Ser Leu Met Thr Val Arg
            180                 185                 190
Lys Val Gly Ser Asp Phe Ala Pro Arg Gln Trp Ile Asp Leu Val Arg
        195                 200                 205
Gln Leu Thr Thr Thr Asn Glu Ile Leu Arg Thr Thr Phe Thr Arg Cys
    210                 215                 220
His Gly Asn Trp Tyr Gly Val Val Leu Arg Asp Ala Thr Pro Val Val
```

225 230 235 240
Glu Ile Tyr Glu Asp Val Ser Asn Glu Gln Arg Gln Gln Ile Ile Lys
245 250 255
Ser Leu Asp Asp Tyr Arg Phe Val Phe Gly Lys Pro Phe Ile Arg Tyr
260 265 270
Ala Ile Leu His Leu Ser Thr Gly Glu Thr Glu Ile Val Ser Leu His
275 280 285
Thr Arg Ala Trp Lys Val Arg Asn Ala
290 295

<210> 26966
<211> 319
<212> PRT
<213> A.fumigatus

<400> 26966
Ser Asp Leu His Val Lys Leu Pro Leu Pro Asp Pro Ala Phe Arg Leu
1 5 10 15
Leu Thr Asn Asn Phe Cys Arg Leu Leu Glu Thr Gly Ser Thr Pro Phe
20 25 30
Ile Arg Asn Thr Ala Ala Gln Gln Leu Ala Asp Val Gln Lys Gln His
35 40 45
Pro Asp Glu Leu Phe Asn Leu Leu Gly Arg Ile Leu Pro Tyr Leu Arg
50 55 60
Ser Lys Ser Trp Asp Thr Arg Ala Ala Ala Ala Lys Ala Ile Gly Leu
65 70 75 80
Ile Val Ala Asn Ala Asp Thr Phe Asp Pro Asn Gln Asp Asp Gly Gln
85 90 95
Glu Ile Lys Lys Ala Glu Asn Asp Asp Leu Asp Val Asp Ile Lys Ser
100 105 110
Glu Glu Glu Leu Leu Ser Pro Met Asp Asp Ser Leu Leu Gln Leu Glu
115 120 125
Arg Leu Asp Leu Pro Ser Ile Leu Lys Tyr Gly Lys Arg Leu Leu Gly
130 135 140
Ser Ala Gly Lys Glu Tyr Glu Tyr Ser Leu Ala Ala Met Asp Pro Ala
145 150 155 160
Ser Arg Leu Gln His Gln Lys Lys Thr Leu Thr Ser Arg Leu Gly Leu
165 170 175
Ala Gly Glu Tyr Ile Glu Glu Asp Leu Ile Asn Asp Asn Asp Leu Val
180 185 190
Ser Lys Pro Val Val Lys Glu Glu Pro Ser Phe Val Ala Ser Arg Glu
195 200 205
His Ser Ile Gln Gly Thr Ser Gln Pro Leu Ala Ser Pro Ile Glu Pro
210 215 220
Ala Asn Gly Glu Glu Ser Gly Leu Ser Lys Arg Gln Leu Asn Gln Leu
225 230 235 240
Lys Arg Lys Asn Lys Gln Ser Ala Arg Met Gly Ala Asn Lys Val Arg
245 250 255
Val Val Asp Leu Ser Ser Arg Arg Ala Ser Glu Asn Val Thr Thr Pro
260 265 270
Ser Val Ala Thr Pro Tyr Pro Ile Lys Ser Glu Asn Gly Glu Glu Arg
275 280 285
Asn Gly Asp Ser Lys Pro Asp Tyr Phe Ser Leu Asp Arg Ser Ala Gly
290 295 300
Asp Asp Glu Ser Lys Ser Pro His His Glu Ala Pro Gly Pro Pro
305 310 315

<210> 26967
<211> 240
<212> PRT
<213> A.fumigatus

<400> 26967
Ile Ser Ser Ile Ala Ser Leu Gly Gln Thr Asp Lys Trp Leu Lys Asp
1 5 10 15
Val Phe Phe Pro Ser Leu Ser Pro Thr Pro Ser Met Ala Ser Ile Pro
20 25 30
Gln Pro Lys Phe Ser Ile Ile Phe Pro Thr Pro Asp Glu Ile Arg Arg
35 40 45
Ser Leu Asn Gly Tyr Gly Ser Gly Gly Ser Ile His Met Lys Leu Gln
50 55 60
Ser Val Thr Gln Gln Lys Gln Leu Gln Tyr Met Arg Pro Tyr Leu Arg
65 70 75 80
His Trp Ala Gly Asp Ser Asp Ser Ser Ser Ser Thr Ser Thr Pro Gln
85 90 95
Arg Glu Ala Gly Arg Cys Arg Ala Ala Pro His Ile Lys Thr Tyr Ile
100 105 110
Arg Phe Ser Asp Ala Glu Lys Met Asp Thr Ile Asp Trp Ala Met Val
115 120 125
Thr Ser Ala Asn Leu Ser Thr Gln Ala Trp Gly Ala Ala Val Asn Asn
130 135 140
Ala Gly Glu Val Arg Ile Ser Ser Trp Glu Ile Gly Val Ile Val Trp
145 150 155 160
Pro Gln Leu Phe Val His Glu Asp Asn Thr Thr Glu Arg His Gln Gln
165 170 175
Ala Val Met Val Pro Cys Phe Lys Arg Asp Ile Pro Leu Gln Leu Pro
180 185 190
Glu Asp Met Pro Arg Cys Asp Val Leu Val Gly Leu Arg Met Pro Tyr
195 200 205
Asp Leu Pro Leu Thr Pro Tyr Lys Ala Asn Glu Val Pro Trp Cys Ala
210 215 220
Thr Ile Ala His Thr Glu Pro Asp Trp Leu Gly Gln Thr Trp Gly Gly
225 230 235 240

<210> 26968
<211> 141
<212> PRT
<213> A.fumigatus

<400> 26968
Arg His Pro Ser Gly Arg Asp His Gln Leu Thr Leu Gln Ile Phe Ser
1 5 10 15
Val Asn Met Val Leu Pro Ile Ile Asn Ile Val Tyr Trp Asn His Ser
20 25 30
Asn Trp Thr Glu Ser Asn Ala Val Arg His Asp Tyr Glu Val Ala Leu
35 40 45
Ser Ile Val Thr Leu Gly Gly Val Leu Leu Gly Gln Ile Ala Phe Gly
50 55 60
Phe Ala Ala Asp Val Trp Gly Arg Ser Lys Val Tyr Gly Met Glu Leu
65 70 75 80
Val Ile Leu Ile Phe Pro Thr Leu Gly Leu Ala Leu Ser Ser Ser Gly
85 90 95

```
Ala Glu Asn Ser Met Ser Ala Ile Ser Leu Phe Leu Phe Trp Arg Gly
            100                 105                 110
Leu Leu Gly Ile Gly Leu Gly Gly Asp Tyr Pro Val Gly Ser Tyr Leu
        115                 120                 125
Phe Arg Val Arg Ser His Pro Glu Trp Arg Asn Arg Arg
    130                 135                 140
```

<210> 26969
<211> 205
<212> PRT
<213> A.fumigatus

<400> 26969

```
Asp Pro Ile Arg Asn Gly Val Ile Ala Ala Asp Asn Leu Arg Phe Ala
1               5                   10                  15
Pro Ser Arg Leu Arg Gly Arg Leu Leu Ala Thr Val Phe Phe Cys Gln
            20                  25                  30
Ser Leu Gly Gln Leu Ala Ala Gln Leu Ile Ala Leu Ile Ala Met Ala
        35                  40                  45
Gly Phe Gln His His Ile Pro Thr Asn Pro Asp Thr Ile Thr Cys Thr
    50                  55                  60
Glu Thr Cys Val Arg Ser Leu Asp Thr Ile Trp Arg Leu Leu Val Gly
65                  70                  75                  80
Leu Gly Ala Val Pro Ala Phe Ile Ala Leu Trp Phe Arg Leu Thr Ile
                85                  90                  95
Ile Glu Ser Pro Arg Tyr Thr Ala Glu Val Thr Lys Asp Ser Leu Gln
            100                 105                 110
Ala Val Asn Asp Val Ser Gln Phe Tyr Gln Arg Val Ser Ile Asp Ser
        115                 120                 125
Ala Ser Val Asn Ser Val Glu Pro Pro Ser Pro Glu Ser Gly Ser Phe
    130                 135                 140
Arg Leu Ser Ala Thr Gln Ser Val Asp His Gln Pro Asp Arg Pro Ala
145                 150                 155                 160
Ser Ala Ala Pro Phe Ala Glu Gln Asp Ala Ala Ser Pro Leu Ala Ile
                165                 170                 175
Leu Asn Asp Phe Lys His Phe Phe Gly Gln Lys Asp Asn Phe Arg Lys
            180                 185                 190
Leu Ala Gly His Asn Pro Leu Ala Gly Ser Trp Leu Glu
        195                 200                 205
```

<210> 26970
<211> 247
<212> PRT
<213> A.fumigatus

<400> 26970

```
Ala Arg Thr Leu Ala Ala Ser Val Ser Glu Asp Ala Trp Arg Gly Lys
1               5                   10                  15
Tyr Leu Asn Val Val Arg Glu Cys Gly Gly Val Asp Ile Ser Gln Lys
            20                  25                  30
Val Thr Asp Val Pro His Thr Leu Asp Asp Pro Arg Phe Leu Asp Asn
        35                  40                  45
Val Asn Ala Ala Tyr Thr Tyr Ala Asn Ala Ser Leu Leu Asn Leu Leu
    50                  55                  60
Leu Thr Lys Asn Ser Leu Thr Thr Arg Phe Arg Ser Leu Lys His Tyr
65                  70                  75                  80
```

```
Phe Phe Leu Asp Arg Ser Asp Phe Phe Ser Tyr Phe Leu Glu Leu Gly
                85                  90                  95
Ser Ser Glu Leu Arg Lys Pro Ala Lys Asn Val Asn Glu Asn Lys Leu
            100                 105                 110
Gln Ser Leu Leu Asp Leu Val Leu Arg Gln Pro Gly Ser Ile Ala Ala
        115                 120                 125
Ser Asp Pro Phe Lys Glu Asp Val Lys Val Arg Met Asn Lys Ile Gly
    130                 135                 140
Leu Thr Lys Trp Leu Met Gln Val Val Ser Val Ser Gly Ile Asp Gln
145                 150                 155                 160
Asp Asn Pro Glu Ala Val Leu Glu Arg Tyr Gln Ala Pro Gln Thr Gln
                165                 170                 175
Gly Gly Glu Asp Asp Lys Asp Ile Val Gly Phe Asp Ala Leu Glu Leu
            180                 185                 190
Asp Tyr Ser Val Pro Phe Pro Leu Ser Leu Val Ile Ser Arg Lys Asn
        195                 200                 205
Val Leu Arg Tyr Gln Leu Ile Phe Arg His Leu Leu Ser Leu Arg Gln
    210                 215                 220
Leu Glu Thr Pro Ala Asn Tyr Ile Leu Val Arg Ser Glu Gln Gly Cys
225                 230                 235                 240
Trp Leu Ala Ala Gln Phe Phe
                245
```

<210> 26971
<211> 141
<212> PRT
<213> A.fumigatus

<400> 26971

```
Pro Gly Ser Ala Gly Arg Gly Asp Arg Ser Ser Arg Ser Ala Thr Ser
1               5                   10                  15
Ser Ser Ser Pro Leu Pro Ser Pro Ser Ser Ser Arg Ser Arg Ser Ser
            20                  25                  30
Arg Pro Ser Pro Ser Arg Ser Ala Ser Ser Ser Ala Arg Arg Met Glu
        35                  40                  45
Gly Gly Ser Gly Glu Ser Ser Trp Ser Cys Glu Gly Thr Ser Arg Ser
    50                  55                  60
Ser Leu Pro Ala Thr Ser Glu Glu Ala Ala Pro Ala Thr Arg Leu Gly
65                  70                  75                  80
Arg Leu Arg Leu Leu Leu Glu Arg Ala Asp Glu Ala Val Cys Pro Leu
                85                  90                  95
Glu Ala Ser Pro Ala Val Ala Pro Glu Ala Pro Ala Ser Ala Ser Ala
            100                 105                 110
Ser Leu Arg Leu Ala Leu Arg Ala Ala Arg Ala Leu Leu Arg Ala Asp
        115                 120                 125
Ile Glu Ala Arg Pro Leu Arg Ser Arg Ala Ser Met Ala
    130                 135                 140
```

<210> 26972
<211> 65
<212> PRT
<213> A.fumigatus

<400> 26972

```
Val Phe Val His Ile Asp Ser Thr Ile Ser Val Val Glu Ile Leu Leu
1               5                   10                  15
```

```
Val Val Asn Phe Ile Val Gly Cys Gln Arg Phe Arg Val Val Ile Cys
            20                  25                  30
Ile Thr Thr Asn Glu Thr Ile Leu Val Thr Arg Leu Cys Trp Ala Arg
        35                  40                  45
Gly Ser Val Val Ala Ile Arg Asn Val Ile Leu Ile Pro Ala Pro Phe
    50                  55                  60
Thr
65
```

<210> 26973
<211> 381
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (9)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26973

```
Asp Gly Ala Asp Pro Pro Thr Arg Xaa Arg Arg Ala Pro Pro Gly Ser
1               5                   10                  15
Gly His Pro Ile Leu Asn Arg Phe Val Thr Glu Ser Thr Ile Gly Gln
            20                  25                  30
Pro Pro Ser Ala Arg Arg Pro Arg Pro Leu Thr Gln His Gln Leu Ala
        35                  40                  45
Val Glu Gln Asn Arg Arg Gln Arg Ile Asp Tyr Leu Leu Ala Lys Arg
    50                  55                  60
Lys Asn Glu Ala Tyr Arg Ile Leu Arg Ala Lys Arg Glu Ser Glu Ile
65                  70                  75                  80
Pro Phe Ala Arg Tyr Gly Arg Leu Leu Gln Ser Leu Pro Glu Gly Tyr
                85                  90                  95
Asp Thr Glu Asp Glu Glu Val Ser Arg Gly Lys Gly Gly Leu Ile Pro
            100                 105                 110
His His Glu Glu Glu Glu Asp Phe Gly Glu Ser Ala Gly Tyr Phe Leu
        115                 120                 125
Ser Val Ile Arg Lys Ala Ala Arg Arg Leu Asp Arg Trp Asp Tyr Glu
    130                 135                 140
Asn Ala Asn Gly Pro Lys Arg Asp Arg Lys Lys Glu Arg Glu Glu Arg
145                 150                 155                 160
Gln Lys Ala Arg Gln Asn Gly Tyr Ala Met Asp Ala Leu Asp Leu Ser
                165                 170                 175
Gly Arg Ala Ser Met Ser Ala Arg Ser Arg Ala Arg Ala Ala Arg Asn
            180                 185                 190
Ala Arg Arg Lys Leu Ala Glu Ala Glu Ala Gly Ala Ser Gly Ala Thr
        195                 200                 205
Ala Gly Glu Ala Ser Lys Gly Gln Thr Ala Ser Ser Ala Arg Ser Lys
    210                 215                 220
Ser Ser Arg Ser Arg Pro Ser Arg Val Ala Gly Ala Ala Ser Ser Asp
225                 230                 235                 240
Val Ala Gly Lys Asp Asp Leu Asp Val Pro Ser Gln Asp Gln Glu Leu
                245                 250                 255
Ser Pro Leu Pro Pro Ser Ile Arg Leu Ala Asp Asp Asp Ala Asp Leu
            260                 265                 270
Asp Gly Glu Gly Leu Asp Asp Leu Asp Arg Glu Leu Leu Gly Glu Gly
        275                 280                 285
```

```
Ser Gly Asp Glu Asp Asp Val Ala Asp Arg Asp Asp Arg Ser Pro Arg
    290                 295                 300
Pro Ala Glu Pro Gly Tyr Glu Asp Ser Phe Ile Gly Gly Asp Ala Asp
305                 310                 315                 320
Asp Asp Ala Glu Ala Leu Thr Ser Asp Asp Glu Val Asp Asp Glu Glu
                325                 330                 335
Asp Leu Asp Asp Gly Asp Gly Gly Val Asp Val Asp Glu Asn Ser Ser
            340                 345                 350
Thr Phe Asp Gly Gly Asn Gly Tyr Ala Ala Ser Glu Thr Ser Ser Val
        355                 360                 365
Ala Gly Asp Thr Thr Ala Val Leu Asp Asp Gly Lys Val
    370                 375                 380
```

<210> 26974
<211> 135
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (123)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26974

```
Lys Arg Thr Ser His Tyr Pro Gly Arg Gln Ser Val His Glu Arg Val
1               5                   10                  15
Ile Gln Thr Ser Ser Leu Gly Asp Leu Pro Trp Met Gly Ala Gln Glu
            20                  25                  30
Lys Val Leu Arg Val Ser Ser Val Gln Cys Ser Ser Thr Trp Cys His
        35                  40                  45
Val Leu Thr Lys Val Ile Tyr Asp Ile Asp Asp Ala Tyr Tyr Gly Thr
    50                  55                  60
Asn Pro Met Arg Pro Pro Ser Lys Arg Pro Ala Asp Pro Asp Glu Gly
65                  70                  75                  80
Tyr Leu Thr Pro Thr Gln Ser Ser Arg Ser Glu Ser Lys Arg Pro Lys
                85                  90                  95
Arg Glu Ser Ser Leu Asn Arg Ser Val Gly Gln Gln Arg Leu Ile Leu
            100                 105                 110
Lys Thr Lys Met Glu Gln Thr Pro Arg Arg Xaa Leu Ala Gly Arg Leu
        115                 120                 125
Gln Val Gln Val Ile Arg Phe
    130                 135
```

<210> 26975
<211> 329
<212> PRT
<213> A.fumigatus

<400> 26975

```
His Asn His Leu Arg Ser Ser Pro Ser Arg Leu Ile Cys Asn Met Ile
1               5                   10                  15
Pro Arg Thr Glu Val Leu Ile Ile Gly Ala Gly Pro Thr Gly Leu Val
            20                  25                  30
Leu Ala Leu Trp Leu Thr Arg Gln Asn Val Lys Val Arg Ile Ile Asp
        35                  40                  45
Arg Gln Glu Ala Lys Pro Ser Thr Ser Arg Ala Leu Val Val His Ala
```

```
    50                  55                  60
Arg Pro Leu Glu Leu Tyr Arg Gln Leu Gly Leu Ala Asp Asp Val Phe
65                  70                  75                  80
Ala Asn Gly His Lys Ile Glu Ala Thr Asn Ile Trp Val Glu Ala Thr
                85                  90                  95
His Arg Ala His Val Pro Ile Gly Asp Val Gly Lys Gly Leu Thr Pro
            100                 105                 110
Tyr Pro Phe Ile His Val Tyr Pro Gln Asp Arg His Glu Arg Leu Leu
        115                 120                 125
Glu Asp Arg Leu Asn Ala Met Gly Val Thr Val Gln Arg Asn Trp Lys
    130                 135                 140
Leu Val Asp Phe Glu Glu His Asp Glu Tyr Ile Leu Ala Gln Leu Lys
145                 150                 155                 160
Tyr Thr Ser Glu Gln Pro Ser Ser Thr Glu Lys Thr Glu Phe Cys Glu
                165                 170                 175
Ala Arg Tyr Ile Val Gly Cys Asp Gly Ala His Ser Ala Val Arg His
            180                 185                 190
Leu Cys Asn Ile Ala Phe Glu Gly Ala Thr Tyr Pro Gln Leu Phe Tyr
        195                 200                 205
Val Thr Asp Ile Glu Gly Ser Gly Pro Thr Met Asn Gly Glu Ala His
    210                 215                 220
Val Ser Leu Asn Gly Ser Glu Phe Met Leu Ser Leu Ala Tyr Asp Thr
225                 230                 235                 240
Asn Arg Arg Ala Arg Leu Ala Gly Ala Val Asn Glu Glu His Val Thr
                245                 250                 255
Lys Asp Ile Ser Glu Leu Thr Leu Asp Asp Ile Leu Pro Thr Thr Ile
            260                 265                 270
Lys Lys Met Gly Leu Gln Ile Asp Lys Val Asn Trp Phe Thr Thr Tyr
        275                 280                 285
Arg Val His His Arg Leu Ala Ala Ser Phe Arg Lys Gly Arg Ala Phe
    290                 295                 300
Leu Ala Gly Asp Ala Ala His Ile His Ser Pro Val Gly Gly Ser Ser
305                 310                 315                 320
Arg Arg Gly Cys Lys Asp Thr Arg Ala
                325
```

<210> 26976
<211> 77
<212> PRT
<213> A.fumigatus

```
<400> 26976
Ser Ser Cys Ser Pro Arg Pro Thr Pro Ala Pro Ala Gln Lys Pro Thr
1               5                   10                  15
Ala Lys Pro Thr Thr Gln Pro Thr Val Val Thr His Trp Ser Ala Ile
            20                  25                  30
Gln Glu Glu Lys Ala Arg Ala Leu Phe Ala Lys Tyr Gly Leu Thr Leu
        35                  40                  45
Glu Ser Gly Glu Trp Arg Ser Ser Ser Asp Met Thr Val Arg Leu His
    50                  55                  60
Leu Arg Glu Leu Asp Glu Ser Ala Leu Asp Val Trp Lys
65                  70                  75
```

<210> 26977
<211> 130
<212> PRT

<213> A.fumigatus

<400> 26977
Gln Leu Val Phe Ala His Cys Asp Leu Leu Cys Ala Asn Val Ile Ile
1 5 10 15
Leu Pro Ser Gln Cys Pro Ala Thr Ala Ala Thr Ser Asp Lys Glu Ala
20 25 30
Leu Lys Val Gln Phe Ile Asp Tyr Glu Tyr Ala Thr Pro Ser Pro Ala
35 40 45
Ala Phe Asp Ile Ala Asn His Phe Ala Glu Trp Gly Gly Tyr Asn Cys
50 55 60
Asp Tyr Ser Met Met Pro Thr Arg Ser Val Arg Arg Gln Phe Leu Thr
65 70 75 80
Glu Tyr Val Lys Ser Tyr Ser Gln Tyr Arg Gly Ile Pro Glu Cys Ala
85 90 95
Gln Gln Glu Ile Val Asp Arg Leu Tyr Glu Asp Val Asp Arg Phe Arg
100 105 110
Gly Ile Pro Gly Leu Tyr Trp Tyr Val Pro Gly His Cys Arg Trp Thr
115 120 125
Leu Ile
130

<210> 26978
<211> 61
<212> PRT
<213> A.fumigatus

<400> 26978
Ser Asp Lys Tyr Arg Gly Val Trp Ala Leu Ile Gln Ala Gln Ile Ser
1 5 10 15
Gln Ile Asp Phe Asp Tyr Ala Ser Tyr Ala Glu Thr Arg Leu Gly Glu
20 25 30
Tyr Tyr Ala Trp Arg Arg Glu Val Asp Gly Ser Arg Val Gln Ala Ser
35 40 45
Glu Glu Met Pro Leu Arg Glu Arg Arg Trp Ala Glu Ala
50 55 60

<210> 26979
<211> 100
<212> PRT
<213> A.fumigatus

<400> 26979
Cys Asn Gly Asn Asp Ala Ser Asn Ala Ser Asp Glu Ala Asp Val Asp
1 5 10 15
Ala Leu Asn Phe Ser Thr Ser Thr Asn Leu Leu His Ala Leu His Pro
20 25 30
Arg Ala Ala Cys Phe Ser Gly Val Ala Gly Ser Gly Ser Ala Asn Val
35 40 45
Leu Glu Asn Asn Ser Ser Asp Thr His Pro Ser Asn Pro Ser Ser Lys
50 55 60
Asn Ala Arg Ala Thr Ser Arg Thr Gly Arg Tyr Pro Pro Arg Ser Ser
65 70 75 80
Ser Asn Gly Asn Ser Leu Ala Phe Arg Asp Gln Leu Met Arg Gly Gly
85 90 95
Cys Pro Gly Thr

100

<210> 26980
<211> 135
<212> PRT
<213> A.fumigatus

<400> 26980
Val Ala His Ile Thr Asn Asp Asp Val Thr Ala Met Thr His Pro Thr
1 5 10 15
His Leu Thr Lys Gln Thr Trp Met Leu Ser Thr Ser Ala Pro Pro Pro
20 25 30
Thr Ser Ser Thr Pro Ser Thr Pro Val Pro His Ala Ser Pro Ala Trp
35 40 45
Gln Gly Pro Asp Pro Pro Thr Ser Ser Lys Thr Thr Pro Ala Thr Pro
50 55 60
Thr Pro Gln Thr Gln Ala Gln Arg Thr Pro Ala Pro His Pro Gly Pro
65 70 75 80
Gly Gly Ile Arg Arg Gly Pro Leu Gln Thr Gly Thr Ala Ser His Ser
85 90 95
Ala Thr Ser Ser Cys Ala Val Ala Ala Arg Gly His Glu Thr Gly Gly
100 105 110
Ser Arg Arg Ala Gly Arg Arg Gly Ala Pro Arg Arg Arg Ser Gly Cys
115 120 125
Arg Arg Ile Phe Gly Arg Arg
130 135

<210> 26981
<211> 131
<212> PRT
<213> A.fumigatus

<400> 26981
Ile Asp Val Gln Lys Phe Phe Tyr Ile Gln Ile Val Asp Gly Glu Arg
1 5 10 15
Leu Ser Ala Pro Leu Asp Glu Asn His Pro Phe His Val Pro Gly Gln
20 25 30
Pro Pro Arg Met Ser Trp Ser Arg Asn Ala Arg Leu Phe Pro Phe Glu
35 40 45
Glu Asp Arg Gly Gly Tyr Leu Pro Val Leu Asp Val Ala Arg Ala Phe
50 55 60
Phe Glu Leu Gly Phe Glu Gly Trp Val Ser Leu Glu Leu Phe Ser Arg
65 70 75 80
Thr Leu Ala Asp Pro Asp Pro Ala Thr Pro Glu Lys His Ala Ala Arg
85 90 95
Gly Trp Arg Ala Trp Arg Arg Leu Val Glu Val Leu Lys Leu Arg Ala
100 105 110
Ser Thr Ser Ala Ser Ser Asp Ala Leu Asp Ala Ser Leu Pro Leu His
115 120 125
His Arg Leu
130

<210> 26982
<211> 75
<212> PRT
<213> A.fumigatus

<400> 26982
His Pro Arg Asp Arg Leu Ile Leu Cys Ala Pro Arg Phe Leu Thr Leu
1 5 10 15
Ala Glu Gln Asn Phe Gly Val Asp Leu Glu Ala Arg Ala Arg Ala Asp
20 25 30
Arg Lys Arg Val Pro Ile Leu Val Thr Thr Leu Leu Thr Tyr Leu Asp
35 40 45
Asn Arg Arg Pro Thr Val Ser Leu Ser Cys Pro Ser Ala Phe Glu Leu
50 55 60
Thr Asn Leu Leu Arg Leu Ser Arg Thr Arg Arg
65 70 75

<210> 26983
<211> 291
<212> PRT
<213> A.fumigatus

<400> 26983
Thr Thr Arg Ser Val Ser Arg Asp Gly Gly Gly Val Ala Val His Arg
1 5 10 15
Pro Asn Phe Phe Pro Asp Ser Leu Val Ser Ser Gln Val Tyr Glu Ile
20 25 30
Val Lys Thr Ile Tyr Ser Thr Thr Ala His Glu Thr Thr Glu Asp Gly
35 40 45
Arg Ile Lys Val Leu Gln Ser Thr Leu Gly Gln Leu Arg Leu Asn Asn
50 55 60
Ile Ala Thr Leu Asp Ala Ile Met Thr His Phe Thr Arg Leu Ile Asp
65 70 75 80
Leu Thr Ser Ala Asp Glu Ala Tyr Ile Ser Ala Leu Ala Gln Thr Leu
85 90 95
Ala Pro Cys Ile Leu Arg Pro Arg Val Glu Asn Ser Leu Thr Met Asn
100 105 110
Glu Arg His Thr Thr Val Leu Tyr Val Thr Ser Ser Leu Thr Arg Met
115 120 125
Leu Ser Ser Ala Ser Leu Lys Arg Gln Ser Ser Val Leu Gly Leu Gly
130 135 140
Ser Thr Ser Asn Arg Pro Arg Ala Ile Ser Thr Asp Glu Ser Asn Arg
145 150 155 160
Arg Ala Ala Met Glu Ala Arg Asn Arg Ala Ile Val Asp Arg Ser Arg
165 170 175
Ala Asn Ser Pro Ala Pro Pro Arg Lys His Arg Arg Asp Arg Ser Ser
180 185 190
Gly Ala Ser Glu Ala Gly Arg Phe Pro Ile His Val Thr Ser Pro Thr
195 200 205
Glu Arg Lys Ala Ala Thr Arg Ser Ser Leu Glu Val Pro Ala Ser Ala
210 215 220
Glu Ala Pro Thr Thr Gly Glu Gln Phe Thr Thr Val Asn Ile Gln Ala
225 230 235 240
Asn Asp Ser Ala Thr Asn Gly Thr Ser Ser Asp Ser Pro Ala Ser Ala
245 250 255
Val Ala Gly Glu Asn Thr Ser Ser Glu Ser Ser Ser Pro Pro Pro Ala
260 265 270
Gly Asn Ser Asp Gly Ser Pro Thr Pro Thr Pro Thr Pro Gly Tyr Val
275 280 285
Thr Ala Pro

290

<210> 26984
<211> 135
<212> PRT
<213> A.fumigatus

<400> 26984
Pro Ile Phe Ser Gly Tyr Pro Glu Leu Glu Gly Asp Glu Ala Arg Arg
1 5 10 15
Ala Ile Trp Leu Tyr Asp Val Pro Leu Ala Ala Thr His His Leu Arg
20 25 30
Asn Ala Leu Asn Asn Ser Lys Ala Asp Tyr Asn Glu Ile Leu Gln Lys
35 40 45
Tyr Asp Ile Pro Ile Val Ala Ser Val Leu Lys Leu Tyr Leu Leu Glu
50 55 60
Leu Pro Gly Pro Tyr Pro Glu Met Val Glu Ala Leu Gln Phe Ile Asp
65 70 75 80
Leu Ile Ser Phe Gln Ile Pro Leu Phe Leu Arg Lys Tyr Met Arg Leu
85 90 95
Ser Arg Leu Phe Ile Gln Leu Pro Leu Met Lys Arg Arg Lys Thr Asp
100 105 110
Glu Ser Lys Phe Cys Lys Ala Pro Leu Val Ser Phe Val Ser Thr Thr
115 120 125
Ser Gln His Leu Thr Pro Ser
130 135

<210> 26985
<211> 139
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (51)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26985
Arg Gly Leu Gly Ser Phe Gln Pro Thr His Asn Arg Thr Arg Leu Pro
1 5 10 15
Val Asp Lys Phe Arg Gly Arg Ala Arg Glu Ala His Asp Gly Tyr Lys
20 25 30
Ala Ala Val Arg Lys Leu Asp Gln Ile Arg Cys Lys Leu Lys Glu Glu
35 40 45
Ile Val Xaa Asn Leu Arg Phe Met Glu Gln Cys Glu Leu Asp Arg Leu
50 55 60
Lys Ala Ile Lys Ala Val Val Leu Asp Phe Ser Gly Ala Ile Ser Asn
65 70 75 80
Val Ile Pro Asn Leu Gln Ser Thr Val Asp His Met Met Leu Tyr Gln
85 90 95
Glu Thr Ile Gln Pro Leu Gly Asp Leu Arg Tyr Leu Leu Glu Asn Tyr
100 105 110
Arg Thr Gly Gly Phe Val Pro Arg Val Gln Ala Tyr Glu Asn Tyr Tyr
115 120 125
Gly Ser Val Glu Gly Met Leu Thr Ser Ser Arg
130 135

<210> 26986
<211> 382
<212> PRT
<213> A.fumigatus

<400> 26986
His Ser Gly Leu Gly Ile Gln Phe Cys Ser Asp Val Leu Arg Ala Gly
1 5 10 15
Phe Phe Pro Gly Ala Val Tyr Leu Cys Thr Phe Trp Tyr Met Pro Lys
20 25 30
Asp Leu Ser Thr Arg Ile Ala Val Phe Tyr Cys Ala Ser Ala Leu Ser
35 40 45
Gly Ala Phe Ser Gly Leu Leu Ala Ala Gly Ile Ala Gln Met Asp Gly
50 55 60
Val Gly Gly Gln Glu Gly Trp Arg Trp Ile Phe Leu Leu Glu Gly Leu
65 70 75 80
Val Thr Val Ile Leu Gly Val Met Cys Phe Phe Phe Leu Ile Asp Ser
85 90 95
Pro Arg Arg Ser Gly Arg Trp Leu Asp Pro Glu Glu Ile Arg Tyr Leu
100 105 110
Glu Leu Gln His Phe Ile Lys Asp Gly Gly Arg Phe Lys Asp Glu Arg
115 120 125
Lys Arg Ala Ser Trp Ser Asp Ile Lys Ala Val Leu Leu Asn Trp Arg
130 135 140
Met Tyr Met Leu Ala Tyr Ile Leu Leu Cys Gln Ser Ala Cys Ser Tyr
145 150 155 160
Gly Gln Ser Arg Ser Leu Asn Ser Ala Ser Ala Ser Gln Leu Thr Arg
165 170 175
Thr Gly Thr Lys Phe Thr Met Pro Thr Ile Thr Lys Ala Met Gly Phe
180 185 190
Thr Asn Thr His Ala Gln Leu Met Thr Val Pro Pro Tyr Val Ala Gly
195 200 205
Ala Leu Ser Ala Ile Phe Phe Ser Lys Leu Ser Asp Arg Phe Tyr Trp
210 215 220
Arg Met Pro Phe Val Ala Ile Pro Leu Ala Leu Val Thr Ile Ala Tyr
225 230 235 240
Ser Ile Ile Ile Ser Phe His Gly His Leu Lys Glu His Val Gly Pro
245 250 255
Ala Phe Phe Ala Val Ile Leu Thr Cys Met Gly Ile Tyr Pro Ile His
260 265 270
Pro Ala Thr Thr Ser Trp Thr Ala Asn Asn Leu Ala Ser Ser Ser Ser
275 280 285
Arg Ala Ile Gly Leu Ala Phe Asn Ile Cys Ile Gly Asn Ile Gly Gly
290 295 300
Ile Ile Gly Ser Tyr Met Tyr Ile Asp Ser Glu Ser Pro Glu Tyr Tyr
305 310 315 320
Thr Gly Phe Gly Leu Ser Leu Ala Phe Gly Gly Ser Gly Leu Leu Val
325 330 335
Ala Leu Leu Leu Glu Leu Ser Tyr Ile Tyr Gly Asn Arg Lys Lys Ala
340 345 350
Arg Ile Pro Glu Ala Glu Ile Arg Glu Arg Tyr Thr Asp Asp Gln Leu
355 360 365
Leu Ala Met Gly Thr Lys Ser Pro Leu Phe Lys Tyr Thr Leu
370 375 380

<210> 26987
<211> 67
<212> PRT
<213> A.fumigatus

<400> 26987
Thr Arg Thr Glu Val Pro Ser Asn Met Leu Leu Lys Ser Phe Ser Arg
1 5 10 15
Pro Ser Val Tyr Ile Gly Ile Leu Ile Thr Cys Trp Gly Ile Ile Met
20 25 30
Thr Leu Thr Gly Met Val Arg Thr Phe Ala Gly Leu Met Val Thr Arg
35 40 45
Val Leu Leu Gly Ile Phe Glu Tyr Val Thr Leu Arg Ala Arg His Thr
50 55 60
Val Leu Phe
65

<210> 26988
<211> 155
<212> PRT
<213> A.fumigatus

<400> 26988
Gln Ala Glu Thr Cys Val Val Leu Arg Ala Leu Thr Val Asp Ile His
1 5 10 15
Val Ala Pro Asp Asn Thr Ala Asp Ile Ala Asn Ala Asp Val Glu Arg
20 25 30
Gln Pro Asn Gly Ser Ala Ala Gly Gly Gly Glu Val Val Gly Cys Pro
35 40 45
Gly Arg Gly Arg Arg Val Asp Gly Val Asn Pro His Ala Gly Glu Asp
50 55 60
Asp Cys Glu Glu Gly Arg Ala Asp Val Leu Phe Glu Val Ala Val Glu
65 70 75 80
Arg Asp Asp Asn Gly Val Gly Asp Gly His Glu Gly Gln Arg Asp Gly
85 90 95
Asp Glu Gly His Ala Pro Val Glu Ala Val Gly Glu Phe Gly Glu Glu
100 105 110
Asp Gly Gly Glu Gly Ala Gly Asp Val Trp Arg Asp Gly His Glu Leu
115 120 125
Gly Val Gly Val Gly Glu Ala His Cys Phe Gly Asp Gly Arg His Gly
130 135 140
Glu Phe Gly Ser Cys Thr Ser Glu Leu Gly Gly
145 150 155

<210> 26989
<211> 71
<212> PRT
<213> A.fumigatus

<400> 26989
Leu Phe Phe Phe Phe Phe Lys Tyr Met Ser Cys Asp Leu Arg Thr Glu
1 5 10 15
Pro Asp Lys Gly Tyr Ala Arg Ala Phe Glu Ser Val Ser Lys His Cys
20 25 30
Ser Gly Gly Cys Ser Thr Ser Lys Asp Ser Thr Leu Phe Ser Ile Lys
35 40 45

```
Lys Leu Val Leu Gly Tyr Asn Cys Glu Pro Val Tyr Leu Phe Gly Lys
    50                  55                  60
Gly Asn Val Asp Ser Ala Leu
65                  70
```

<210> 26990
<211> 85
<212> PRT
<213> A.fumigatus

<400> 26990

```
His Phe Pro Ala Leu Asn Lys Lys Gln Arg Lys Arg Tyr Glu Lys Lys
1               5                   10                  15
Met Ala Ala Arg Ala Ala Thr Leu Pro Pro Gln Ile Pro Val His His
            20                  25                  30
His Ala Thr Asp Ile Thr Pro Ala Asp Tyr Asn Arg Glu Arg Thr Glu
        35                  40                  45
Asp Val Leu Thr Leu Ala Ala Glu Ser Ile Glu Lys Arg Thr Glu Ile
    50                  55                  60
Thr Lys Ser Ala Arg Asp Ala Arg Arg Lys Ala Ile Arg Glu Ala Asn
65                  70                  75                  80
Phe Leu Arg Gly Leu
                85
```

<210> 26991
<211> 88
<212> PRT
<213> A.fumigatus

<400> 26991

```
Lys Glu Asn Cys Ser Ser Val Leu Asp Ala Tyr Val Gln Met Ser His
1               5                   10                  15
Gly Arg Leu Leu Asn Pro Glu Ala Thr Ser Asp Cys Gln Val Cys Pro
            20                  25                  30
Val Ala Asp Thr Asp Thr Phe Leu Ala Gln Val Ser Ile Ser Tyr Ser
        35                  40                  45
Asp Arg Trp Arg Asn Val Gly Leu Leu Phe Val Tyr Ile Val Phe Asn
    50                  55                  60
Ile Phe Ala Ala Ile Phe Leu Tyr Trp Leu Ile Arg Val Pro Lys Lys
65                  70                  75                  80
Arg Ser Arg Lys Ile Lys Glu Glu
                85
```

<210> 26992
<211> 314
<212> PRT
<213> A.fumigatus

<400> 26992

```
Ile Leu Ala Arg Ser Ser Ala Pro Val Val Lys Thr Ser Arg Cys Val
1               5                   10                  15
Val Leu Ser His Ile Leu Asp Ala Val Pro Lys Thr Met Gln Ile Glu
            20                  25                  30
Lys Tyr Gln Phe Lys Leu Phe Ala Met Met Phe Ser Ser Phe Glu Glu
        35                  40                  45
Ile Leu Phe Leu Asp Ala Asp Ala Phe Pro Leu Glu Lys Pro Asp Ile
```

```
    50                  55                  60
Leu Phe Thr Asn Glu Pro Phe Arg Ser Lys Asn Met Val Thr Trp Pro
65                  70                  75                  80
Asp Phe Trp Ala Asp Thr Ile Ser Ser Tyr Tyr Tyr Asp Ile Ala Ser
                85                  90                  95
Lys Pro Met Pro Ser Lys Thr Ile Arg Gln Ser Thr Glu Ser Gly Glu
            100                 105                 110
Leu Leu Leu Ser Lys Lys Thr His Ser Lys Thr Leu Leu Leu Ser Ala
        115                 120                 125
Tyr Tyr Asn Phe Trp Gly Pro Asp Tyr Tyr Trp Ala Leu Leu Ser Gln
    130                 135                 140
Gly Ala Ala Gly Glu Gly Asp Lys Glu Thr Phe Val Ala Ala Ala Leu
145                 150                 155                 160
Thr Met Asp Glu Pro Tyr Tyr Gln Val Arg Glu Pro Ile Val Ala Leu
                165                 170                 175
Gly His Arg Thr Gln Ser Gly Leu Ala Gly Ser Ala Met Ala Gln Phe
            180                 185                 190
Asp Pro Val Glu Asp Tyr Ala Leu Thr Gln Lys Gly Glu Trp Arg Val
        195                 200                 205
His Gly Ser Lys Ala Pro Ala Pro Arg Ala Phe Phe Ile His Ala Asn
    210                 215                 220
Phe Pro Lys Phe Asn Pro Ala Thr Val Phe Asp Glu Gln Ala Val Lys
225                 230                 235                 240
Pro Thr Phe Glu Asp Asp Gly Ser Tyr Thr Arg Ala Trp Thr Ile Pro
                245                 250                 255
Glu Glu Val Ile Gly Lys Phe Arg Thr Asp Val Glu Lys Gln Phe Trp
            260                 265                 270
Arg Glu Ile Leu Trp Thr Ala Cys Glu Leu Glu Thr Lys Phe Arg Ser
        275                 280                 285
Trp Glu Gly Arg Glu Gly Ile Cys Gln Arg Val Lys Asp Tyr Trp Asn
    290                 295                 300
Ala Met Phe Pro Thr Gln Ser Val Lys Thr
305                 310
```

<210> 26993
<211> 145
<212> PRT
<213> A.fumigatus

<400> 26993

```
Thr Glu Leu Phe Ser Arg Lys Ala Ser Pro Ile Met Val Gly Ser Leu
1               5                   10                  15
Ser Leu Phe Ser Val Asn Ala Val Leu Leu Met Ser Ala Asp Asp Gly
            20                  25                  30
Ser Arg Ile Phe Ala Lys Tyr Tyr Ser Pro Pro His Pro Pro Ala Gly
        35                  40                  45
Ala Ala Pro Asn Ala Thr Asp Tyr Pro Gly Ala Asn Pro Tyr Pro Thr
    50                  55                  60
Leu Lys Asp Gln Lys Ala Phe Glu Gln Gly Leu Leu Glu Lys Thr Asn
65                  70                  75                  80
Lys Gln Thr Ser Asp Val Ile Leu Tyr Asp Asn Arg Val Val Val Phe
                85                  90                  95
Lys Met Glu Ser Asp Val Met Ile Tyr Val Val Gly Gly Ala Asp Glu
            100                 105                 110
Asn Glu Val Leu Leu Tyr Asn Val Val Leu Ser Leu Arg Asp Ala Leu
        115                 120                 125
```

```
Gly Ile Leu Phe Lys Tyr Asp Phe Gly Cys Phe Gly Ser Tyr Met Leu
    130                 135                 140
Asn
145
```

<210> 26994
<211> 96
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (96)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26994

```
Ala Ile Asn Glu Lys Phe Lys Gln Leu Asp Phe Gln Asp Cys Lys Val
1               5                  10                  15
Arg Val Leu Asn Val Asp Ser Gln Ala Ser Phe Asp Asn Ile Leu Ile
            20                  25                  30
Ser Val Ile Gly Glu Ile Ser Asn Lys Ser Glu Pro Ser Arg Lys Phe
        35                  40                  45
Val Gln Thr Phe Val Leu Ala Glu Gln Pro Asn Gly Tyr Tyr Val Leu
    50                  55                  60
Asn Asp Ile Phe Arg Tyr Leu Val Asp Glu Glu Glu Glu Glu Glu Ile
65                  70                  75                  80
Ile Lys Ser Ser Pro Arg Gly Trp Lys Tyr Arg Arg Cys His Phe Xaa
                85                  90                  95
```

<210> 26995
<211> 179
<212> PRT
<213> A.fumigatus

<400> 26995

```
Ile Ser Ser Ser Phe Cys Thr Tyr Cys Arg Leu Ser Ser His Arg Ser
1               5                  10                  15
Phe Leu Pro Leu Ser Ile Tyr Phe Trp Pro Pro Lys Thr Phe Ser Pro
            20                  25                  30
Thr His Leu Pro Pro Gln Leu Leu Thr Met Ser Asp Thr Thr Gln Pro
        35                  40                  45
Pro Met Asn Gly Asn Tyr Pro Ala Gln His Ala Tyr Pro Asp Ser Tyr
    50                  55                  60
Asn His Ala His Thr Ala Val Thr Ser Val Ser Asn Phe Gln Pro Ala
65                  70                  75                  80
Gln Ser Ser Thr Pro Thr Asn Ala Pro Pro Asn Asp Gln Lys Asn Gly
                85                  90                  95
Ile Ser Lys Asp Glu Val Gly Trp Tyr Phe Val Glu Gln Tyr Tyr Thr
            100                 105                 110
Asn Met Ser Arg Ser Pro Glu Lys Leu His Leu Phe Tyr Ser Arg Arg
        115                 120                 125
Ser Gln Leu Val Phe Gly Thr Glu Ala Glu Ser Val Pro Val Ala Val
    130                 135                 140
Gly Gln Lys Val Ser Trp Met Arg Leu Glu Leu Val Ala Pro Gln Arg
145                 150                 155                 160
Ala Leu Leu Thr Arg Leu Pro Ile Arg Leu Gly Asn Gln Arg Glu Ile
```

165 170 175

Gln Ala Ala

<210> 26996
<211> 169
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (129)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 26996
Thr Cys Ala Ser Ile Cys Ala Phe Leu Thr Arg Leu His Asp Thr Ile
1 5 10 15
Ala Ala Thr Leu Ser Ser Ser Gly Ser Asn Phe Arg His Leu Leu Thr
20 25 30
Glu Ile Ala Leu Gly Thr Arg Ser His Leu Leu Glu His Phe Lys Arg
35 40 45
Tyr Ala Val Asn Gly Ala Gly Gly Leu Met Val Thr Lys Asp Met Thr
50 55 60
Gln Tyr Ala Asp Leu Leu Lys Ser Trp Asp Ile Asp Glu His Val Lys
65 70 75 80
Gly Pro Gly Gly Leu Leu Asp Val Leu Leu Glu Val Gly Ser Leu Phe
85 90 95
Val Ile Gly Pro Glu Ala Leu Leu Glu Arg Ile Arg Ala Gly Ala Ser
100 105 110
Ser Asp Ala Ser Arg Arg Pro Gly Ala Ser Arg Thr Asp Thr Glu Arg
115 120 125
Xaa Gln Glu Leu Leu Glu Thr Gly His Ile Glu Pro Gly Leu Ser Val
130 135 140
Gln Glu Ile Arg Ala Tyr Val Ser Arg Arg Glu Asp Ser Ser Thr Thr
145 150 155 160
Ala Met Gln Asn Val Leu Asn Leu Leu
165

<210> 26997
<211> 89
<212> PRT
<213> A.fumigatus

<400> 26997
Ser Ser Trp Ile Val Leu Trp Phe Ala Thr Met Ile Asn Pro Trp Leu
1 5 10 15
Leu Ile Thr Ser Phe Leu Ala Leu Ala Ile Leu Ser Leu Val Tyr Cys
20 25 30
Ala Lys Lys Leu Glu Pro Glu Ile Thr Ser Ser Ser Phe Asp Asn Glu
35 40 45
Pro Phe Ser Leu Phe Tyr Phe Glu Glu Pro Glu Thr Met Leu Ile Glu
50 55 60
His Arg Lys Trp Asn Phe Phe Pro Ser Phe His Gly Gly Lys Ala Gly
65 70 75 80
Glu Leu Val Asp Gly His Met Pro Asn
85

<210> 26998
<211> 119
<212> PRT
<213> A.fumigatus

<400> 26998
Phe Leu Val Leu Glu Gln Arg Val Ser Ser Ile Gln Glu Gln Leu Gln
1 5 10 15
Leu Asp Arg Ala Asn Asn Asp Lys Ile Asp Pro Ser Phe Asn Ile Ser
20 25 30
Tyr Asp Val Leu Pro Phe Glu Ser Gly Gly Gly Pro Leu Gln Leu Ser
35 40 45
Tyr Gly Asn Tyr Leu Gly Ala Tyr Ala Arg Thr Trp Gln Lys Ser Arg
50 55 60
Arg Asn Thr Leu Ala Asp Ser Thr Leu Ile Ile Ala Val Ser Leu Ser
65 70 75 80
Lys Val Ser Val His Pro Cys Arg Lys Arg Thr Ala Asp Gly Leu Ser
85 90 95
Ser Pro Thr Thr Phe Leu Pro Arg Val Lys Lys Tyr Gly Gly Gly Phe
100 105 110
Pro Leu Thr Ala Ser Ser Ser
115

<210> 26999
<211> 166
<212> PRT
<213> A.fumigatus

<400> 26999
Thr His Gly Gly Thr Thr Lys Ser Asn Pro Leu Cys Gln His His Ser
1 5 10 15
Asn Asn Leu Leu Cys Gln Gly His Cys Leu Arg Ser His Arg Arg Tyr
20 25 30
Pro Leu Cys Glu Asn Gln Gln Ser Leu Phe His Asp Ala Trp Ala Arg
35 40 45
Val Pro Glu Thr Arg Arg Ala Tyr Asn Gly Lys Met Ile Asp Val Leu
50 55 60
Lys Val Ala Asp Ala Met Leu Glu Gly Glu Ile Glu Tyr Arg Cys Thr
65 70 75 80
Asn Tyr Asp Lys Ala Phe Ala Ala Leu Arg Arg Ala Ile Asp Leu Glu
85 90 95
Asp Lys Leu Pro Tyr Ser Glu Pro Trp Ser Trp Met Gln Pro Val Arg
100 105 110
His Ala Tyr Ala Ala Leu Met Met Glu Gln Gly Tyr Leu Glu Glu Ala
115 120 125
Leu Gln Val Tyr Arg Ala Asp Leu Gly Leu Asp Thr Ser Ile Ile Arg
130 135 140
Pro Arg Arg His Pro Asn Asn Val Trp Ser Leu Gln Gly Tyr His Glu
145 150 155 160
Cys Leu Val Arg Leu Gly
165

<210> 27000
<211> 434
<212> PRT

<213> A.fumigatus

<400> 27000

```
Phe Ile Ile Ser Lys Ile Phe Lys Ser Phe Ile Met Ser Ser Leu Leu
1               5                  10                  15
Ala Met Ser Pro Val Leu Ala Ser Asn Glu Tyr Tyr Asp Leu Gly Ser
            20                  25                  30
Phe Gly Arg Thr Ile Thr Thr Thr Ser Thr Asp Ala Gln Ile Trp Phe
        35                  40                  45
Asn Arg Gly Leu Thr Trp Val Tyr Ser Phe Asn His Ala Glu Gly Ala
    50                  55                  60
Tyr Cys Phe Gln Gln Ala Leu Ala His Asp Pro Glu Cys Ala Met Ala
65                  70                  75                  80
Tyr Trp Gly Leu Ala Tyr Ala Val Gly Pro Asn Tyr Asn Lys Pro Trp
                85                  90                  95
Glu Lys Phe Asp Gln Gly Asp Leu His Thr Ser Val Gln Arg Gly Tyr
            100                 105                 110
Asn Ala Ala Arg Glu Ala Arg Lys His Ala Ala Val Arg Ala Thr Pro
        115                 120                 125
Leu Glu Arg Ala Leu Val Asp Ala Ile Gln Ser Arg Phe Pro Thr Gly
    130                 135                 140
Glu Pro Ala Glu Asp Tyr Pro Ala Val Asn Arg Asp Tyr Ala Ala Ala
145                 150                 155                 160
Met Lys Thr Val Tyr Glu Thr Tyr Gly Arg Asp Leu Asn Val Ala Thr
                165                 170                 175
Leu Tyr Ala Asp Ala Leu Met Asn Met Thr Pro Trp Ala Leu Trp Asp
            180                 185                 190
Leu Phe Thr Gly Lys Pro Asn Pro Lys Ala Pro Thr Met Glu Val Lys
        195                 200                 205
Ala Val Leu Glu Arg Ala Leu Ala Gln Glu Glu Asp Gly Ala Leu Leu
    210                 215                 220
Asn Pro Gly Leu Leu His Leu Tyr Ile His Phe Val Glu Met Ser Pro
225                 230                 235                 240
Thr Pro Glu Leu Gly Ile Asn Ala Ala Asp His Leu Arg Asp Leu Val
                245                 250                 255
Pro Asp Ala Gly His Ile His His Met Pro Thr His Leu Asp Ile Leu
            260                 265                 270
Ile Gly Asp Trp Arg Arg Ser Ile Ser Ser Asn Tyr Lys Ser Thr Leu
        275                 280                 285
Ala Asp Asp Lys Tyr Phe Arg Lys Ser Gly Ala Lys Asn Phe Tyr Thr
    290                 295                 300
Phe Tyr Arg Leu His Asp Tyr His Ser Leu Ile Tyr Ala Ala Met Phe
305                 310                 315                 320
Ala Gly Lys Ser Lys Val Ala Phe Asp Ala Val Thr Arg Met Glu Ser
                325                 330                 335
Thr Val Pro Glu Glu Val Leu Gln Ile Arg Ser Pro Pro Met Ala Asp
            340                 345                 350
Trp Leu Glu Gln Phe Leu Pro Ile Arg Leu His Ile Met Val Arg Phe
        355                 360                 365
Gly Met Trp Lys Glu Leu Lys Arg Met Glu Ala Pro Gln Asn Gln Ile
    370                 375                 380
Leu Tyr Ala Ser Thr Thr Ala Thr Thr Tyr Tyr Ala Arg Ala Ile Ala
385                 390                 395                 400
Tyr Ala Ala Thr Gly Asp Ile Pro Ser Ala Lys Thr Asn Ser Leu Ser
                405                 410                 415
Ser Met Met His Gly Arg Gly Ser Leu Arg Pro Asp Ala Pro Thr Met
```

420 425 430

Ala Arg

<210> 27001
<211> 401
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (4)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27001

```
Leu Thr Ala Xaa Glu Thr Arg Gly Glu Asp Asp Leu Pro Tyr Thr Ile
1               5                  10                  15
Leu Asn Ala Ile Thr Ser Asn Ile Val Leu Tyr Phe Met Thr Asn Leu
            20                  25                  30
Arg Arg Glu Pro Gly Ala Phe Phe Phe Phe Val Phe Thr Ser Phe Ile
        35                  40                  45
Leu Thr Leu Thr Met Ser Met Phe Phe Arg Ser Met Ala Ser Leu Ser
    50                  55                  60
Arg Ser Leu Val Gln Val Leu Pro Phe Ser Ala Val Leu Leu Leu Gly
65                  70                  75                  80
Leu Ser Met Tyr Thr Gly Phe Ala Ile Pro Thr Gly Tyr Met Leu Gly
                85                  90                  95
Trp Ala Arg Trp Ile Ala Tyr Ile Asn Pro Ile Ser Tyr Gly Phe Glu
            100                 105                 110
Ser Leu Met Ile Asn Glu Phe His Asn Arg Asp Phe Pro Cys Met Asp
        115                 120                 125
Tyr Val Pro Ser Gly Pro Gly Tyr Thr Asp Val Gly Leu Asn Asn Arg
    130                 135                 140
Val Cys Ser Thr Val Arg Ser Val Pro Gly Gln Ala Phe Val Asn Gly
145                 150                 155                 160
Asn Ala Tyr Ile Glu Ser Ala Tyr Ser Tyr Thr Ala Ser His Lys Trp
                165                 170                 175
Arg Asn Ile Gly Val Ile Phe Ala Tyr Met Phe Leu Leu Gly Ala Val
            180                 185                 190
Tyr Leu Val Ala Ser Asp Phe Ile Thr Glu Lys Lys Pro Lys Gly Glu
        195                 200                 205
Ile Leu Val Phe Pro Arg Gly His Lys Ala Leu Lys Lys Gly Lys Ser
    210                 215                 220
Asp Glu Asp Leu Glu Gly Gly Gly Gly Arg Ser Ala Thr Val Glu Lys
225                 230                 235                 240
Ile Gly Ser Asp Gly Leu Ala Met Ile Glu Arg Gln Thr Ala Ile Phe
                245                 250                 255
Gln Trp Lys Asp Val Cys Phe Asp Ile Lys Ile Gly Lys Glu Asn Cys
            260                 265                 270
Arg Ile Leu Asp His Val Asp Gly Trp Val Lys Pro Gly Ile Leu Thr
        275                 280                 285
Ala Leu Met Gly Val Ser Gly Ala Gly Lys Thr Thr Leu Leu Asp Val
    290                 295                 300
Leu Ala Thr Arg Thr Thr Met Gly Ile Ile Ser Gly Glu Met Leu Val
305                 310                 315                 320
Asp Gly Gln Pro Arg Asp Glu Ser Phe Gln Arg Lys Thr Gly Tyr Ala
```

```
                325                 330                 335
Gln Gln Gln Asp Leu His Leu Ser Thr Ala Thr Val Arg Glu Ala Leu
            340                 345                 350
Glu Phe Ser Ala Leu Leu Arg Gln Ser Ala His Val Pro Arg Gln Glu
        355                 360                 365
Lys Ile Asp Tyr Val Thr Glu Val Ile Lys Leu Leu Asp Met Thr Glu
    370                 375                 380
Tyr Ala Ser Ser Pro Arg Gly Trp Lys Glu Pro Leu Tyr Leu Gln Phe
385                 390                 395                 400
Tyr
```

<210> 27002
<211> 425
<212> PRT
<213> A.fumigatus

<400> 27002

```
Leu Arg Trp Lys Thr Cys Ser Ser Phe Thr Ser Cys Tyr Ile Thr Met
1               5                   10                  15
Ala Ser Asp Gly Met Pro Pro Ala Lys Arg Leu Lys Ser Ser Asn Leu
            20                  25                  30
Pro Pro His Leu Arg Asp Ala Lys Arg Lys Asp Ile Asp Asn Trp Glu
        35                  40                  45
Thr Asn Arg Met Leu Thr Ser Gly Val Ala Gln Arg Arg Asp Phe Glu
    50                  55                  60
Gly Asp Phe Leu Pro Glu Asp Glu Asp Gly Thr Arg Val His Leu Leu
65                  70                  75                  80
Val His Asp Leu Arg Pro Pro Phe Leu Asp Gly Arg Thr Ile Phe Thr
                85                  90                  95
Lys Gln Leu Glu Pro Ile Ser Ala Val Arg Asp Pro Gln Ser Asp Met
            100                 105                 110
Ala Val Phe Ser Arg Lys Gly Ser Lys Val Val Arg Glu Arg Arg Gln
        115                 120                 125
Gln Arg Glu Arg Gln Lys Gln Ala Gln Glu Ala Thr Thr Met Ala Gly
    130                 135                 140
Thr Ala Leu Gly Asn Ile Met Gly Val Lys Glu Asp Glu Gly Asp Ser
145                 150                 155                 160
Ala Val Ala Met Pro Val Glu Asp Thr Tyr Arg Ser Gly Asn Lys Phe
                165                 170                 175
Ala Gln His Leu Lys Lys Asp Glu Gly Gly Gln Ser Ser Phe Ser Lys
            180                 185                 190
Ser Lys Thr Leu Arg Glu Gln Arg Glu Tyr Leu Pro Ala Phe Ala Val
        195                 200                 205
Arg Glu Glu Leu Leu Arg Val Ile Arg Asp Asn Gln Val Ile Val Val
    210                 215                 220
Val Gly Glu Thr Gly Ser Gly Lys Thr Thr Gln Leu Thr Gln Phe Leu
225                 230                 235                 240
His Glu Asp Gly Tyr Ser Lys Tyr Gly Ile Ile Gly Cys Thr Gln Pro
                245                 250                 255
Arg Arg Val Ala Ala Met Ser Val Ala Lys Arg Val Ser Glu Glu Met
            260                 265                 270
Glu Val Asp Leu Gly Ala Glu Val Gly Tyr Ala Ile Arg Phe Glu Asp
        275                 280                 285
Cys Thr Ser Lys Asp Thr Val Ile Lys Tyr Met Thr Asp Gly Val Leu
    290                 295                 300
```

```
Leu Arg Glu Ser Leu Val Gln Pro Asp Leu Asp Lys Tyr Ser Cys Ile
305                 310                 315                 320
Ile Met Asp Glu Ala His Glu Arg Ala Leu Asn Thr Asp Val Leu Met
                325                 330                 335
Gly Leu Leu Lys Lys Val Leu Ala Arg Arg Arg Asp Leu Lys Leu Ile
            340                 345                 350
Val Thr Ser Ala Thr Met Asn Ser Glu Arg Phe Ser Arg Phe Phe Gly
        355                 360                 365
Gly Ala Pro Glu Phe Ile Ile Pro Gly Arg Thr Phe Pro Val Asp Leu
    370                 375                 380
His Phe Ser Arg Thr Pro Cys Glu Asp Tyr Val Asp Ser Ala Val Lys
385                 390                 395                 400
Gln Val Leu Ala Ile His Val Ser Gln Gly Pro Gly Val Phe Thr Thr
                405                 410                 415
Gly Leu Glu Gly Ser Thr Gly Ala Gln
            420                 425
```

<210> 27003
<211> 60
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (27)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27003

```
Ala Ala Glu Arg Ile Leu Ala Ala Tyr Gly Ser Cys Cys Ser Pro Arg
1               5                   10                  15
Pro Leu Thr Pro Gln Lys Thr Ile Asn Trp Xaa Tyr Thr Thr Thr His
            20                  25                  30
Gln Gln Pro Arg Asp Thr Asn Ile Gln His Tyr Glu Ile Ser Pro Leu
        35                  40                  45
Ala Tyr Ser Asn Asn Arg Ile Val Ser Asn Met Arg
    50                  55                  60
```

<210> 27004
<211> 76
<212> PRT
<213> A.fumigatus

<400> 27004

```
His Ile Val Leu Ile Leu Arg Gln Phe Arg Ser Ser Leu Ile Gln Asp
1               5                   10                  15
Glu Tyr Val His Ile Arg His Tyr Thr Glu Arg Arg Trp Pro Phe Ser
            20                  25                  30
Ser Lys Asp Ser Ser Arg Leu Thr Thr Thr Thr Ala Lys Gly Thr Ser
        35                  40                  45
Ser Phe Gly Lys Arg His Asn Lys Ser His Thr Leu Cys Arg Arg Cys
    50                  55                  60
Gly Gln Tyr Phe Thr Phe Arg Asp Phe Ser Gly Gly
65                  70                  75
```

<210> 27005
<211> 99

<212> PRT
<213> A.fumigatus

<400> 27005
Tyr Asp Gly Lys Glu Lys Thr Arg Pro Asn Thr Asn Ser Met Gly Lys
1 5 10 15
His His Phe Arg Leu Ala Leu Lys Pro Val Thr Ser Asn Ala Arg Pro
20 25 30
Phe Ile Pro Ala Leu Ser Ser Leu Arg Glu Arg Glu Arg Asp Ala Glu
35 40 45
Phe Asp Leu Val Asp Leu Gly Thr Thr Gly Ala Leu Gly Ser Ala Asp
50 55 60
Leu Glu Ala Val Leu Glu Ala Thr Val Asp Ile Leu Glu Val Ala His
65 70 75 80
Ser Ala Gly Ala Gly Gly Leu Ser Ser Leu Gly Leu Leu Ala Pro Val
85 90 95
Val Cys Cys

<210> 27006
<211> 206
<212> PRT
<213> A.fumigatus

<400> 27006
Ser Gly Pro Ser Gln Pro Arg Gly Glu Asp Ser Pro Val Pro Gln Arg
1 5 10 15
Ala Pro Ser Ala Asp Glu Asp Asp Leu Leu Ala Ala Phe Asp Ala Ser
20 25 30
Ala Pro Val Asp Ala Ser Thr Asn Phe Pro Ile Pro Ser Pro Ser Pro
35 40 45
Ser Pro Gln Ile Ala Gln Ser Ala Ser Thr Ala Ala Ala Gln Gln Gln
50 55 60
His Gln Thr Ala Gly Met Ser Phe Ser Glu Val Asp Asp Asp Pro Phe
65 70 75 80
Gly Leu Asn Gln Leu Lys Pro Lys Pro Thr Ala Thr Pro Glu Pro Ala
85 90 95
Gln Thr Asp Asp Asp Asp Phe Leu Gly Leu Leu Gly Lys Pro Val Ser
100 105 110
Glu Val Ser Arg Pro Ala Pro Glu Pro Ser Pro Lys Pro Ser Ser Pro
115 120 125
Ala Ile His Glu His His Ala Pro Ser Pro Lys Pro Ser Ser Gly Ala
130 135 140
Asp Arg Ala Ile Ala Glu Leu Val Asp Met Gly Phe Pro Ala Asp Lys
145 150 155 160
Ala Ser Gln Ala Leu Arg Ala Thr Glu Ser Gly Thr Asp Val Gln Ala
165 170 175
Ala Val Ser Leu Leu Leu Thr Gln Ala His Glu Glu Ala Arg Gln Lys
180 185 190
Ser Lys Ser Arg Thr Pro Ala Val Asp Arg Glu Phe Asp His
195 200 205

<210> 27007
<211> 226
<212> PRT
<213> A.fumigatus

<400> 27007
Thr Met Ser Val Gly Arg Ala Val Arg Gly Val Asp Leu Gly Ile Tyr
1 5 10 15
His Pro Asp Val Ile Tyr Leu Phe Phe Pro Arg Leu Ser Glu Pro Ser
20 25 30
Tyr Glu Leu Ile Arg Thr Asn Lys Gln Ile Glu Ala Asp Lys Lys Glu
35 40 45
Asp Met Lys Lys Tyr Ala Leu Ile Gly Thr Gly Gly Arg Ala Met Phe
50 55 60
Phe Tyr Thr Ala Ile Val Arg Asp Phe Pro Thr Thr Ala Gln Leu Val
65 70 75 80
Ala Phe Cys Asp Thr Asn Thr Thr Arg Met Ala Tyr Ala Asn Ser Leu
85 90 95
Leu Glu Ala Leu Gly His Ala Pro Val Pro Thr Tyr Val Ala Ser Asp
100 105 110
Phe Asp Lys Met Ile Ala Asp Thr Lys Pro Asp Glu Ile Ile Val Thr
115 120 125
Thr Ile Asp Arg Thr His His Gln Tyr Ile Ile Arg Ala Leu Glu Leu
130 135 140
Gly Cys Asn Val Ile Thr Glu Lys Pro Met Thr Ile Asp Ala Pro Arg
145 150 155 160
Cys Arg Ala Ile Ile Asp Ala Val Glu Arg Thr Gln Arg Gln Val Arg
165 170 175
Val Thr Phe Asn Tyr Arg Tyr Ala Pro His Asn Ser Lys Ile Ala Ala
180 185 190
Leu Leu Ala Ser Asp Ala Ile Gly Asp Val His Ser Val His Phe Glu
195 200 205
Trp Met Leu Asn Thr Ser His Gly Ala Asp Tyr Phe Arg Arg Trp Ala
210 215 220
Arg Gln
225

<210> 27008
<211> 171
<212> PRT
<213> A.fumigatus

<400> 27008
Gly Ala Thr Arg Ala Gly Met Gln His Gly Gln Ser Pro Asn Gln Glu
1 5 10 15
His Glu Gln Glu Met Thr Gln Glu Asp His Ile Thr Pro Val Gln Asn
20 25 30
Pro Arg Asn Asp Pro Ile Lys Glu Lys Ala Ala Gln Phe Leu Ala Thr
35 40 45
Val Asn Glu Asp Arg Thr Phe Thr Val Glu Glu Glu Lys Ala Leu Leu
50 55 60
Arg Arg Ile Asp Arg Arg Ile Leu Pro Leu Leu Leu Gly Ala Tyr Phe
65 70 75 80
Phe Gln Gln Leu Asp Lys Ser Ser Pro Ser Tyr Val Ser Ile Ser Gly
85 90 95
Ile Val Glu Asp Ala Asn Leu His Gly Gln Gln Tyr Ser Trp Leu Gly
100 105 110
Ser Ile Leu Tyr Leu Ala His Leu Val Met His Pro Ile Ala Ala Leu
115 120 125
Leu Leu Ser Lys Leu Pro Thr Gly Lys Leu Asn Arg Val Gly Gly Thr

```
    130                 135                 140
Ser Pro Gly Ala Ala His Ser Pro Ile Met Gly Gly Arg Thr Lys Phe
145                 150                 155                 160
Ser Pro Phe Trp Pro Gly Leu Arg Ile Pro Ser
                165                 170
```

<210> 27009
<211> 200
<212> PRT
<213> A.fumigatus

<400> 27009

```
Val Gly Pro Thr Trp Arg Arg Asn Leu Ala Thr Pro Trp Glu Thr Ala
1               5                  10                  15
Phe Ser Val Asp Arg Ser Leu Ala Ala Asn Asn Ser Glu Asp Cys Trp
            20                  25                  30
Thr Gly Cys Ser Ile Gly Cys Trp Val Ser Gly Gly Ser Asp Ile Leu
        35                  40                  45
Leu Thr Gly Arg Asn Asp Arg Arg Ile Trp Ile Leu Glu Thr Ala Arg
    50                  55                  60
Ser Ala Leu Thr Gly Cys Phe Ser Ser Ala Asn Leu Ala Arg Gly Leu
65                  70                  75                  80
Leu Gln Thr Gly Thr Glu Val Ile Leu Tyr Arg Gly His Asp Leu Pro
                85                  90                  95
Asp Leu Met Ser Ile Ser Gly Lys Asp Ser Leu Trp His His Ala Gln
            100                 105                 110
Tyr Pro Pro Ala Tyr Leu His Ser Gln Trp Pro Ile Arg Ser Ser Val
        115                 120                 125
Val Ser Gln Asp Gly Arg Tyr Ile Ala Ile Ala Gly Arg Arg Gly Leu
    130                 135                 140
Ala His Tyr Ser Val Asn Ser Gly Arg Trp Lys Val Phe Glu Asp Pro
145                 150                 155                 160
Lys Thr Glu Asn Ser Phe Ala Val Arg Gly Gly Met Cys Trp Tyr Gly
                165                 170                 175
His Ile Leu Ile Ala Ala Val Glu Ser Asp Gly Ser Tyr Glu Val Arg
            180                 185                 190
Pro Leu Ser Thr Thr Lys Leu Phe
        195                 200
```

<210> 27010
<211> 64
<212> PRT
<213> A.fumigatus

<400> 27010

```
Asn Ser Leu Tyr Gly Tyr Asp Leu Pro Phe Phe Thr Leu His Met Pro
1               5                  10                  15
Ser Met Leu Pro Tyr Val Leu Met Leu Arg Arg Pro Ile Tyr Ser Tyr
            20                  25                  30
His Met Ser Tyr Asn Met Ile Leu Ser Val Glu Thr Ser Arg Gln Arg
        35                  40                  45
Ser His Tyr Ala Asn Val Ser Pro Thr Ser His Ile Ser Leu Met Pro
    50                  55                  60
```

<210> 27011
<211> 230

<212> PRT
<213> A.fumigatus

<400> 27011
Ser Ser Leu Phe His Leu Thr His Ala Ile His Val Ala Ile Cys Thr
1 5 10 15
Asp Val Glu Lys Thr His Leu Phe Leu Pro Tyr Val Leu Gln His Asp
20 25 30
Leu Val Arg Gly Asp Leu Ala Ala Ala Leu Thr Leu Cys Gln Arg Phe
35 40 45
Ser His Leu Ser Tyr Phe Pro His Ala Leu Glu Met Leu Leu His His
50 55 60
Val Leu Asp Asp Asp Val Asp Asn Glu Arg Lys Glu Ser Lys Thr Asp
65 70 75 80
Asp Pro Ser Arg Arg His Glu Pro Leu Leu Pro Ser Val Ile Ser Phe
85 90 95
Leu Gln Ala Ser Leu Pro Ile Lys Val Phe Leu Asp Ile Val Val Gln
100 105 110
Cys Thr Arg Lys Thr Glu Leu Arg Ser Trp Arg Thr Leu Phe Asn His
115 120 125
Leu Pro Pro Pro Lys Asp Leu Phe Glu Gln Ala Leu Arg Leu Asn Ser
130 135 140
Leu Lys Thr Ala Val Gly Tyr Leu Leu Val Leu Gln Ala Met Glu Asp
145 150 155 160
Glu Gly Glu Gly Gly His Glu Ala Pro Ile Glu Asp Tyr Val Val Arg
165 170 175
Leu Ile Gly Leu Ala Ser Gln Asn Ser Asp Trp Glu Leu Cys Gly Glu
180 185 190
Leu Ala Arg Phe Leu Ile Ala Leu Asp Ala Ser Gly Asp Met Leu Arg
195 200 205
Arg Ala Ile Ser Arg Val Gly Leu Arg Val Phe Thr Thr Gly Leu Glu
210 215 220
Gly Ala Ala Pro Ser Leu
225 230

<210> 27012
<211> 76
<212> PRT
<213> A.fumigatus

<400> 27012
Tyr Ile Leu Val Tyr Asn Phe Leu Leu Ser Ile Ser Phe Lys Tyr Ile
1 5 10 15
Tyr Thr Asn Tyr Ser Val Phe Ile Lys His Ser Ile Thr Ile Leu Leu
20 25 30
Tyr Ile Asn Asn Ile Leu Ile Phe Leu Asn Leu Asn Asn Leu Ile Asn
35 40 45
Asn Phe Leu Lys Gln Leu Gly Lys Leu Phe Lys Tyr Ile Asn Asn Ser
50 55 60
Lys Val Ser Val Tyr Leu Gly Ile Asp Ile Leu Tyr
65 70 75

<210> 27013
<211> 62
<212> PRT
<213> A.fumigatus

<400> 27013
Leu Ile Leu Glu Thr Tyr Leu Asp Ile Thr Phe Thr Ile Ser Lys Leu
1 5 10 15
Thr Tyr Phe Thr Arg Asn Pro Ser Pro Asn Tyr Phe Ile Ile Val Lys
20 25 30
Tyr Ile Phe Tyr Tyr Leu Ala Glu Met Leu Leu Leu Leu Leu Phe Tyr
35 40 45
Pro Ser Ile Leu Ser Asn Leu Asn Ser Phe Ile Asn Thr Asn
50 55 60

<210> 27014
<211> 316
<212> PRT
<213> A.fumigatus

<400> 27014
Pro Leu Asp Phe Pro Leu Trp His Met Gly Ile Ser Gly Tyr Glu Ala
1 5 10 15
Thr Ile Ile Ala Tyr Met Ser Pro Leu Leu Leu Ala Ile Pro Thr Leu
20 25 30
Lys Thr Ala Val Ala Lys Tyr Pro Arg Leu Phe His Phe Leu Ser Leu
35 40 45
Ser Gly Leu Leu Ala Tyr Lys Val Gln Asn Pro Thr Asn Arg Leu Phe
50 55 60
Val Thr Thr Phe Ser Val Ala Cys Asn Ala Leu Thr Trp Ser Gly Ile
65 70 75 80
Phe His Ala Glu Lys Thr Gln Ser Ser Arg Leu Glu Ser Arg Ile Leu
85 90 95
Ala Trp Gly Ile Gly Leu Ile Met Ser Ser Val Ala Lys Phe Ala Cys
100 105 110
Ser Thr Asn Asn Pro Val Trp Pro Thr Met His Ala Glu Asn Gly Gly
115 120 125
Trp Asn Lys Met Gly Leu Leu Leu Gly Ile Leu Ala Val Leu Arg Ser
130 135 140
His Arg Lys Pro Val Pro Ser Gly Gly Asp Tyr Phe Pro Ser Thr Gly
145 150 155 160
Lys Lys Gly Pro Ser Leu Leu Ala Ala Phe Gly Met Gly Gly Leu Leu
165 170 175
Phe Ala Met His Ser Leu Leu Ser Asp Ser Ser Thr Met Ile Ser Trp
180 185 190
Val Trp Glu Gly Tyr Pro Val Arg Gly Pro Ile Ala Val Pro His Gly
195 200 205
Val Leu Thr Ile Phe Ala Met Gly Ala Gly Leu Val Tyr Gly Leu Phe
210 215 220
Cys Pro Arg Ile Ala Gly Ser Trp Thr Ala Phe Gly Ile Gly Ser Leu
225 230 235 240
Gly Ala Ala Leu Leu Thr Cys Tyr Ser His Trp Thr Gly Phe Tyr Gly
245 250 255
Arg Arg Ser Leu Arg Phe Met Ser Trp Pro Val Ala Pro Val Pro Gly
260 265 270
Phe Leu Gly Cys Ser Ala Ile Ser Ser Arg Thr Asn Val Pro Gly Ser
275 280 285
Glu Ala Leu Ala Thr Ala Ser Trp Thr Pro Phe Gln Leu Gly Val Gly
290 295 300
Ala Leu Ser Ile Cys Val Pro Gly Gly Ser Leu Cys

305 310 315

<210> 27015
<211> 192
<212> PRT
<213> A.fumigatus

<400> 27015
Arg Ile Thr Glu Tyr Phe Asn Val Ala Leu Pro Val Gly Gly Val Phe
1 5 10 15
Ala Thr Pro Phe Ile Gly Leu Phe Leu Asp His Leu Ser Val Pro Asn
20 25 30
Met Leu Ala Ile Ile Val Ile Leu Thr Thr Leu Ile Glu Ala Leu Asn
35 40 45
Phe Gly Ala Ser Ser Leu Gly Gly Leu His His Arg Asp Val Val Arg
50 55 60
Pro Ala Ala Pro Val Val Leu Phe Ser His Val Val Ser Ala Ser Leu
65 70 75 80
Ser Pro Val His Phe Arg Gly Leu Thr Ser Ala Arg Asp Tyr Ala Thr
85 90 95
Lys Val Phe Gly Phe Ala Thr Phe Gly Arg Val Tyr Gly Thr Ile Ile
100 105 110
Cys Val Ser Gly Leu Val Asn Phe Ser Gln Tyr Ala Leu Asp Ala Leu
115 120 125
Thr His Gly Pro Phe Asp Gly Asn Pro Ile Pro Val Asn Ile Phe Leu
130 135 140
Ala Ala Ala Gly Phe Val Val Gly Thr Val Leu Val Leu Tyr Val Gln
145 150 155 160
Ile Ala Gly Lys His Leu Lys Glu Lys Arg Leu Ala Leu Glu Arg Asp
165 170 175
Glu Glu Gln Glu Arg Glu Arg Leu Ile Pro Ile Gln Glu Glu Asp Ala
180 185 190

<210> 27016
<211> 386
<212> PRT
<213> A.fumigatus

<400> 27016
Asn Gln Ser Asp Ser Lys Phe Leu Glu Ala Leu Arg Met Arg Asp Pro
1 5 10 15
Lys Arg Arg Phe Asp His Ile Trp Arg Leu Ser Lys Asp Val Leu Ile
20 25 30
Cys Glu Ala Asp Pro Pro Pro Asp Glu Asp Glu Pro Phe Ser Lys Glu
35 40 45
Ser Ser Lys Pro Leu Arg Arg His Gly Gly Cys Gly Asn Ala Gln Pro
50 55 60
Thr Ile Arg Lys Glu Gly Ile Thr Leu Val Gly Thr Trp Lys Pro Asn
65 70 75 80
Lys Ser Met Met Asp Glu Asp Glu Met Gln Gln Pro Glu Lys Lys Val
85 90 95
Ile Thr Pro Gln Met Ala Leu Asn Val Phe Arg Asn Ile Ser His Glu
100 105 110
Asp Val Arg Ile Met Gly Leu Ser Asn Asp Tyr Ala Arg Pro Glu Trp
115 120 125
Met Ile Ile Thr Val Leu Pro Val Pro Pro Pro Pro Val Arg Pro Ser

```
    130                 135                 140
Val Leu Val Gly Gly Ser Thr Ser Gly Gln Arg Gly Glu Asp Asp Leu
145                 150                 155                 160
Thr Tyr Lys Leu Ala Glu Ile Ile Arg Ala Asn Gln Asn Val Gln Arg
                165                 170                 175
Cys Glu Gln Glu Gly Ala Pro Glu His Val Val Arg Glu Phe Glu Ser
            180                 185                 190
Leu Leu Gln Tyr His Val Ala Thr Tyr Met Asp Asn Asp Ile Ala Gly
        195                 200                 205
Gln Pro Lys Ala Met Gln Lys Ser Asn Arg Pro Val Lys Ala Ile Arg
    210                 215                 220
Ser Arg Leu Lys Gly Lys Glu Gly Arg Leu Arg Gln Asn Leu Met Gly
225                 230                 235                 240
Lys Arg Val Asp Phe Ser Ala Arg Thr Val Ile Thr Gly Asp Pro Asn
                245                 250                 255
Leu Ser Leu Asp Glu Val Gly Val Pro Arg Ser Ile Ala Arg Thr Leu
            260                 265                 270
Thr Tyr Pro Glu Val Val Thr Pro Tyr Asn Ile Glu Lys Leu Gln Gln
        275                 280                 285
Leu Val Ala Asn Gly Pro Asn Glu His Pro Gly Ala Arg Tyr Ile Val
    290                 295                 300
Arg Asp Asn Gly Glu Arg Ile Asp Leu Arg His Ala Arg Arg Ala Gly
305                 310                 315                 320
Gly Gln Gln Leu Leu Tyr Gly Trp Lys Val Glu Arg His Leu Met Asp
                325                 330                 335
Gly Asp Ile Ile Leu Phe Asn Arg Gln Pro Ser Leu His Lys Glu Ser
            340                 345                 350
Met Met Gly His Arg Val Arg Val Met Pro Tyr Ser Thr Phe Arg Leu
        355                 360                 365
Asn Leu Ser Val Thr Thr Val Phe Thr Thr Gly Leu Asp Gly Ser Glu
    370                 375                 380
Leu Thr
385
```

<210> 27017
<211> 125
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (67)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 27017
Ser Thr Arg Ile Phe Gln Pro Phe Gly Glu Tyr Leu Gly Thr Gln Phe
1               5                   10                  15
Thr Gly Val Asn Val Ile Gly Tyr Tyr Gln Thr Ile Met Tyr Glu Ser
            20                  25                  30
Leu Gly Ile Thr Gly Asn Arg Ala Thr Leu Val Ala Gly Ile Tyr Asn
        35                  40                  45
Cys Val Gly Pro Leu Ala Asn Leu Ile Phe Ile Ile Phe Ile Leu Asp
    50                  55                  60
Arg Val Xaa Arg Arg Arg Pro Met Met Phe Gly Ala Ile Gly Ile Ser
65                  70                  75                  80
Ile Ala Leu Ile Cys Glu Ala Ala Leu Asn Ser Gln Asn Glu Asp Gly
```

```
                85                  90                  95
Ser Arg His Gly Tyr Ser Ile Gly Gly Val Val Phe Leu Phe Cys Val
            100                 105                 110
Thr Ile Ile Phe Ser Leu Ser Phe Gly Pro Cys Ser Trp
        115                 120                 125
```

<210> 27018
<211> 72
<212> PRT
<213> A.fumigatus

```
<400> 27018
Leu Gln Ser Arg Val Tyr Met Ser Glu Val Met Pro Met Gln Ile Arg
1               5                   10                  15
Gly Lys Gly Asn Ala Phe Ala Thr Gly Ile Gly Asn Trp Ala Val Ala
            20                  25                  30
Thr Leu Trp Ala Gln Val Ser Pro Ile Ala Leu Gly Lys Leu Gly Trp
        35                  40                  45
Lys Phe Tyr Phe Val Phe Val Ala Trp Ser Lys Phe Ala Pro Gln Arg
    50                  55                  60
Arg Cys Asp Arg Arg Glu Thr Gly
65                  70
```

<210> 27019
<211> 80
<212> PRT
<213> A.fumigatus

```
<400> 27019
His Gly Val Ser Leu Arg Pro Lys Glu Gly Val Ile Val Val Lys Gln
1               5                   10                  15
Ala Asn Val Ser Cys Leu Asp Ile Cys Ile Thr Leu Pro Val Ile Tyr
            20                  25                  30
Phe Cys Phe Lys Glu Thr Lys Gln Lys Ser Leu Glu Glu Ile Asp Leu
        35                  40                  45
Leu Phe Gly Gly Arg Ala Leu Gly Thr Leu Pro Glu Asn Met Ala Asp
    50                  55                  60
Lys Gly Glu Glu Thr Gly Ile Ser Val Thr Asn Val Glu His Ser Val
65                  70                  75                  80
```

<210> 27020
<211> 294
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (271)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 27020
Tyr Glu Cys Ser Phe Gln Pro Arg Gly Glu Asp Pro Ala Val Glu Ser
1               5                   10                  15
Tyr Val Thr Thr Lys Asp Gly Val Ser Leu Pro Tyr Arg Leu Glu Gly
            20                  25                  30
Ser Thr Asp Pro Thr Ala Pro Val Ile Gly Leu Ser Asn Ser Ile Leu
```

```
        35                  40                  45
Val Asp Trp Ser Ile Trp Asp Gly Phe Val Asp Ala Phe Leu Ser Asn
    50                  55                  60
Pro Gln Asn Gln Asn Tyr Arg Ile Leu Arg Tyr Leu Thr Arg Gly Arg
65                  70                  75                  80
Arg Arg Asp Cys Gly Glu Thr Pro Ile Thr Val Asp Val Leu Ala Ser
                85                  90                  95
Asp Ile Ile Ala Leu Leu Asp Ala Leu Arg Ile Pro Gln Ala Thr Leu
            100                 105                 110
Ile Gly Val Ser Leu Gly Gly Val Thr Val Leu Asn Thr Ala Leu Leu
        115                 120                 125
Tyr Pro Ala Arg Val Thr Arg Phe Ile Ala Cys Asp Thr Asn Ser Ser
    130                 135                 140
Ala Pro Glu Ser Asn Arg Gln Ala Trp Thr Asp Arg His Ala Met Ala
145                 150                 155                 160
Ala Ser Glu Gly Ala Val Ser Pro Asp Thr Gln Glu Pro Ile Ile Gly
                165                 170                 175
Glu Lys Leu Ala Glu Ala Thr Thr Arg Arg Trp Phe Val Pro Ala Thr
            180                 185                 190
Tyr Glu Thr Gln Pro Glu Val Ala Ala Arg Val Lys Glu Val Val Arg
        195                 200                 205
Ala Asn Ser Leu Glu Gly Phe His Lys Gly Met Gln Ala Leu Cys Ala
    210                 215                 220
Tyr Asp Val Arg Glu Arg Met Ala Asp Ala Arg Val Pro Gly Leu Phe
225                 230                 235                 240
Val Ala Gly Glu Gly Asp Gly Leu Leu Pro Gln Thr Met Gln Lys Met
                245                 250                 255
Ala Ser Asp Leu Asn Gly Gly Ala Glu Leu Lys Ile Ile Pro Xaa Ala
            260                 265                 270
Gly His Leu Pro Met Val Glu Gln Pro Gln Ala Phe Thr Glu Val Val
        275                 280                 285
Asn Ser Phe Leu His Pro
    290
```

<210> 27021
<211> 179
<212> PRT
<213> A.fumigatus

```
<400> 27021
Ser Gln Cys Leu Lys Phe Lys Gly Ile Leu Gln Pro Tyr Ser Asp Thr
1               5                   10                  15
Pro Ile Met Arg Asp Arg Leu Ile Ile Thr Ala Met Ser Thr Met Ala
            20                  25                  30
Phe Ala Ser Ala Gln Ala Cys Asp Ile Val Pro Ala Val Thr His Thr
        35                  40                  45
Phe Tyr Gly Phe Pro Asp Asn Asp Pro Pro Gly Pro Ala Ile Ala Tyr
    50                  55                  60
Asp Cys Gly Arg Gly Leu Thr Ala Gly Gly Ile Gly Thr Phe Asp Asp
65                  70                  75                  80
Pro Leu Thr Phe Ala Ser Ala Pro Gly Glu Phe Thr Gln Cys Glu Val
                85                  90                  95
Ile Phe Ser Pro Tyr Leu His Lys Tyr Ile Arg Phe Glu Asp Leu Cys
            100                 105                 110
Ser Gln Cys Val Glu Glu Trp Thr Ser Ser Gly Ile Arg His Ile Asp
        115                 120                 125
```

```
Ile Trp Thr Gly Ser Asn Thr Thr Asp Gly Gly Gln Asp Gln Ile Asn
    130                 135                 140
Cys Glu Met Arg Leu Thr Pro Ala Gly Asp Leu Ser Val Val Arg Asn
145                 150                 155                 160
Pro Ser Met Asp Leu Asp Val Asp Gly Met Leu Pro Leu His Leu His
                165                 170                 175
Leu Pro Ser
```

<210> 27022
<211> 138
<212> PRT
<213> A.fumigatus

<400> 27022

```
Ser Val His Met Ala Ser Thr Asp Ser Val Pro Gly Arg Phe Asn Gly
1               5                   10                  15
Leu His Arg Arg Val Leu Gly Glu Leu Gly Leu Leu Thr Leu Trp His
            20                  25                  30
Ser Ser Leu Asp Val Lys Val Leu Cys Ala Gln Arg Phe Ile Arg Leu
        35                  40                  45
Phe Ala Tyr Gly Gly Ser Thr Leu Ile Leu Ala Ser Tyr Leu Ser Ala
    50                  55                  60
Leu Gly Ile Ser Asp Asp Arg Ile Gly Leu Phe Met Thr Leu Thr Leu
65                  70                  75                  80
Val Gly Asp Val Ala Ile Ser Phe Phe Leu Thr Leu Phe Ala Asp Gly
                85                  90                  95
Ile Gly Arg Arg Ala Val Leu Ala Leu Gly Ser Ala Leu Met Ala Cys
            100                 105                 110
Ser Gly Val Val Phe Gly Leu Phe Asp Asn Tyr Trp Ile Leu Leu Thr
        115                 120                 125
Ala Ala Val Leu Gly Val Ile Ser Pro Ser
    130                 135
```

<210> 27023
<211> 460
<212> PRT
<213> A.fumigatus

<400> 27023

```
Gln Arg Val Ser Phe Gln Pro Arg Gly Glu Asp Tyr Leu Val Thr Cys
1               5                   10                  15
Ser Lys Asp Lys Leu Ile Lys Ile Trp Asn Arg Gln Glu Leu Thr Pro
            20                  25                  30
Leu Asp Lys Asp Tyr Pro Ser Val His Lys Gly Val Gly Val Thr Tyr
        35                  40                  45
Pro Ser Tyr Ile Ile Asp Thr Ser Glu Ile Pro Ser Pro Val Leu Glu
    50                  55                  60
Ala Glu Leu Ala Lys Asn His Ile Arg Ser Leu Arg Pro Tyr Ser Leu
65                  70                  75                  80
Leu Met Thr Leu Asp Gly His Gly Ala Ala Val Asn Ala Ile Gln Met
                85                  90                  95
Asn Asp Asp Glu Ile Val Ser Ala Ser Gly Asp Arg Leu Ile Lys Ile
            100                 105                 110
Trp Asp Ile His Ser Gly Ala Cys Lys Lys Thr Leu Pro Gly His Glu
        115                 120                 125
```

```
Lys Gly Ile Ala Cys Val Gln Phe Asp Asn Arg Arg Ile Ile Ser Gly
    130                 135                 140
Ser Asn Asp Asp Thr Val Arg Ile Phe Asp His Ala Ser Gly Ala Glu
145                 150                 155                 160
Val Ala Cys Leu His Gly His Ala Asn Leu Val Arg Thr Val Gln Ala
                165                 170                 175
Gly Phe Gly Asp Pro Pro Gly Ala Glu Glu Ala Met Arg Leu Glu Ala
            180                 185                 190
Leu Ala Ile Glu Asn Glu Phe Trp Asp Ala Gln Arg Ser Gly Glu Gly
        195                 200                 205
Val Asp Leu Gly His Ser Ala Ile Arg Arg Ala Gly Tyr His Gln Asn
    210                 215                 220
Thr Ala Gly Ser Arg Asn Pro Arg Asp Ile Lys Ala Leu Gly Ala Lys
225                 230                 235                 240
Ile Pro Pro Gly Gly Gly Gly Ser Gln Trp Gly Arg Ile Val Ser Gly
                245                 250                 255
Ser Tyr Asp Glu Ser Met Ile Ile Trp Lys Lys Asp Lys Glu Gly Arg
            260                 265                 270
Trp Val Ile Ser Gln Arg Leu Arg Gln Ala Asp Ala Val Val Asn Ala
        275                 280                 285
Ser Gln Ala Gln Pro Ser Ser Ser Arg Thr Met Val Pro Pro Pro Arg
    290                 295                 300
Val Pro Gln Asn Gln Gly Pro Ala Leu Pro Gln Gly Gln Ala Ala Val
305                 310                 315                 320
Pro Pro Pro Gly Gln Ala Pro Ser Thr Gln His Leu Ser Pro Ile Asn
                325                 330                 335
Gln Ile Pro His Gln Ala Pro Ile Ile His Pro Ala Pro Gly Gln Gln
            340                 345                 350
Asn Ala Leu Trp Asn Ser Trp Asn Thr Ala Asn Ala Asn Ala Gln Val
        355                 360                 365
Gly His Ala Ala Asn Pro Ala Leu Leu Ile Gln Ala Gln His His Met
    370                 375                 380
Gln Asn Ala Gln Pro Met Pro Asn Pro Leu Pro Pro His His His His
385                 390                 395                 400
His Val Arg Met Asn Arg Ala Leu Asn Pro Gln Gly Gly His Pro Thr
                405                 410                 415
Ser Arg Ile Phe Lys Leu Gln Phe Asp Ala Arg Lys Ile Ile Cys Ala
            420                 425                 430
Ser Gln Asp Pro Arg Ile Val Gly Trp Asp Phe Val Gly Asp Asp Glu
        435                 440                 445
Glu Leu Asn Glu Ala Cys Gln Phe Phe Thr Gly Leu
    450                 455                 460
```

<210> 27024
<211> 249
<212> PRT
<213> A.fumigatus

<400> 27024

```
Ala Pro Ser Ala Ala Gln Thr Ile Arg Lys Glu Ile Met Glu Thr Ala
1               5                   10                  15
Ile Arg Trp Ser Arg Ser Ser Asn Thr Ala Glu Gln Arg Phe Leu Leu
            20                  25                  30
Val Asp Val Thr Gly Lys Thr Phe Arg Val Cys Arg Val Thr Gly Phe
        35                  40                  45
Asp Gly Lys Asn Leu Glu His Glu Val Leu Leu Thr His Thr Lys Val
```

```
    50                  55                  60
Pro Ala Phe Arg Ala Phe Asp Trp Ser Pro Val Asp Glu Ser Leu Val
65                  70                  75                  80
Ala Val Gly Gln Ser Ser Gly Asp Ala Thr Val Leu Arg Leu Ser Ser
                85                  90                  95
Glu Asn Ala Glu Ser Ile Ser Phe Pro Ile Arg His Gln Arg Tyr Cys
            100                 105                 110
Asn Ala Val Ser Phe Ser Arg His Gly Leu Leu Ala Ala Gly Leu Asp
        115                 120                 125
Arg Val Arg Asn Asp Phe Cys Leu Asn Ile Trp Asp Val Asn Gln Arg
    130                 135                 140
Met Ile Asn Lys Ser Ala Lys Gly Tyr Val Glu Pro Leu Arg Lys Leu
145                 150                 155                 160
Ala Ser Ser Glu Pro Ile Thr Ser Val Lys Phe Phe Arg Asp Gln Pro
                165                 170                 175
Asp Val Leu Val Thr Gly Val Lys Gly Gln Tyr Val Arg Ile Tyr Asp
            180                 185                 190
Leu Arg Gly Lys Cys Cys His Ser Leu Gln Arg Cys Cys Ala Leu Ser
        195                 200                 205
Ser Ser Phe Phe Trp Leu Glu Cys Ala Thr Asn Ser Leu Gln Lys Ala
    210                 215                 220
Leu Ala Ile His Leu Tyr Asn Phe Pro Arg Asp Ala Ser Thr Ile Leu
225                 230                 235                 240
Arg Ser Thr Arg Leu Met Arg Thr Ile
                245
```

<210> 27025
<211> 66
<212> PRT
<213> A.fumigatus

<400> 27025

```
Thr Phe Asp Pro Leu Val Val Lys Thr Ala Ala Gln Arg Ile Val Gly
1               5                   10                  15
Asp Cys Ser Phe Cys Asn Gly His Tyr Cys Ser Lys His Arg Met Leu
            20                  25                  30
Glu Ala His Ser Cys Thr Gly Leu Glu Asp Cys Lys Lys Glu Ser His
        35                  40                  45
Ala Arg Asn Ala Asp Lys Leu Asn Ser Glu Arg Thr Gln Val Ile Lys
    50                  55                  60
Gly Val
65
```

<210> 27026
<211> 125
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (86),(87)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27026

```
Pro Pro Lys Gly Val Pro Asn Pro Gly Leu Lys Ser Phe Val Ala Lys
1               5                   10                  15
```

```
Lys Pro Phe Asn Leu Cys Phe Lys Gly Ala Lys Arg Ala Val Leu Gly
            20                  25                  30
Phe Ser Phe Ser Arg Ala Glu Pro Pro Tyr Phe Glu Gln Thr Gln Lys
        35                  40                  45
Pro Leu Ile Gly Gly Cys Leu Ala Val Gly Ser His Pro Phe Ile Ser
    50                  55                  60
Lys Val Leu Lys Gln Val His Leu Trp Pro Pro Val Cys Leu Pro Pro
65                  70                  75                  80
Ala Lys Lys Gly Gln Xaa Xaa Lys Glu Ser Leu Phe Gln Lys Leu Ser
                85                  90                  95
Trp Ala Ser Ile Leu Lys Leu Lys Gln Asp Lys Ile Ser Leu Glu Thr
            100                 105                 110
Phe Arg Tyr His Leu Leu His Gln Tyr Pro Phe Lys Lys
        115                 120                 125
```

<210> 27027
<211> 502
<212> PRT
<213> A.fumigatus

<400> 27027

```
Arg Gly Ser Pro Leu Ser Val Val Lys Ile Ser Asp Ala Leu Tyr Pro
1               5                   10                  15
Val Asn Asp Ala Phe Leu Glu Asn Val Ala Ala Glu Val Val Tyr Asn
            20                  25                  30
Val Arg Arg Val Asn His His Pro Ser Leu Ala Leu Trp Ala Gly Gly
        35                  40                  45
Asn Glu Ile Glu Ser Leu Met Leu Pro Met Ala Arg Arg Ala Asp Pro
    50                  55                  60
Thr Gly Tyr Ser Lys Tyr Ile Gly Glu Tyr Glu Lys Leu Tyr Ile Ser
65                  70                  75                  80
Leu Ile Leu Pro Leu Val Tyr Glu Asn Thr Arg Ser Ile Thr Tyr Ser
                85                  90                  95
Pro Ser Ser Thr Thr Glu Gly Tyr Leu Tyr Val Asn Leu Ser Ala Pro
            100                 105                 110
Val Pro Met Ala Glu Arg Tyr Ser Asn Thr Thr Pro Gly Ser Tyr Tyr
        115                 120                 125
Gly Asp Thr Asp Tyr Tyr Asn Tyr Asp Thr Ser Val Ser Phe Asp Tyr
    130                 135                 140
Asn His Tyr Pro Val Gly Arg Phe Ala Asn Glu Phe Gly Phe His Ser
145                 150                 155                 160
Met Pro Ser Leu Gln Thr Trp Gln Gln Ala Val Asp Pro Glu Asp Phe
                165                 170                 175
Gln Phe Asn Ser Ser Val Val Val Leu Arg Asn His His Tyr Thr Ala
            180                 185                 190
Gly Gly Leu Phe Thr Asp Asn Phe Lys Asn Ser Ser Lys Gly Met Gly
        195                 200                 205
Glu Met Thr Met Gly Val Glu Ala Tyr Tyr Pro Ile Pro Ser Lys Ser
    210                 215                 220
Asp Ser Val Ala Asn Phe Ser Ala Trp Cys His Ala Thr Gln Leu Phe
225                 230                 235                 240
Gln Ala Asp Leu Tyr Lys Ser Gln Ile Gln Phe Tyr Arg Arg Gly Ser
                245                 250                 255
Gly Met Pro Glu Arg Gln Leu Gly Ser Leu Tyr Trp Gln Leu Glu Asp
            260                 265                 270
Ile Trp Gln Ala Pro Thr Trp Ala Gly Ile Glu Tyr Asp Gly Arg Trp
```

```
        275                 280                 285
Lys Val Leu His Tyr Val Ala Arg Asp Ile Tyr Gln Pro Ile Ile Val
    290                 295                 300
Ser Pro Phe Trp Asn Tyr Thr Thr Gly Arg Leu Glu Val Tyr Val Thr
305                 310                 315                 320
Ser Asp Leu Trp Glu Pro Ala Gln Gly Thr Val Asn Leu Thr Trp Val
                325                 330                 335
Asp Leu Ser Gly Lys Ser Ile Ala Asn Asn Ala Gly Thr Pro Glu Thr
            340                 345                 350
Val Ser Phe Thr Val Gly Ala Leu Asn Thr Thr Asn Ile Tyr Thr Thr
        355                 360                 365
Asn Ile Ser Glu Leu Ser Leu Pro Asp Leu Lys Asp Ser Ile Leu Ile
    370                 375                 380
Leu Ser Leu Ser Gly Glu Gly Arg Leu Pro Asn Ala Ser Ser Lys Lys
385                 390                 395                 400
Ala Phe Val His Gln Asn His Phe Thr Pro Val Phe Pro Lys Asp Leu
                405                 410                 415
Ser Leu Lys Asp Pro Lys Leu Glu Val Ser Tyr Ser Pro Glu Ser Arg
            420                 425                 430
Lys Phe Thr Val Gln Ala Thr Gly Gly Val Ser Leu Tyr Thr Trp Leu
        435                 440                 445
Asp Tyr Pro Ala Gly Ala Val Gly Tyr Phe Glu Ala Asn Ala Phe Val
    450                 455                 460
Leu Leu Pro Gly Val Pro Lys Glu Val Ser Phe Val Ala Gln Glu Gly
465                 470                 475                 480
Asn Val Thr Asp Asp Trp Leu Gln Arg Val Thr Val Gln Ser Leu Trp
                485                 490                 495
Asp Gln Lys Val Arg Asp
            500
```

<210> 27028
<211> 63
<212> PRT
<213> A.fumigatus

<400> 27028

```
Gly Gly Lys Pro Lys Phe Lys Ala Tyr Phe Ala Lys Ser Asn Arg Thr
1               5                   10                  15
Ala Phe Gln Gln Ile Ser Glu Trp Met Ala Ala Gly Lys Val Arg Thr
            20                  25                  30
Val Ile Asp Ser Val Phe Glu Phe Asp Asp Met Pro Arg Ala Ile Glu
        35                  40                  45
Arg Ile Lys Ser Gly Lys Thr Cys Gly Lys Ile Ile Val His Val
    50                  55                  60
```

<210> 27029
<211> 104
<212> PRT
<213> A.fumigatus

<400> 27029

```
Gly Pro Ile Pro Gln Met Gly Arg Phe Gly Ser Asn Asp Phe Val Lys
1               5                   10                  15
Arg Val Pro Ser Met Arg Gln Val Gly Gly Pro Met Ile Tyr Thr His
            20                  25                  30
Cys Glu Leu Gly Gly Ile Ala Ala Thr Gly Asn Gly Arg Gly Phe Gly
```

```
        35                  40                  45
Asp Lys Phe Pro Leu Val Leu Ala Ala Tyr Ser Ser Ser Pro Pro Lys
    50                  55                  60
Thr Ile Pro Gly Asp Trp Lys Thr Trp Thr Ile Trp Gln Asn Ser Asp
65                  70                  75                  80
Lys Tyr Lys His Gly Gly Asp Ser Asp Lys Phe Asn Gly Pro Met Thr
                85                  90                  95
Gln Leu Arg Lys Leu Ala Ser Gly
            100
```

<210> 27030
<211> 68
<212> PRT
<213> A.fumigatus

<400> 27030

```
Arg Gly Pro Leu Arg Val Thr Gly Ala Arg Arg Glu Asp Thr Val Ser
1               5                   10                  15
Asp Ile Ala Phe Phe Asp Leu Leu Gln Asp Leu Gly Pro Tyr Val Arg
            20                  25                  30
Met Ala Phe Phe Val Gly Leu Asp Gly Gly Gly Leu Gln Met Asp Asp
        35                  40                  45
Leu Arg Asp Ala Ala Asp Trp Cys His Phe Ser Thr Gly Tyr Gly Leu
    50                  55                  60
Val Arg Leu Arg
65
```

<210> 27031
<211> 107
<212> PRT
<213> A.fumigatus

<400> 27031

```
Arg Pro Ala Gly Gly Phe Ile Ala Asp Met Leu Tyr Lys Tyr Thr Gly
1               5                   10                  15
Ala Val Trp Ser Lys Lys Val Leu Leu Ser Phe Leu Gly Val Val Met
            20                  25                  30
Gly Ala Phe Gln Leu Ala Ile Gly Leu Ala Asp Pro Arg Ser Glu Ala
        35                  40                  45
Thr Met Phe Gly Leu Thr Ala Gly Leu Ala Phe Phe Leu Glu Ala Cys
    50                  55                  60
Asn Gly Thr Asn Phe Ala Val Val Pro His Val His Pro Phe Ala Asn
65                  70                  75                  80
Gly Lys Ile Pro Ala Phe Cys Pro Phe Pro Ala Ala Pro Leu Ala Asn
                85                  90                  95
Asp Leu Ser Leu Gln Val Pro Ser Pro Val Pro
            100                 105
```

<210> 27032
<211> 66
<212> PRT
<213> A.fumigatus

<400> 27032

```
Arg Ser Val Ser Ala Gly Ala Val Ser Gly Ala Val Gly Gly Met Gly
1               5                   10                  15
```

```
Asn Leu Gly Gly Ile Ile Phe Ala Ile Ile Phe Arg Tyr Asn Glu Thr
            20                  25                  30
His Tyr Ser Arg Ser Leu Trp Ile Ile Gly Val Ile Ser Ile Ala Ala
        35                  40                  45
Asn Leu Ala Val Ser Trp Ile Arg Pro Val Pro Lys Ser Gln Met Met
    50                  55                  60
Arg Gln
65
```

<210> 27033
<211> 90
<212> PRT
<213> A.fumigatus

<400> 27033

```
Pro Lys Gln Leu His Ser Lys Thr Asn Ile Ser Asp Ser Val Ser Arg
1               5                   10                  15
Thr Lys Ser Gly Glu Ser Ser Gln Phe Pro Gly Thr Val Thr Lys Leu
            20                  25                  30
Ser Thr Ser Leu Ala Asn Met Asp Met Ala Asn Leu Glu Tyr His Asp
        35                  40                  45
Lys Ile Arg Gln Asn Ser Met Tyr Met Lys Lys Leu Val Ile Asp Ile
    50                  55                  60
Leu Asp Val Asp Arg Gly Gln Ala Ile Pro Gly Ser Gly Arg Thr Cys
65                  70                  75                  80
Gly Gly Glu Gly Cys Ile Pro Arg Leu Ala
                85                  90
```

<210> 27034
<211> 72
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (44)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27034

```
Arg Arg Arg Gln Ser Glu Arg Arg Ser Val Asp Ser Ser Gly Arg Cys
1               5                   10                  15
Ala Asp Gly Leu Cys Leu Pro Val Ala Gly Gly Pro Ser Thr Ile Asn
            20                  25                  30
Asn Thr Thr Ser Gly Gln Ser Ala Leu Ala Phe Xaa Thr Ser Trp Phe
        35                  40                  45
Thr His Gly Ser Tyr Gln Ala His Ser Leu Val Cys Leu Leu Gly Tyr
    50                  55                  60
Lys Cys Leu Ser Ile Arg Thr Pro
65                  70
```

<210> 27035
<211> 71
<212> PRT
<213> A.fumigatus

<400> 27035

```
Thr Cys Leu Ser Tyr Arg Tyr Leu Leu Glu His Gly Leu Lys Ala Asp
1               5                  10                  15
Gly Arg Leu Asp Pro Glu Val Pro Glu Ser His Asn Asn Gly Gly Ser
            20                  25                  30
Phe Glu Thr Phe Phe Thr Glu Thr Asn Ser Gly Lys Tyr Val Pro Arg
        35                  40                  45
Ser Ile Phe Val Asp Leu Asp Pro Ser Val Arg His Asn Ser Asp Leu
    50                  55                  60
Ser Pro Gly Ser Asn Gly Arg
65                  70
```

<210> 27036
<211> 114
<212> PRT
<213> A.fumigatus

<400> 27036

```
Thr Val Pro Tyr Ala Asp Pro Arg Pro Pro Tyr His Arg Lys Gln Ala
1               5                  10                  15
Phe Asp Phe Gly Asp Gly Gly Gly Gly Asn Met Ala Asn Asn Leu Ser
            20                  25                  30
Ile Gly Cys Asp Cys Leu Gly Val Ile Lys Tyr Phe Asp Ala Ile Val
        35                  40                  45
Thr Gly Pro Asp Gly Ser Ala Lys Lys Leu Pro Asn Ala Ile Cys Leu
    50                  55                  60
His Glu Gln Asp Asn Gly Ile Gly Trp Lys His Ser Asn Trp Arg Thr
65                  70                  75                  80
Gly Arg Ala Val Val Thr Arg Asn Arg Glu Leu Val Val Gln Phe Ile
                85                  90                  95
Ile Thr Leu Ala Asn Tyr Glu Tyr Ile Phe Ala Tyr Lys Phe Asp Gln
            100                 105                 110
Ser Gly
```

<210> 27037
<211> 149
<212> PRT
<213> A.fumigatus

<400> 27037

```
Trp Leu Gln Leu Arg Cys Cys Ile Leu Asn Ala Ser Ser Phe Asn Gln
1               5                  10                  15
Cys Ala Tyr His His Ser Thr Pro Pro Asp Met Ala Pro His Pro Leu
            20                  25                  30
Ala Ile Leu Ser Glu Glu Glu Thr Asn Leu Ala Arg Asp Val Val Ile
        35                  40                  45
Ala Glu His Pro Asn Thr Val Ile Ser Phe Arg Glu Ile Tyr Leu Leu
    50                  55                  60
Glu Pro Pro Lys Asp Gln Leu Arg Glu Phe Leu Ala Leu Glu His Ala
65                  70                  75                  80
Gly Arg Leu Ser Pro Thr Thr Pro Arg Pro Pro Arg Leu Ala Thr Cys
                85                  90                  95
Gln Tyr Asp Val Ile Gly Ala Asp His Ile Pro Ser Phe His Glu Ser
            100                 105                 110
Val Val Asp Val Val Ala Arg Lys Arg Val Lys His His Ile Val Gly
        115                 120                 125
```

```
Lys Gln His His Ala Pro Leu Thr Met Cys Val Glu Lys His Val Ser
    130                 135                 140
Gln Arg His Thr Cys
145
```

<210> 27038
<211> 210
<212> PRT
<213> A.fumigatus

<400> 27038

```
Trp Arg Tyr Cys Arg Ser Glu Phe Glu Asn Leu Val Glu Arg Cys Phe
1               5                  10                  15
Ser Ser Pro Leu Phe Lys Lys Ala Leu Glu Asp Phe Asp Leu Pro Pro
            20                  25                  30
Gly Phe Glu Val Thr Ile Glu Pro Trp Pro Tyr Gly Gly Leu Asp Asn
        35                  40                  45
Thr Glu Glu Asn Arg Arg Tyr Phe Gln Gly Leu Cys Phe Ala Thr Asp
    50                  55                  60
Lys Ser Lys Asn Asn Pro Asp Ala Asn Phe Tyr Ser Tyr Pro Leu Pro
65                  70                  75                  80
Leu Ile Pro Val Met Asp Ala Leu Thr Gln Lys Ile Ile Arg Val Asp
                85                  90                  95
Arg Pro Ala Thr Gly Gly Lys Gly Asp Gly Leu Thr Glu Gln Thr Phe
            100                 105                 110
Lys Arg Asp Ile Ile Gly His Cys Lys Ala Ser Asp Tyr Val Pro Glu
        115                 120                 125
Leu Leu Pro Asp Gly Thr Arg Arg Asp Leu Lys Pro Leu Asn Val Val
    130                 135                 140
Gln Pro Glu Gly Pro Ser Phe Arg Ile Thr Asn Glu Ser Leu Val Glu
145                 150                 155                 160
Trp Gln Lys Trp Ser Phe Arg Val Gly Phe Asn Pro Arg Glu Gly Ala
                165                 170                 175
Thr Ile His Asp Val Trp Tyr Asp Gly Arg Ser Val Met His Arg Leu
            180                 185                 190
Ser Ile Ser Glu Met Val Glu Leu Phe Pro Glu Glu Ser Leu Gly Gln
        195                 200                 205
Phe Asp
    210
```

<210> 27039
<211> 87
<212> PRT
<213> A.fumigatus

<400> 27039

```
Ile Met Arg Leu Ser His Val Leu Leu Gly Thr Ala Ala Ala Ala Gly
1               5                  10                  15
Val Leu Ala Ser Pro Thr Pro Asn Asp Tyr Val Val His Glu Arg Arg
            20                  25                  30
Ala Val Leu Pro Arg Ser Trp Thr Glu Glu Lys Arg Leu Asp Lys Ala
        35                  40                  45
Ser Ile Leu Pro Met Arg Ile Gly Leu Thr Gln Ser Asn Leu Asp Arg
    50                  55                  60
Gly His Asp Leu Leu Met Glu Met Tyr Val Thr Cys Leu Asn Leu Gly
65                  70                  75                  80
```

```
Val Phe Val Val Asp Glu Arg
                85

<210> 27040
<211> 63
<212> PRT
<213> A.fumigatus

<400> 27040
Leu His Ala Ser Leu Ile Thr Ala Val Pro Val Val Ser Lys Asn Glu
1               5                   10                  15
Arg Thr Gly Tyr Asp Lys Leu Gln Leu Ala Ser Tyr Gly Leu Ser Glu
            20                  25                  30
His Lys Asp Lys Lys Val Pro Arg Thr Ser Ile Ser Ser Ile Val Glu
        35                  40                  45
Val Ile Val His Ile Ser Ser Ile Pro Arg Cys Gly Thr Thr Pro
    50                  55                  60

<210> 27041
<211> 100
<212> PRT
<213> A.fumigatus

<400> 27041
Gly Ser Arg Gly Cys Leu Gln Ser Arg Gly Ser Gln Pro Val Leu Phe
1               5                   10                  15
Asn Ile Cys Thr Val Cys Gln Leu Leu Leu Cys Pro Val Met Thr Asn
            20                  25                  30
Pro Ser Arg Gln Ile Pro Gln Gly Thr His Pro Ile Leu Lys Ala Val
        35                  40                  45
Asp Gly Ala Gln Ala Pro Thr Ser Val Thr Asn Ala Gly Pro Glu Ser
    50                  55                  60
Asp Leu Asp Phe Gln Ile Ser Tyr Pro Ile Ile Trp Pro Gln Asn Ser
65                  70                  75                  80
Ile Leu Phe Gln Thr Asp Asp Pro Ser Tyr Thr Asp Gly Ala Ser Arg
                85                  90                  95
Ile Arg Gly Glu
            100

<210> 27042
<211> 89
<212> PRT
<213> A.fumigatus

<400> 27042
Val Gly Cys Val Ser Phe Tyr Gly Phe Pro Ser His Tyr Tyr Lys Glu
1               5                   10                  15
Lys Phe Pro Asn Val Gly Ser Lys Glu Ile Ala Asn Lys Val Leu Ser
            20                  25                  30
Ala Leu Lys Glu Ala Gly Ile Lys Ala Glu Gly Val Lys Arg Gly Leu
        35                  40                  45
Asp His Gly Val Trp Ala Ser Phe Lys Cys Gly Lys Cys Lys Cys Leu
    50                  55                  60
Asn Met Ser Val Ala Pro Ile Gly Gly Gln Ile Val Met Ile Gly Met
65                  70                  75                  80
Gln His Leu Thr Gln Thr Pro Thr Pro
```

85

<210> 27043
<211> 174
<212> PRT
<213> A.fumigatus

<400> 27043
Val Gln Val Pro Gln His Val Arg Cys Thr Asn Arg Trp Ala Asn Ser
1 5 10 15
Asn Asp Trp Asp Ala Ala Phe Asp Pro Asp Ser Asn Pro Leu Asn Val
20 25 30
Pro Ile Val Gln Val Ser Leu Phe Asn Thr Glu Asp Pro Ala Gln His
35 40 45
Tyr Arg Leu Gly Gln Ala Val Ser Lys Leu Arg Asp Asp Asn Ile Leu
50 55 60
Ile Ile Val Ser Gly Met Ala Val His Asn Leu Arg Asp Leu Gln Phe
65 70 75 80
Thr Trp Gly Asn Pro Lys Pro Met Pro Tyr Thr Thr Ser Phe Asp Glu
85 90 95
Ala Leu Lys Asp Ala Val Thr Lys Pro Pro Ala Glu Arg Glu Gln Ala
100 105 110
Met Ser Asp Leu Leu Lys Arg Pro Asp Ala Arg Gln Ala His Pro Ser
115 120 125
Phe Asp His Leu Leu Pro Ile His Ile Gly Ala Gly Ala Ala Gly Asp
130 135 140
Asp Leu Gly Lys Arg Leu Trp Thr Leu Lys Glu Gly Ser Met Ser Trp
145 150 155 160
Ala Gln Tyr Arg Phe Gly Asp Val Gly Asn Asn Ser Ala Leu
165 170

<210> 27044
<211> 60
<212> PRT
<213> A.fumigatus

<400> 27044
Leu Tyr Asp Phe Ala Asn His Arg Ser Phe Leu Gln Arg Gly Tyr Pro
1 5 10 15
Thr Met Lys Lys His Asn Pro Gln Thr Pro Ile Leu Ile Arg Glu Ala
20 25 30
Ala Gly Thr Leu His Arg Val Tyr Ala Arg Tyr Gly Thr Thr Asp Ser
35 40 45
His Asn Arg Thr Ser Gln Trp Lys Ser Asn Gly Cys
50 55 60

<210> 27045
<211> 143
<212> PRT
<213> A.fumigatus

<400> 27045
Leu Val Arg Thr Gly Gly Gly Ser Lys Thr Trp Thr Ile Met Tyr Asp
1 5 10 15
Thr Arg Leu Leu Lys Glu Asp Ser Asp Asp Ser Thr Ser Thr Ser Leu
20 25 30

```
Thr Val Asn Pro Thr Leu Val Ala Thr Ile Thr Lys Asp Ser Ala Asn
        35                  40                  45
Pro Thr Ala Thr Ile Pro Ala Glu Ile Leu Thr Ala Pro Ser Ala Thr
    50                  55                  60
Phe Thr Lys His Pro Gly Val Ala Gln Asp Met Pro Ser Val Asn Val
65                  70                  75                  80
Ser Ser Ser Ala Ala Ala Ala Ala Ser Lys Ser Ala Gly Thr Ser Ser
                85                  90                  95
Ala Ser Ala Ser Ala Ser Ser Ser Thr Pro Ser Ala Ser Pro Ser Gly
            100                 105                 110
Ser Ala Gly Ser Gly Ala Ser Leu Ser Arg Ser Val Gly Ala Ala Gly
        115                 120                 125
Pro Ile Ile Gly Ala Val Phe Ile Pro Leu Val Met Ser Trp Phe
    130                 135                 140

<210> 27046
<211> 628
<212> PRT
<213> A.fumigatus

<400> 27046
Asn Arg Asn Gly Pro Arg Met Leu Thr Ala Asn Arg His Ala Trp Leu
1               5                   10                  15
Gln Thr Thr Gly Lys Ile His Tyr Glu Pro Asp Ser Val Phe Ser Leu
            20                  25                  30
Leu Ala Gln Arg Ser Gly Ser Glu Pro Leu Asp Lys Asp Ala Phe Leu
        35                  40                  45
Ala Pro Leu Leu Asn Val Lys Asp Leu Ala Gln Gly Asp Val Leu Pro
    50                  55                  60
His Leu Leu Lys Thr Arg Ser Thr Ile His Pro Lys Ser Phe Leu His
65                  70                  75                  80
Val Asp Ser Arg Phe Val Trp Leu Gly Tyr Trp Ser Gly Ala Leu Ala
                85                  90                  95
Arg Ile Lys Ile Glu Gly Arg Ile Ser Phe Tyr Phe Gly Pro Gly Glu
            100                 105                 110
Glu Asn Pro Lys Tyr Gly Ile Gln Phe Glu Pro Asp Thr Leu Lys Gln
        115                 120                 125
Arg Pro Gly Leu Leu Asn Pro Thr Ile Gly Leu Tyr Gln Leu Arg Ala
    130                 135                 140
Gln Lys Ser Val Tyr Lys Phe Leu Val Ser Cys Ala Ser Arg Val Ser
145                 150                 155                 160
Gln Pro Leu Met Leu Gly Asp His Pro Ser Asp Ser Thr Asp Gly Gly
                165                 170                 175
Thr Ser Leu Ser Leu Leu Ser Arg Ser Ala Arg Met Asp Tyr Arg Arg
            180                 185                 190
Pro Asp Cys Ile Asp Trp Ser Tyr Leu Gln Ser Val Leu Glu Ala Ser
        195                 200                 205
Ala Asp Glu Ala Leu Asp Asp Leu Trp Arg Leu Arg Thr Asp Ala Glu
    210                 215                 220
Phe Trp Leu Leu Arg Met Met Glu Met Arg Lys Asn Thr Ser Thr Leu
225                 230                 235                 240
Leu Asp Cys Ala Phe Asn Arg Ile Asp Thr Phe Val Cys Leu Ser Glu
                245                 250                 255
Arg Ile Lys Glu Ile Arg Leu Asn Ser Gly Arg Ile Glu Pro Ser Ile
            260                 265                 270
Pro Cys Asp Asn Ile Asp Leu Lys Asn Val Ile Ser Leu Asp Arg Val
```

```
        275                 280                 285
Phe Arg Ser Ile Leu Asn Arg Ala Leu Glu Ser Val Gln Asn Met Ala
    290                 295                 300
Arg Ser Ser Glu Trp Thr Leu Asn Gly Thr Lys Thr Phe Cys Tyr Leu
305                 310                 315                 320
Phe Asp Met Ile Lys Glu Asn Asp Pro Thr Leu Arg Val Ile Gly Val
                325                 330                 335
Arg Thr Val Leu Arg Thr Ile Glu Arg Glu Met Ser Lys Ala Asn Ile
            340                 345                 350
Gly Asp Leu Met Pro Phe Pro Ile Ala Gln Ala Leu Asn Asp Met Ser
        355                 360                 365
Val Val Ala Val Cys Met Gln Glu Thr Ser Asn His Tyr Gln Tyr Ile
    370                 375                 380
Arg Ser Leu Pro Thr Glu Tyr Ala Ser Val Ala Asn Asp Ala Glu Thr
385                 390                 395                 400
Glu Trp Asn Glu Arg Glu Arg Pro Trp Ile Leu Leu Val Glu Ser Thr
                405                 410                 415
Leu Gln Asn Leu Gly Arg Lys Val Asn Lys Leu Asn Ile Ser Ile Ser
            420                 425                 430
Asp Glu Ala Lys Ser Leu Glu Glu Arg His Arg Asn Phe Trp Asn Thr
        435                 440                 445
Ile Asp Lys Cys Met Arg Asn Asn Val Thr Pro Ser His Leu Val Ala
    450                 455                 460
Ile Ile Gln Arg Glu Ala Pro Ile Pro Ala Ala Pro Thr Phe Gly Ser
465                 470                 475                 480
Asp Ala Ser Ser Ile Ala Trp Ser Thr Gln Arg Thr Asp Leu Glu Val
                485                 490                 495
Thr Glu Thr Gln Lys Lys Arg Ala Arg Gly Arg Lys Val Gln Ser His
            500                 505                 510
Thr Ser Arg Ser Leu Arg Arg Ala Val Thr Ala Ser Thr Val Val Glu
        515                 520                 525
Pro Pro Ser Leu Pro Leu Val Arg Ile Gln Lys Glu Glu Asp Lys Asp
    530                 535                 540
Phe Trp Asn Arg Leu Leu Asn Asp Lys Gly Gln Thr Thr Phe Arg Ser
545                 550                 555                 560
Trp Lys Ser Phe Leu Leu Ser Ile Gly Phe Ser Leu Thr Pro Gln Leu
                565                 570                 575
Gly Ser Gly Arg Arg Phe Glu Trp Lys Thr His Glu Gly Arg Cys His
            580                 585                 590
Ala Ile Val Phe His Glu Pro His Gly His Asn Gly Val Asp Leu Pro
        595                 600                 605
Leu Tyr Arg Gly Arg Glu Leu Trp Ala Arg Leu His His Gly Ala Gly
    610                 615                 620
Arg Ala Ala His
625
```

<210> 27047
<211> 94
<212> PRT
<213> A.fumigatus

<400> 27047

```
Gly Leu Tyr Ser His Glu Thr Phe Cys Val Trp His Thr Val Ile Arg
1               5                   10                  15
Gln Leu Trp Gly Glu Gly Arg Tyr Arg Asp Met Ala Gly Leu Cys Gln
            20                  25                  30
```

```
Arg Leu Cys Trp Arg Leu Ala Leu Leu Gly Asp Glu Tyr Asp Tyr Ser
        35                  40                  45
Gln Gln Leu Gln Leu Asn Phe Asp Ala Ser Leu Thr Phe Tyr Leu Leu
    50                  55                  60
Gly Gln Ala Gln Val Ala Gln Gly Asn Leu Arg Asp Ala Arg Thr Ala
65                  70                  75                  80
Phe Glu Gly Ser Val Met Leu Arg Lys Ser Ala Cys Pro Gln
                85                  90
```

<210> 27048
<211> 382
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (4)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27048

```
Phe Leu Thr Xaa Ala Ser Leu Arg Phe Arg Lys Asp Ile Leu Lys Met
1               5                   10                  15
Asn Pro Ser Arg Phe Glu Ile Gly Pro Val Tyr Asn Thr Asn Pro Arg
            20                  25                  30
Asp Arg Lys Thr Leu Arg Gly Gly Gln Met Lys Pro Ile Ser Lys Glu
        35                  40                  45
Leu Val Phe Asp Ile Asp Leu Thr Asp Tyr Asp Asp Ile Arg Ser Cys
    50                  55                  60
Cys Thr Lys Ala Asn Ile Cys Arg Lys Cys Trp Thr Phe Val Thr Met
65                  70                  75                  80
Ala Met Lys Val Val Asp Thr Ala Leu Arg Glu Asp Phe Gly Phe Glu
                85                  90                  95
His Ile Leu Trp Val Tyr Ser Gly Arg Arg Gly Ala His Ala Trp Val
            100                 105                 110
Cys Asp Ala Arg Ala Arg Cys Leu Pro Asp Asp Arg Arg Arg Ala Ile
        115                 120                 125
Ala Gly Tyr Leu Asp Val Val Arg Gly Gly Ser Gln Ser Gly Lys Arg
    130                 135                 140
Val Asn Ile Lys Arg Pro Leu His Pro His Met Ser Arg Ser Leu Glu
145                 150                 155                 160
Ile Leu Lys Pro Phe Phe Ala Gln Thr Thr Leu Ile Asp Gln Asp Thr
                165                 170                 175
Phe Ala Ser Ser Glu Gln Ala Glu Arg Leu Leu Ser Leu Leu Pro Asp
            180                 185                 190
Lys Thr Leu Asn Asp Ala Leu Arg Lys Lys Trp Asp Ser Ser Pro Gly
        195                 200                 205
Arg Ser Ser Thr Asn Lys Trp Ala Asp Ile Asp Ala Leu Ala Lys Thr
    210                 215                 220
Gly Lys Ser Ser Thr Leu Asn Pro Thr Thr Leu Arg Asp Ala Lys Gln
225                 230                 235                 240
Asp Ile Val Leu Glu Tyr Thr Tyr Pro Arg Leu Asp Ala Glu Val Ser
                245                 250                 255
Lys Lys Met Ile His Leu Leu Lys Ser Pro Phe Val Ile His Pro Gly
            260                 265                 270
Thr Gly Arg Val Cys Val Pro Ile Asp Ala Lys Lys Ala Asp Gly Phe
        275                 280                 285
```

```
Asp Pro Leu Ser Val Pro Thr Val Thr Gln Leu Leu Ala Glu Ile Asp
    290                 295                 300
Ala Trp Asp Ala Glu His Ser Ser Gly Asn Ala Gly Ala Glu Ala Gly
305                 310                 315                 320
Gln Asp Glu Ser His Thr Pro Ser Asp Ser Gln Gly Ser Arg Lys Leu
                325                 330                 335
Gln Asp Tyr Glu Lys Thr Ser Leu Lys Pro Tyr Ile Asp Tyr Phe Arg
            340                 345                 350
Ser Phe Ile Ala Ser Leu Asn Lys Glu Glu Arg Val Gly Lys Arg Gly
        355                 360                 365
Asn Glu Asp Pro Asp Glu Val Lys Ser Glu Ser Met Glu Phe
    370                 375                 380

<210> 27049
<211> 157
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (40),(57),(74)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27049
Ser Arg Pro Leu Phe Gly Met Phe Cys Ser Arg Ser Arg Arg Cys Ser
1               5                   10                  15
Tyr Phe Phe Lys Pro Asp Phe Ala His Ala Gln Thr Ala Glu Gln Asp
            20                  25                  30
Trp Thr Arg Gln Ser Phe Tyr Xaa Val Leu Pro Phe Glu Asn Leu Asp
        35                  40                  45
Gly Asp Leu Gln Thr Phe Phe Glu Xaa Tyr Phe Glu Glu Arg Gly Ile
    50                  55                  60
Asn Ala Glu Leu Ala Asn Met Ile Pro Xaa Tyr Ile Gln Val Lys Glu
65                  70                  75                  80
Gln Lys Glu Tyr Val Arg Trp Leu Glu Ser Lys Phe Asn His Cys His
                85                  90                  95
Tyr Ala Phe Ala Arg Val Ala Asn Ile Ala Gly Arg Arg Arg Gln Glu
            100                 105                 110
Leu Arg Arg Arg Leu Asn Thr Glu Ile Phe Ser Ala Lys Lys Cys Ser
        115                 120                 125
Glu Val Leu Thr Arg Ser Ser Arg Ala Leu Tyr Gln Asn Pro Leu Lys
    130                 135                 140
Asn His Asn Tyr Leu Ser Ala Ile Pro Pro Leu Tyr His
145                 150                 155

<210> 27050
<211> 317
<212> PRT
<213> A.fumigatus

<400> 27050
Arg Arg Lys Tyr Gly Ser Ala Asn Val Trp Arg Tyr Cys Cys Glu Val
1               5                   10                  15
Phe Asp Tyr Leu Ala Leu Gly Ala Leu Val Leu Gly Ala Ser Ser Glu
            20                  25                  30
Leu Glu Pro Thr Gly Ser Thr Met Asn Asp Thr Thr Gln Ser Thr Met
```

```
        35                  40                  45
Pro Ile Asp Gly Ala Glu Leu Glu Thr Glu Val Leu Asn Ser Arg Gly
    50                  55                  60
Glu Val Thr Met Ser Thr Tyr Arg Arg Arg Gln Arg Ser Ser Ser Asp
65                  70                  75                  80
Ala Ser Thr Asp Ser Arg Asn Leu Ser Pro Pro Arg Asp Ile Ser Ala
                85                  90                  95
Val Pro Gly Gln Ala Pro Ala Arg Ser Gly Ala Pro Gly Thr Gly Ala
            100                 105                 110
Ser Gly Asn Gly Ala Gly Ser Asn Thr Ser Arg Thr Gly Ala Val Leu
        115                 120                 125
Cys Val His Gly Gly Leu Ser Pro Leu Ile Asp Thr Val Asp Lys Ile
    130                 135                 140
Arg Leu Ile Asp Arg Lys Gln Glu Val Pro His Glu Gly Ala Met Cys
145                 150                 155                 160
Asp Leu Leu Trp Ser Asp Pro Asp Glu Ile Glu Gly Trp Gly Leu Ser
                165                 170                 175
Pro Arg Gly Ala Gly Phe Leu Phe Gly Gly Asp Ile Val Lys Gln Phe
            180                 185                 190
Asn Tyr Lys Asn Asp Leu Ser Leu Val Ala Arg Ala His Gln Leu Val
        195                 200                 205
Met Glu Gly Tyr Lys Glu Met Phe Asp Gly Gly Ile Val Thr Val Trp
    210                 215                 220
Ser Ala Pro Asn Tyr Cys Tyr Arg Cys Gly Asn Val Ala Ala Ile Leu
225                 230                 235                 240
Glu Leu Gly Glu Asp Thr Ser Asn Gly Gly Thr Val Ala Arg Ser Asn
                245                 250                 255
Gly Asp Tyr Gly Arg Ser Asn Gly Val Ser Gly Val Asp Ser Gly Gly
            260                 265                 270
Ser Arg Val Val Ser Pro Gly Arg Arg Tyr Arg Val Phe Glu Ala Ala
        275                 280                 285
Ala Gln Asp Thr Arg Gly Met Pro Ala Lys Lys Pro Val Ala Asp Tyr
    290                 295                 300
Phe Leu Val Arg Phe Ser Pro Phe Pro Phe Glu Thr Arg
305                 310                 315
```

<210> 27051
<211> 81
<212> PRT
<213> A.fumigatus

<400> 27051

```
Ala Lys Met Gly Ser Leu Pro Glu Pro Ala Tyr Leu Tyr Lys Asn Val
1               5                   10                  15
Val His Asp Pro Thr Val Pro Tyr Val Gln Ser Ala Glu Gly Met Tyr
            20                  25                  30
Ile His Leu Asp Asn Gly Gln Arg Ile Leu Asp Ala Thr Cys Gly Ala
        35                  40                  45
Ala Val Ser Ala Ile Gly His Asp Val Asp Arg Val Lys Gln Ala Ile
    50                  55                  60
Ile Ser Gln Leu Asp Gln Val Glu Tyr Ser His Pro Gly Phe Phe Pro
65                  70                  75                  80
Asn
```

<210> 27052

<211> 79
<212> PRT
<213> A.fumigatus

<400> 27052

```
Asn Leu Leu Arg Pro Cys Leu Cys Ile Pro Ala Cys Pro Pro Ser Val
1               5                  10                  15
Asn Gln Tyr Ile Leu Gln Asn Ser Ile Thr Phe Phe Ser Ala Arg Gly
            20                  25                  30
Tyr Leu His Asp Ser Leu Leu Ile Leu Asp Gln Leu Leu Leu Pro His
        35                  40                  45
Leu Ser Asp Ile Phe Glu Ile Phe Thr Leu Gln Val Pro Asp Leu Leu
    50                  55                  60
Pro Pro Gly Lys Ile Thr Ser Pro Leu Pro Ser Pro Pro Gln Phe
65                  70                  75
```

<210> 27053
<211> 255
<212> PRT
<213> A.fumigatus

<400> 27053

```
Ser Met Glu Ser Val Glu Arg Lys Ser Glu Ser Ser Tyr Leu Gly Met
1               5                  10                  15
Arg Asn Met Gln Pro Glu Gln Arg Leu Ser Leu Asp Pro Pro Arg Leu
            20                  25                  30
Arg Ser Thr Pro Gln Asp Glu Leu His Asp Leu Leu Cys Val Gly Phe
        35                  40                  45
Gly Pro Ala Ser Leu Ala Ile Ala Ile Ala Leu His Asp Ala Leu Asp
    50                  55                  60
Pro Arg Leu Asn Lys Ser Ala Ser Asn Ile His Ala Gln Pro Lys Ile
65                  70                  75                  80
Cys Phe Leu Glu Arg Gln Lys Gln Phe Ala Trp His Ser Gly Met Leu
                85                  90                  95
Val Pro Gly Ser Lys Met Gln Ile Ser Phe Ile Lys Asp Leu Ala Thr
            100                 105                 110
Leu Arg Asp Pro Arg Ser Ser Phe Thr Phe Leu Asn Tyr Leu His Gln
        115                 120                 125
Lys Gly Arg Leu Ile His Phe Thr Asn Leu Ser Thr Phe Leu Pro Ala
    130                 135                 140
Arg Leu Glu Phe Glu Asp Tyr Met Arg Trp Cys Ala Gln Gln Phe Ser
145                 150                 155                 160
Asp Val Val Ala Tyr Gly Glu Glu Val Val Glu Val Ile Pro Gly Lys
                165                 170                 175
Ser Asp Pro Ser Ser Ser Val Val Asp Phe Phe Thr Val Arg Ser Arg
            180                 185                 190
Asn Val Glu Thr Gly Glu Ile Ser Ala Arg Arg Thr Arg Lys Val Val
        195                 200                 205
Ile Ala Ile Gly Gly Thr Ala Lys Met Pro Ser Gly Leu Pro Gln Asp
    210                 215                 220
Pro Arg Ile Ile His Ser Ser Lys Tyr Cys Thr Thr Leu Pro Ala Leu
225                 230                 235                 240
Leu Lys Asp Lys Ser Lys Pro Tyr Asn Ile Ala Val Leu Gly Ser
                245                 250                 255
```

<210> 27054

<211> 222
<212> PRT
<213> A.fumigatus

<400> 27054
Ser Ala Ala Gln Asn Gly Asn Val Val Arg Leu Arg Leu Val Leu Gln
1 5 10 15
Gln Gly Arg Gln Arg Cys Ala Val Leu Gly Arg Val Tyr Asn Pro Gly
20 25 30
Ile Leu Gly Gln Ser Gly Trp His Leu Cys Ser Ala Ser Asp Cys Asn
35 40 45
Asn Asp Leu Ala Gly Pro Pro Gly Thr Asp Leu Ala Arg Leu Asn Val
50 55 60
Ala Arg Pro Asn Ser Glu Glu Val Asn His Arg Ala Ala Gly Ile Arg
65 70 75 80
Leu Pro Gly Asn His Phe Asp His Leu Phe Pro Val Ser His Tyr Ile
85 90 95
Arg Lys Leu Leu Arg Thr Pro Thr His Val Val Leu Glu Leu Gln Pro
100 105 110
Ser Arg Gln Glu Gly Ala Glu Val Ser Glu Val Asn Gln Thr Ala Leu
115 120 125
Leu Val Glu Val Val Glu Lys Ser Lys Thr Ala Ala Gly Val Pro Glu
130 135 140
Ser Cys Glu Ile Leu Asp Glu Gly Asp Leu His Leu Gly Thr Gly Asp
145 150 155 160
Gln His Thr Arg Val Pro Arg Lys Leu Leu Leu Ala Leu Gln Glu Ala
165 170 175
Asp Leu Arg Leu Cys Met Asp Ile Gly Ser Gly Leu Val Gln Ser Arg
180 185 190
Val Gln Ser Val Met Gln Ser Asn Gly Asn Gly Gln Gly Ser Gly Ser
195 200 205
Lys Pro Asn Thr Gln Lys Ile Met Lys Leu Ile Leu Gly Cys
210 215 220

<210> 27055
<211> 216
<212> PRT
<213> A.fumigatus

<400> 27055
Pro Leu Ser Thr Val Asn Ser Gln Ser Ala Gln Ser Ala Ala Thr His
1 5 10 15
Ala Phe Leu Lys Ser Gln Pro Ser Ser Ser Ser Leu Ser Ser Ala Ala
20 25 30
Ala Ala Ala Ala Leu Arg Ser Leu Thr Pro Thr Pro Thr Pro Val Glu
35 40 45
Asn Val Gln Thr Lys Arg Met Ile Gln Arg Arg Ala Ser Val Thr Ser
50 55 60
Gln Thr Ser Met Thr Gly Ser Leu Arg Pro Ala Ser Arg Ala Ala Leu
65 70 75 80
Arg Arg Ser Asn Ser Ser Ser Ser Met Ser Asn Arg Thr Phe Arg Glu
85 90 95
Gln Ser Pro Arg Arg Pro Ala Thr Ser Asn Gly Gln Val Asp Val Val
100 105 110
Pro Pro Leu Pro Ser Met Pro Pro Gly Phe Gly Gly Arg Lys Asn Pro
115 120 125

```
Gly Arg Arg Ser Val Ser Leu Glu Pro Ser Val Arg Phe Asn Ser Ser
    130                 135                 140
Pro Thr Asn Lys Ala Leu Gly Arg Gly Val Ser Val Asp Arg Ser Leu
145                 150                 155                 160
Arg Ser Pro Ser Ser Gln Ser Pro Val Gln Ser Lys Pro Leu Ser Thr
                165                 170                 175
Val Pro Glu Leu Glu Arg Thr Ser Ser Arg Asn Ser Ile Asn Phe Ser
            180                 185                 190
Tyr Pro Met Asn Gly Arg Pro Ile Ser Pro Thr Val Ser Arg Ser Phe
        195                 200                 205
Pro Thr Gln His Glu Pro Leu Gly
    210                 215
```

<210> 27056
<211> 60
<212> PRT
<213> A.fumigatus

<400> 27056

```
Ile His Arg Gly Leu Arg Gln Thr Gln Val Phe Ile Gly Ser Leu Ile
1               5                   10                  15
Phe Lys Val Pro Thr Ser Cys Lys Leu Thr Asp Ala Thr Ser Gly Ile
            20                  25                  30
Asp Thr Pro Thr Pro Ala Tyr Ile Ile Asp Ala Leu Gln Lys Thr Ile
        35                  40                  45
Asn Pro Val Ala Thr Leu Gln Tyr Val Arg Arg Ala
    50                  55                  60
```

<210> 27057
<211> 153
<212> PRT
<213> A.fumigatus

<400> 27057

```
Gln Gly Val Gly Val Pro Thr Leu Leu Thr Pro Ser Leu Pro Ile Leu
1               5                   10                  15
Thr Ser Ser Phe Leu Leu Pro Leu Gln Gly Arg Pro His Gly Arg Leu
            20                  25                  30
Leu Arg Thr Pro Arg Ser Pro Pro Arg Ala Leu Thr Thr Thr Ser Thr
        35                  40                  45
Thr Thr Phe Glu Ala Pro Thr Thr Leu Thr Thr Ala Ser Ser Thr Ser
    50                  55                  60
Glu Gly Pro Thr Thr Asn His Lys His Thr Thr Thr Arg Thr Pro Tyr
65                  70                  75                  80
Thr Ser Thr Tyr Lys Ser Thr Thr Thr Leu Pro Asn Gly Glu Arg Ser
                85                  90                  95
Thr Val Thr Ala Val Thr Val Val Tyr Pro Thr Ala Asp Ser Ser Ser
            100                 105                 110
Pro Ala Ala Thr Thr Thr Gly Pro Ala Pro Gly Leu Gln Thr Gly Gly
        115                 120                 125
Ala Ala Ser Ile Thr Gly Leu Gln Lys Glu Leu Leu Val Met Leu Gly
    130                 135                 140
Gly Ala Ala Ala Val Ala Met Ala Leu
145                 150
```

<210> 27058

<211> 296
<212> PRT
<213> A.fumigatus

<400> 27058

```
Pro Gly Pro Ser Pro Phe Pro Ala Cys Gln Pro Leu Trp Val Gly Cys
1               5                  10                  15
Glu Gly Arg Asn Arg Glu Arg Cys Phe Ile Ser Lys Gln Asn Gly Gly
            20                  25                  30
Tyr Tyr Asn Ser Val Gln Cys Trp Arg Gly Ile Gln Pro Ala Tyr Asn
        35                  40                  45
Pro Leu Arg Pro Arg Gln Ser Arg Cys Arg Ser Ile Met Glu Val Asn
    50                  55                  60
Ser Asn Asn Ser Glu Tyr Ile Tyr Thr Ala Val Trp Thr Asp Trp Ser
65                  70                  75                  80
His Gly Arg Ile His Gly Ala Thr Ile Thr Leu Ser Ala Gln Asn Ala
                85                  90                  95
Gly Phe Leu Thr Ala Phe Leu Ala Leu Phe Val Ser Val Ser Ala Gly
            100                 105                 110
His Leu Trp Arg Ile Ile Ser Phe Val Val His Gln Phe His Ser Ser
        115                 120                 125
Gln Lys Pro Arg Asp Ala Leu His His Gln Gln Gln Val Ile Phe Lys
    130                 135                 140
Asn Thr Thr Ser Pro Val Ala Leu Ile Trp Glu Phe Ala Leu Leu Ser
145                 150                 155                 160
Trp Ala Trp Arg Arg Lys Ala Gln His Pro Leu Leu Arg Asn Leu Leu
                165                 170                 175
Phe Ile Val Leu Ala Ile Ile Trp Leu Ala Leu Thr Gly Ser Ala Ala
            180                 185                 190
Ile Leu Ser Ala Arg Ile Thr Lys Pro Ala Gly Ser His Cys Leu Ile
        195                 200                 205
Met Ser Pro His Cys Gly Leu Tyr Leu Ala Ala Gly Ala Gly Phe Asn
    210                 215                 220
Ala Ser Asp Pro Tyr Gln Leu Asp Val Phe Asp Thr Thr Gln Leu Leu
225                 230                 235                 240
Glu Thr Asn Thr Ala Thr Ser Tyr Ala Arg Thr Cys Tyr Val Pro Gly
                245                 250                 255
Ala Glu Arg Leu Pro Gln Cys Asn Ile Tyr Ala Gln Thr Arg Leu Ala
            260                 265                 270
Leu His Thr Thr Thr Asn Ala Ser Cys Pro Phe Gln Ser Gly Met Cys
        275                 280                 285
Leu Glu Gly Asp Ser Ala Ala Phe
    290                 295
```

<210> 27059
<211> 133
<212> PRT
<213> A.fumigatus

<400> 27059

```
Gln Val Glu Ile Pro Asp Leu Gly Asn Glu Leu Met Gly Pro Val Thr
1               5                  10                  15
Pro Cys Ala Leu Pro Glu Pro Glu Val Glu Arg Ile Ala Ala Ala Leu
            20                  25                  30
Leu Gly Ala Lys Arg Pro Leu Ile Ile Thr Gly Tyr Met Gly Arg Asn
        35                  40                  45
```

```
Pro Arg Thr Pro Pro Leu Leu Ala Glu Leu Cys Asp Lys Leu Pro Ile
    50                  55                  60
Ser Val Ile Glu Thr Val Gly Ser Asp Val Ser Leu Arg Ser Asp His
65                  70                  75                  80
Glu Ala Tyr Leu Gly Val Thr Val Ser Thr His Pro Ala Val Cys Glu
                85                  90                  95
Ala Asp Val Ile Leu Val Met Asp Cys Asp Val Pro Trp Val Pro Thr
            100                 105                 110
Ala Gly Lys Pro Ala Asp Gly Met Leu Phe Tyr Asn Phe Phe Pro Pro
        115                 120                 125
Arg Gln Trp Leu Thr
    130
```

<210> 27060
<211> 94
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (41),(61)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27060

```
Ala Leu Leu Phe Ser Arg Val Ala Leu His Ile Leu Met Asp Val Asp
1               5                   10                  15
Met Asn Leu Ser Phe Glu Pro Ser Pro Asp Tyr Pro Gly Ile Ala Ala
            20                  25                  30
Ala Ala Gly Asn Pro Trp Gly Ala Xaa Val Thr Lys Thr Asp Gln Phe
        35                  40                  45
Asp Ser Thr Leu Asn Asn Ala Val Glu Thr Val Gln Xaa Gly Pro Cys
    50                  55                  60
Ala Val Val Glu Ile Arg Leu Val Phe Ser Leu Cys Ser Gln Ala Lys
65                  70                  75                  80
Leu Asn Leu Gly Asn Val Ser Leu Gln Cys Gly Val Lys Lys
                85                  90
```

<210> 27061
<211> 75
<212> PRT
<213> A.fumigatus

<400> 27061

```
Ala Asp Thr Cys Ser Val Gly Asp Gly Thr Tyr Leu Phe Ser Gln Met
1               5                   10                  15
Glu Ser Val Tyr Trp Ile Ala Arg Arg Tyr Asp Val Pro Phe Leu Leu
            20                  25                  30
Val Val Leu Asn Asn Ser Gly Trp Asn Ala Pro Lys Val Ser Thr Leu
        35                  40                  45
Leu Val His Ser Asp Gly Leu Ala Ser Lys Ser Asn Arg Gly Gly Arg
    50                  55                  60
Leu Ser Phe Ser Ala Glu Trp Leu Ser Thr Tyr
65                  70                  75
```

<210> 27062
<211> 76

<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (72)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27062
Met Gln Ser Val Ser Ser Pro Cys Ile Arg Gln Gly Ser Tyr Asp Leu
1 5 10 15
Gln Gly Cys His Tyr His Cys Pro Ile Ser Ala Leu Arg Ala Gly Ile
20 25 30
Arg Gly Leu Trp Arg Ile Ser Ser Lys Pro Leu Ala Tyr Asp Ser Ile
35 40 45
Trp Leu Ser Asp Lys Leu Ser Gly Phe Asp Ala Glu Phe Gly Trp Glu
50 55 60
Lys Leu Lys Ser Thr Ala His Xaa Leu Val Arg Gly
65 70 75

<210> 27063
<211> 78
<212> PRT
<213> A.fumigatus

<400> 27063
Ile Ser Ile Val Met Ser His Gln Leu Thr Asn Gly Leu Gln Asp Lys
1 5 10 15
Lys Gly Asn Gln Val Asp His His Ile Leu Thr Gln Gly Ala Glu Ile
20 25 30
Cys His Glu Val Glu Ile Leu Asp Glu Arg Lys Asp Ser Phe Asn His
35 40 45
Tyr Pro Tyr Asp Gln Ala Asp Ile Ser Tyr Leu Ile Ile Val Val Gln
50 55 60
Ile Ile Gly His Ser Ser Leu Pro Glu Glu Pro His Pro Asp
65 70 75

<210> 27064
<211> 127
<212> PRT
<213> A.fumigatus

<400> 27064
His Ser Ser Asp Pro Ser Thr Pro Val Val Lys Thr Ser Pro Gln Ile
1 5 10 15
Val Arg Phe Ile Ser Phe Ser Leu Pro Leu Pro Cys Thr Glu Ser Gln
20 25 30
Leu Thr Ser Pro Pro Thr Asp Gln Tyr Leu Arg Ala Leu Gln Arg Gly
35 40 45
Cys Phe Arg Tyr Phe Gln Leu Gly Leu Val Asp Gly Pro Ala Gly Leu
50 55 60
Leu Gly Gly Leu Ile Gln Lys Pro Ser Val Leu Phe Val His Phe Phe
65 70 75 80
Ser Val Ala Leu Leu Ser Leu Trp Val Leu Leu Arg Glu Tyr Pro Pro
85 90 95
Tyr Leu Phe Pro Val Ala Leu Phe Lys Cys Ile Met Thr Phe Trp Thr

```
            100                 105                 110
Ala Cys Val Val Ile Phe Pro Tyr Met Leu Ile Glu Ala Phe Cys
        115                 120                 125

<210> 27065
<211> 62
<212> PRT
<213> A.fumigatus

<400> 27065
Ile Pro Ala Arg Pro Cys Ser Ser Tyr Ile Pro Pro Ser His Val Gly
1               5                   10                  15
Val Tyr Lys Gly Gln Met Arg Ala Phe Trp Pro Val Phe Lys Asp Tyr
            20                  25                  30
Pro Leu Asp Gly Leu Arg Asp Leu Gln Asn Cys Asn Arg Thr Ser Ala
        35                  40                  45
Ser Val Cys Cys Ile Ser Ile Phe Gly His Val Asn Gly Phe
    50                  55                  60

<210> 27066
<211> 76
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (1)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27066
Xaa Ser Thr Arg Val Phe His Leu Gly Val Lys Thr Ile Ala His Ala
1               5                   10                  15
Pro Arg Lys Pro Asn Gly Ile Asn Ala Ser Thr Leu Asp Ser Ala Ser
            20                  25                  30
Gly Gln Gly Ser Asn Gly Trp Gln Thr Thr Lys Lys Lys Gln Lys Lys
        35                  40                  45
Asn Ala Lys Pro Met Glu Pro Arg Ser Gly Phe His Ala Gly Ala Glu
    50                  55                  60
Pro Leu Pro Ala Asp Glu Ser Leu Arg Lys Gly Gly
65                  70                  75

<210> 27067
<211> 110
<212> PRT
<213> A.fumigatus

<400> 27067
Pro Gln Ala Val Ala Cys Phe Tyr Val Arg Ile Gln Asp Lys Gln Gln
1               5                   10                  15
Gln Glu Pro Tyr Tyr Arg Ala Val Tyr Leu Thr Glu Arg Thr Ala Ser
            20                  25                  30
Asp Phe Ile Asp Gln Leu Ser Lys Lys Tyr Asn Val Gln Pro Asp Arg
        35                  40                  45
Ile Leu Ser Leu Val His Ile Asn Pro Asn Ser Leu Arg Val Ala Val
    50                  55                  60
Asp Asp Asp Val Val Gly Ala Ile Pro Glu Gly Gln Asp Met Ile Ala
```

```
65                  70                  75                  80
Gln Phe Thr Glu Val Pro Ala Pro Val Ser Ser Asp Gly Glu Gly Glu
                85                  90                  95
Gly Glu Gly Asp Ser Thr Arg Tyr Glu Val Gln Leu His Phe
            100                 105                 110

<210> 27068
<211> 510
<212> PRT
<213> A.fumigatus

<400> 27068
Tyr Thr Lys Leu Cys Pro Ser Thr Ala Cys Glu Glu Leu Thr Leu Phe
1               5                  10                  15
Leu Gln Tyr Lys Ser Lys Ile Lys Lys Tyr Val Leu Pro Glu Gly Tyr
            20                  25                  30
Ser Gly Leu Thr Ile Gly Arg Leu Gln Leu Ala Phe Ile Glu Lys Phe
        35                  40                  45
Ala Trp Asn Thr His Asn Asn Gly Val Asp Leu Pro Glu Ile Tyr Ile
    50                  55                  60
Gln Asp Pro Ile Ser Gly Val Arg His Glu Leu Glu Asp Leu Asn Asp
65                  70                  75                  80
Val Lys Asp Arg Ser Val Leu Val Leu Asn Val Asp Ile Leu Asp Glu
                85                  90                  95
Val Lys Lys His Phe Asp Asp Glu Leu Gly Gly Val Arg Arg Leu Ile
            100                 105                 110
Glu Gly Val Lys Gly Thr Leu Glu Gly Gln Glu Asn Ile Ile Gln Arg
        115                 120                 125
Val Ser Asp Arg Gln Leu Glu Ala Ala Lys Glu Ile Ala Arg Leu Ala
    130                 135                 140
Ala Ala Pro Pro Val Ser Ile Pro Thr Ser Leu Pro Asp Gly Ser Ala
145                 150                 155                 160
Arg Lys Gly Pro Ile Thr Gly Ser Arg Ser Gln Leu Ala Glu Leu Gln
                165                 170                 175
Ser Leu Lys Arg Asp Leu Ala Val Leu Arg Gln Thr Tyr Ser Asn Phe
            180                 185                 190
Ser Ser Asp Ile Ala Ser Ser Met Asn Ala Ile Arg Ala Lys Ala Asn
        195                 200                 205
Phe Val Lys Ser Ala Ala Ala Asp Val Ala Val Pro Ser Tyr Glu Gly
    210                 215                 220
Asp Ala Gly Arg Ala Arg Val Asn Ala Gly Lys Lys Glu Leu Ala Asp
225                 230                 235                 240
Glu Ser Glu Arg Leu Val Gly Arg Val Asp Asp Leu Gln Asp Leu Val
                245                 250                 255
Glu Asp Leu Arg Lys Asp Val Val Ser Arg Gly Val Arg Pro Leu Pro
            260                 265                 270
Arg Gln Leu Glu Ser Val Ser Lys Glu Ile Ser Ala Val Thr Lys Glu
        275                 280                 285
Leu Lys Lys Met Gln Glu Phe Leu Lys Arg Glu Lys Pro Ile Trp Thr
    290                 295                 300
Lys Ile Trp Glu Lys Glu Leu Gln Leu Val Cys Glu Glu Arg Asp Gln
305                 310                 315                 320
Leu Thr Met Gln Glu Asp Leu Ala Ala Asp Leu Glu Asp Asp Leu Glu
                325                 330                 335
Lys Ala Ala Gln Thr Phe Ala Leu Val Glu Gln Ala Thr Lys Gln Gln
            340                 345                 350
```

```
Ala Leu Gln His Asn Val Asn Gly Gly Val Ala Leu Arg Asn Thr Ser
        355                 360                 365
Arg Asn Val Val Ile Asp Pro Ala Val Asp Pro Met Lys Ala Lys Asp
    370                 375                 380
Asp Val Leu Gly Glu Val Arg Ala Leu Gln Pro Asn His Glu Ser Arg
385                 390                 395                 400
Leu Glu Ala Ile Glu Arg Ala Glu Lys Ala Arg Gln Lys Glu Leu Glu
                405                 410                 415
Asn Arg Arg Ile Gly Leu Phe Gln Lys Glu Leu Gly Ala Phe Val Gln
            420                 425                 430
Glu Gly Lys Leu Lys Lys Ser Gly Gly Val Glu Glu Ala Glu Arg Gln
        435                 440                 445
Arg Arg Val Lys Asp Asp Arg Ile Arg Lys Glu Val Trp Glu Arg Gln
    450                 455                 460
Gln Ala Arg Ala Ala Glu Met Glu Lys Ala Glu Ala Glu Ser Ala Ala
465                 470                 475                 480
Ala Ala Ala Ala Ser Thr Gln Leu Glu Gln Ser Asp Gln Ser Glu Gln
                485                 490                 495
Pro Val Phe Thr Thr Gly Leu Glu Gly Ala Ala Pro Gln Lys
            500                 505                 510
```

<210> 27069
<211> 68
<212> PRT
<213> A.fumigatus

<400> 27069

```
Leu Gly Leu Gln Ser Gly Ile Leu Ala Cys Leu Val Asn Leu Ser Gln
1               5                   10                  15
Phe Ile Ile Ile Asp Ser Val Gly Pro Val Ser Ser Thr Val Ile Gly
            20                  25                  30
His Leu Lys Thr Cys Ile Ile Val Gly Leu Gly Trp Ala Leu Ser Asp
        35                  40                  45
Arg Pro Ile Ser Arg Gly Cys Leu Val Gly Ile Leu Met Ala Leu Thr
    50                  55                  60
Gly Met Thr Leu
65
```

<210> 27070
<211> 238
<212> PRT
<213> A.fumigatus

<400> 27070

```
Val Arg Ile Leu Ala Arg Ala Val Cys Glu Asp Ala Lys Ala Leu Cys
1               5                   10                  15
Ser Ile Leu Tyr His Asp Ser His Gln Asn Ile Tyr Ser His Met Ser
            20                  25                  30
Cys Val Tyr Pro Lys Tyr Thr His Ile Asn Gln Ser Pro Asn Ser Pro
        35                  40                  45
Val Ile Met Pro Ile Leu Ile Asn Pro Ile Thr Asn Glu Pro Tyr Ile
    50                  55                  60
Pro Leu Pro Ala Pro His Ser Ser Ile Ile Ile Thr Pro Ala Arg Ala
65                  70                  75                  80
Pro Asn Thr His Asp Ser Ser Ala Leu Leu Ser Leu Leu Asn Asn Pro
                85                  90                  95
```

```
Gln Ile Phe Pro Tyr Leu Glu Ser Thr Pro Val Pro Tyr Leu Pro Glu
            100                 105                 110
His Ala Thr Glu Trp Leu Gln Ala Ser His Glu Gln Ala Thr Ala Leu
        115                 120                 125
Leu Gln Ala Ala Gln Asn Asn Arg Phe Val Asp Gly Leu Pro Phe Thr
    130                 135                 140
Cys Ile Arg Glu Val Thr Asn Asp Gly Ser Ser Asp Ile Tyr Ile Gly
145                 150                 155                 160
Asn Val Gly Leu Val Arg Tyr Ala Phe Tyr Glu Phe Lys Lys Gly Thr
                165                 170                 175
Ala Glu Arg Glu Glu Ala Val Arg Arg Asn Glu Ala Leu Gly Val Gly
            180                 185                 190
Ser Pro Glu Ile Val Trp Gly Phe Gly Gly Lys Ser Pro Phe Pro Phe
        195                 200                 205
Phe Pro Ser Ala Leu Ala Ile Tyr Ile Tyr Leu Cys Val Tyr Val Cys
    210                 215                 220
Val Tyr Val Leu Asp Glu Asp Glu Gly Asp Glu Gly Gly Tyr
225                 230                 235

<210> 27071
<211> 109
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (41)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27071
Ile Gln Cys Asp Pro Val His Glu Ser Val Ala Arg Leu Ser Ser Asn
1               5                   10                  15
Pro Ser Ser Leu Ala Asp Ser Thr Leu Leu Pro Ala Ser Gln Thr Asn
            20                  25                  30
Thr Thr Leu Asp Phe Thr Pro Pro Xaa Arg Phe Ser Gly Thr Thr Ala
        35                  40                  45
Gln Ser Ser Asn Ser Asn Ser Asn Arg Asn Pro Phe Phe Ser Asn Thr
    50                  55                  60
Arg Ile Leu Ala Leu Leu Ser Ala Tyr Thr Asp Ala Leu Ile Thr Arg
65                  70                  75                  80
Ala Phe Ile Arg Gly Thr Ala His Ser Ser Ile Thr Ala Leu Met Thr
                85                  90                  95
Ala Val Met Met Pro Leu Pro Trp Tyr Val Gly Glu Arg
            100                 105

<210> 27072
<211> 131
<212> PRT
<213> A.fumigatus

<400> 27072
Pro Ser Asp Ala Glu Lys Trp Trp Asn Val Ile Arg Asp Thr Ala Lys
1               5                   10                  15
Ser Ala Pro Ala His Ser Pro Val Ser Pro Thr Ser Pro Ile Ala Thr
            20                  25                  30
Gly Gly Ala Val Ala Ala Thr Thr Glu Ser Gly Gly Ala Ala Ser Ala
```

```
        35                  40                  45
Pro Pro Pro Thr Thr Ala Thr Ala Asp Val Ala Ala Val Glu Ala Lys
    50                  55                  60
Pro Pro Ala Tyr Lys Glu Gln Glu Gly Val Ala Pro Val Ala Gln Glu
65                  70                  75                  80
Lys Thr Thr Ala Gly Glu Ala Ala Thr Pro Thr Thr Pro Ala Ala Glu
                85                  90                  95
Thr Gly Leu Asn Arg Ser Thr Ser Ala Ala Thr Gly His Tyr His Met
            100                 105                 110
Gly Pro Gly Gly Ser Ala Val Ala Pro Asp Ala Pro Ala Ser Gly Val
        115                 120                 125
Glu Lys Ser
    130
```

<210> 27073
<211> 160
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (148)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27073

```
Arg Arg His Gly Leu Phe Tyr Thr Thr Phe Arg Ala Ser Leu Pro Gly
1               5                   10                  15
Thr Gly Lys Asp Lys Thr Ser Phe Asn Ile Gln Asp Leu Leu Thr Gln
            20                  25                  30
Pro His Pro Gly Phe Ala Asn Val Glu Gln Met Pro Leu Leu Asn Phe
        35                  40                  45
Thr Val Thr Ile Thr Asn Thr Gly Lys Val Ala Ser Asp Tyr Thr Ala
    50                  55                  60
Met Leu Phe Ala Asn Thr Thr Ala Gly Pro Ala Pro Tyr Pro Asn Lys
65                  70                  75                  80
Trp Leu Val Gly Phe Asp Arg Leu Ala Ser Leu Glu Pro His Arg Ser
                85                  90                  95
Gln Thr Met Thr Ile Pro Val Thr Ile Asp Ser Val Ala Arg Thr Asp
            100                 105                 110
Glu Ala Gly Asn Arg Val Leu Tyr Pro Gly Lys Tyr Glu Leu Ala Leu
        115                 120                 125
Asn Asn Glu Arg Ser Val Val Leu Gln Phe Val Leu Thr Gly Arg Glu
    130                 135                 140
Ala Val Ile Xaa Lys Trp Pro Val Glu Gln Gln Gln Ile Ser Ser Ala
145                 150                 155                 160
```

<210> 27074
<211> 222
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (15)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27074
Phe Glu Arg Gly Ser Ser Thr Pro Ser Gly Ser Lys Thr Pro Xaa Lys
1 5 10 15
Ser Ala Ser Ala Ala Gln Ser Gly Ile Arg Asn Leu Pro Leu Ile Leu
20 25 30
Ala Ile Ser Leu Leu Thr Ile Phe Ser Gly Gly Leu Ile Thr Ala Thr
35 40 45
Gly His Phe Gly Ser Leu Met Val Ile Gly Ser Ala Leu Ala Thr Val
50 55 60
Gly Ser Gly Leu Ile Cys Thr Leu Asp Ile His Thr Gly Ser Gly Lys
65 70 75 80
Trp Ile Gly Tyr Gln Ile Val Ala Gly Val Gly Leu Gly Leu Ala Leu
85 90 95
Gln Ile Pro Val Ile Leu Asn Gln Ala Leu Val Thr Pro Ser Asp Leu
100 105 110
Ser Ser Ile Ser Ala Val Thr Leu Phe Met Gln Thr Leu Gly Arg Pro
115 120 125
Ile Cys Val Ser Ala Ala Gln Ala Ala Phe Val Asn Arg Leu Val Thr
130 135 140
Arg Leu Ser Val Leu Ala Pro Asn Val Asp Ala Lys Leu Val Val Ala
145 150 155 160
Thr Gly Ala Ser Glu Leu Arg His Thr Phe Asn Asp Glu Asp Ile Gly
165 170 175
Gly Ile Leu Glu Ala Tyr Met Asp Gly Leu Lys Leu Ser Phe Leu Leu
180 185 190
Cys Thr Val Leu Ala Gly Val Thr Leu Val Ile Ser Ala Leu Pro Lys
195 200 205
Trp Val Asn Leu Lys Gly Lys Val Gln Gly Ser Gly Ala Thr
210 215 220

<210> 27075
<211> 88
<212> PRT
<213> A.fumigatus

<400> 27075
Phe Ile Gln Ser Glu Phe Leu Glu Val Ile Val Ser Leu Thr Val Val
1 5 10 15
Val Ile Gly His Ala Phe Arg Lys Asn Ala Ala Gly Ala Phe Gly Pro
20 25 30
Asp Leu Ala Arg Lys Leu Ser Gln Leu Val Lys Met Glu Lys Asn Val
35 40 45
Met Arg Ser Met Glu Met Val Ala Arg Glu Arg Met Glu Ala Ala Val
50 55 60
Cys Cys Trp Ser Leu Thr His Ala Phe Thr Ile Ala Asp Ser Gly Thr
65 70 75 80
Leu Ala Thr Thr Leu His Leu Gly
85

<210> 27076
<211> 215
<212> PRT
<213> A.fumigatus

<400> 27076
Val Gly Ser Leu Asp Pro Lys Glu Ser Tyr Ile Asn Val Ser Ile Gly

```
1               5                   10                  15
Lys Gln Lys Ile Thr Asp Glu Ile Ala Lys Leu Lys Tyr Lys Asp Pro
            20                  25                  30
Asn Ser Pro Arg Ile Val Val Leu Glu Gln Glu Leu Val Arg Ala Glu
        35                  40                  45
Ala Glu Ser Leu Val Ala Glu Ala Gln Leu Ser Asn Ile Thr Arg Glu
    50                  55                  60
Lys Leu Lys Ala Ala Phe Gln Tyr Gln Phe Asp Ala Leu Arg Glu His
65                  70                  75                  80
Cys Glu Lys Val Ala Ile Ile Ala Gly Tyr Gly Lys His Leu Leu Asp
                85                  90                  95
Leu Val Asp Asp Thr Pro Val Thr Pro Gly Glu Thr Arg Gln Ala Tyr
            100                 105                 110
Asp Gly Tyr Glu Ala Ser Lys Ala Ile Ile Gln Asp Cys Glu Glu Ala
        115                 120                 125
Leu Thr Asn Trp Val Gln Ser Lys Ala Ala Val Lys Pro Ser Leu Ser
    130                 135                 140
Thr Arg Ser Arg Ser Leu Ser Gln Arg Ala Arg Glu Lys Asn Arg Glu
145                 150                 155                 160
Gly Leu Asp Leu Ser Glu Gln Asp Gln Pro Met Arg Gly Asp Arg Asp
                165                 170                 175
Ser Trp Val Pro Ala Gly Gln His Pro Ser Tyr Gly Glu Asp Gly Glu
            180                 185                 190
Glu Ala Ala Ser Thr Val Asp Gly Glu Thr Arg Gly Arg Glu Glu Thr
        195                 200                 205
Thr Glu Ala Val Ala Ala Ala
    210                 215

<210> 27077
<211> 66
<212> PRT
<213> A.fumigatus

<400> 27077
Gln Gln Leu Ser Ile Trp Gly Glu Asn Cys Asp Glu Asp Val Ser Asp
1               5                   10                  15
Val Thr Asp Lys Leu Gly Val Leu Leu Tyr Glu Ile Gly Glu Leu Glu
            20                  25                  30
Asp Leu Phe Val Asp Arg Tyr Asp Gln Tyr Arg Val Pro Ile Lys Ser
        35                  40                  45
Ile Arg Asn Ile Glu Ala Ser Val Gln Pro Ser Arg Asp Arg Lys Ser
    50                  55                  60
Gly Leu
65

<210> 27078
<211> 100
<212> PRT
<213> A.fumigatus

<400> 27078
Ser Pro Pro Val Val Lys Asn Trp Leu Pro Leu Val Leu Pro Cys Gln
1               5                   10                  15
Ser Leu Val Ile Lys Lys Val Ser Ser Thr Met His Arg Thr Tyr Ser
            20                  25                  30
Met Arg Gln Ser Arg Val Pro Thr Ala Ser Gln Ile Glu Asn Pro Pro
```

```
        35                  40                  45
Pro Pro Leu Ser Ser Thr Lys Thr Asn Arg Trp Leu Gly Lys Gly Gly
    50                  55                  60
Leu Gly Ala Leu Ile His Thr Val Arg Ile Pro Gly Ser Asn Ser Phe
65                  70                  75                  80
Thr Asn Ser Cys Gly Asp Arg Pro Cys Leu Ser Gln Glu Cys Arg Arg
                85                  90                  95
Cys Leu Trp Thr
            100
```

<210> 27079
<211> 527
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (37)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27079

```
Ala Val Arg Gln Arg Ser Gly Arg Gly Ile Pro Ser Ser Arg Gly Leu
1               5                   10                  15
Gly Val Pro Glu Lys Arg Ala Trp Lys Glu Phe Gln Gly Arg His Ala
            20                  25                  30
Asp Gln Leu Val Xaa Ser Gln Arg Thr Arg Asp Gln Ile Met Arg Gln
        35                  40                  45
Ser Val Ile Ser Asp Met Phe Asn Ser Ser Trp Arg Met Asp Ala Leu
    50                  55                  60
Val Glu Thr Pro Leu Ala Glu Val Lys Met Pro Ala Val Met Phe Val
65                  70                  75                  80
Arg Asp Pro Glu Thr Lys Asp Leu Lys Pro Tyr His Gly Pro Ala Pro
                85                  90                  95
Gly Ser Asp Lys Pro Leu Pro Asp Ile Lys Val Leu Val Arg Gln Pro
            100                 105                 110
Trp Pro Gly Ala Gly Val Glu Lys Leu Pro Pro Thr Thr Arg Cys Asp
        115                 120                 125
Glu Ala Val Ser Tyr Ile Val Arg Asn His Asp Leu Arg Gly Lys Phe
    130                 135                 140
Asp Pro Gln Lys Ala Lys Glu Leu Asn Val Arg Ala Gly Pro Asn Phe
145                 150                 155                 160
Ala Arg Leu Thr Lys Gly Glu Asn Val Leu Ser Glu Asp Gly Lys Thr
                165                 170                 175
Val Thr Pro Asp Met Val Leu Gly Pro Pro Arg Leu Gly Lys Gly Leu
            180                 185                 190
Ala Ile Ile Asp Leu Pro Thr Ser Asp Tyr Val Asp Asp Leu Val Asp
        195                 200                 205
Arg Pro Glu Trp Asn Ser Ala Ser Val Thr Arg Gly Leu Glu Ala Phe
    210                 215                 220
Leu Trp Ile Leu Gly Pro Gly Val Gly Asp His Pro Arg Leu Arg Glu
225                 230                 235                 240
Phe Val Ala Arg Met Ser His Cys Lys His Thr Val Ser Ser Thr Asp
                245                 250                 255
Tyr Cys Pro Asn Tyr Leu Ala Leu Ser Ser Val Ala Gly Ser Ser Ile
            260                 265                 270
Arg Leu Ala Arg Leu Arg Gly Glu Asn Tyr Pro Val Pro Val His Asp
```

```
        275                 280                 285
Asn Lys Thr Leu Pro Gln Pro Gly Thr Pro Thr Ser Glu Ser Glu Thr
    290                 295                 300
Thr Lys Glu Met Ile Arg Asn Ser Pro Phe Glu Pro Val Lys Pro Gly
305                 310                 315                 320
Leu Val Ile Asp Met Glu Pro Lys Cys Glu Leu Asn Arg Ser Glu Val
                325                 330                 335
Val Pro Leu Phe Asn Pro Ala Glu Thr Val Gln Arg Ile Pro Arg Ser
            340                 345                 350
Ile Glu Gln Arg Val Thr Ala Ile Arg Thr Arg Val Met Asn Pro Gln
        355                 360                 365
Phe Gln Glu Lys Leu Ala Glu Phe Arg Lys Asp Leu Pro Gly Ala Asn
    370                 375                 380
Val Glu Ile Val Thr Leu Gly Thr Gly Ser Ser Ser Pro Ser Lys Tyr
385                 390                 395                 400
Arg Asn Val Ser Ser Thr Leu Val Asn Val Pro Gly Val Gly Ser Tyr
                405                 410                 415
Leu Leu Asp Cys Gly Glu Asn Thr Ile Gly Gln Leu Lys Arg Met Tyr
            420                 425                 430
Glu Pro Lys Lys Leu Gln Glu Val Leu Gln Asn Leu Arg Leu Ile Trp
        435                 440                 445
Ile Ser His Leu His Ala Asp His His Leu Gly Thr Ala Ser Val Ile
    450                 455                 460
Lys Glu Trp Phe Arg Ala Asn Tyr Pro Asn Gly Val Pro Gly Ala Gly
465                 470                 475                 480
Asp Val Glu Thr Asp Met Arg Lys Ile Leu Lys Glu Lys Arg Leu Phe
                485                 490                 495
Val Val Ser Glu Glu Met Met Ile Gly Trp Leu Glu Glu Tyr Ala Gly
            500                 505                 510
Val Glu Asp Tyr Gly Phe Gly Lys Leu Val Pro Leu Ala Ala His
        515                 520                 525

<210> 27080
<211> 176
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (3),(4),(10)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27080
Gly Ala Xaa Xaa Leu Met Thr Leu Ser Xaa Leu Glu Pro Pro Val Lys
1               5                   10                  15
Thr Val Glu Ile Thr Ser Pro Val Ile Ser Asp Gln Ile Val Pro Thr
            20                  25                  30
Ile Leu Asp Leu Leu Ile Glu Ser Ser Ser Leu Gly Asp Thr Ala Thr
        35                  40                  45
Arg Ala Ala Lys Asp Val Leu Ala Leu Tyr Glu Gly Gln Ser Met Ile
    50                  55                  60
Arg Pro Leu Ile Pro Glu Gln Asn Gly Lys Gln Asp Trp Gln Phe Thr
65                  70                  75                  80
Val Met Asn Thr Gly Gly Ser Trp Leu Ala Glu Arg Ser Ala Ala Lys
                85                  90                  95
Pro Ala Phe Arg Leu Val Ile Pro Leu Ile Asp Asp Leu Glu Trp Arg
```

```
            100                 105                 110
Ile Thr Asp Leu Glu Lys Asp Pro Asn Glu Leu His Pro Ile Lys Asn
        115                 120                 125
Phe Asp Leu Val Asp Leu Ala Arg Lys Leu Glu Lys Gln Tyr Gly Pro
    130                 135                 140
Glu Val Thr Asn Trp Val Arg Asp Ala Ala His Val Ala Ser Trp Trp
145                 150                 155                 160
Val Gly Glu Asn Trp Arg Arg Tyr Arg Tyr His Pro Asp Pro Lys His
                165                 170                 175
```

<210> 27081
<211> 290
<212> PRT
<213> A.fumigatus

<400> 27081

```
Cys Val Ser Cys Ile Lys Pro Lys Ser Ser Phe Cys Leu Glu Cys Gln
1               5                   10                  15
His Gly Ser Asp Gly Ala Glu His Gln Ser Ala Gly Gly Asp Arg Ala
            20                  25                  30
Leu Asp Gly Ala Gly Gly Ala Leu Gly Glu Leu Gly Gly Gly Gly Gly
        35                  40                  45
Ser Gly Ala Ser Gly Gly Ala Arg Ala Arg Ala Arg Ala Arg Ala Arg
    50                  55                  60
Ala Gly Ala Gly Ala Arg Ala Gly Val Ala Ala Ala Ala Ala Ala Gly
65                  70                  75                  80
Gly Ser Arg Phe Arg Ala Gly Ala Arg Val Arg Ala Gly Ala Gly Ser
                85                  90                  95
Arg Arg Gly Gly Ser Arg Leu Gly Gly Ser Gly Gln Gly Gly Gly Gly
            100                 105                 110
Arg Gly Leu Ala Arg Gly Arg Ala Gly Gly Ala Gly Gly Ala Gly Gly
        115                 120                 125
Gly Gly Gly His Gly Arg Ala Gly Gly Asp Ile Asp Gly Ala Val Glu
    130                 135                 140
Leu Asp Ala Leu Pro Arg Ala Arg Val Val Arg Val Gly Val Gly Leu
145                 150                 155                 160
Gly Gly Val Gly Val Leu Asp Thr Asp Gly Leu Asp Val His Gly Val
                165                 170                 175
Arg Ser Arg Ala Val Val Gly Gln Ala Thr Gly Pro Leu Asp Gly Ala
            180                 185                 190
Leu Gly Val Ala Gly Val Ala Ala Gly Pro Ala Ala Lys Ser Gln Ala
        195                 200                 205
His Arg Ser Leu Arg Glu Ala Ser Ala Thr Leu Gly Ile Val Val Arg
    210                 215                 220
Glu Arg Thr His Asp Arg Thr Val Asn Arg Pro Gly Asn Gly Ile Leu
225                 230                 235                 240
Gly Pro Val Asp Gly Val Gly Val Glu Ser Leu Leu Arg Ser Gly Asn
                245                 250                 255
Gly His Val Ser Ala Ser Val Ile Cys Gly Gly Val Ser Phe Ala Lys
            260                 265                 270
Val Val Cys Leu Asn Leu Ser Gly Val Thr Ala Gln Tyr Phe Leu Arg
        275                 280                 285
Phe Arg
    290
```

<210> 27082

<211> 142
<212> PRT
<213> A.fumigatus

<400> 27082
Asn Ala Asn Thr Ala Ala Thr Ala Pro Asn Thr Arg Ala Gln Ala Val
1 5 10 15
Thr Glu Pro Leu Met Glu Pro Ala Ala Pro Trp Glu Ser Ser Gly Val
20 25 30
Ala Glu Ala Pro Ala Leu Val Glu Glu Pro Val Leu Glu Leu Glu Pro
35 40 45
Glu Pro Glu Pro Glu Pro Glu Pro Glu Pro Val Leu Leu Leu Pro Leu
50 55 60
Pro Pro Val Val Val Gly Ser Ala Leu Glu Leu Glu Leu Glu Pro Glu
65 70 75 80
Leu Val Pro Asp Gly Val Gly Val Ala Leu Val Glu Val Ala Arg Val
85 90 95
Glu Val Glu Gly Val Leu Leu Glu Val Glu Leu Ala Glu Leu Ala Val
100 105 110
Leu Val Val Glu Glu Val Thr Glu Glu Leu Glu Glu Ile Ser Thr Glu
115 120 125
Pro Ser Asn Leu Met Leu Cys Gln Glu Pro Glu Leu Ser Glu
130 135 140

<210> 27083
<211> 125
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (34)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27083
Val Phe Ser Tyr Asp His Met Ile Tyr Ile Ser Leu Ser Asn Asp Cys
1 5 10 15
Phe Ala Glu Thr Cys Pro Pro Asn Lys Gly Leu Ala Ala Ser Thr Tyr
20 25 30
Thr Xaa Asp Phe Thr Ser Ala Ser Ala Leu Asp Gln Trp Glu Val Thr
35 40 45
Ala Gly Lys Val Pro Val Gly Pro Gln Gly Ala Glu Phe Thr Val Ala
50 55 60
Lys Gln Gly Asp Ala Pro Thr Ile Asp Thr Asp Phe Tyr Phe Phe Phe
65 70 75 80
Gly Lys Ala Glu Val Val Met Lys Ala Ala Pro Gly Thr Gly Val Val
85 90 95
Ser Ser Ile Val Leu Glu Ser Asp Asp Leu Asp Glu Val Asp Trp Val
100 105 110
Ser Leu Leu Val Tyr His Val Phe Val Leu Ser Arg Thr
115 120 125

<210> 27084
<211> 151
<212> PRT
<213> A.fumigatus

<400> 27084
Pro Pro Pro Pro Pro Ala Pro Pro Ala Pro Pro Ala Leu Pro Arg Ala
1 5 10 15
Arg Pro Leu Pro Pro Pro Pro Trp Pro Leu Pro Pro Arg Arg Leu Pro
20 25 30
Pro Arg Leu Glu Pro Ala Pro Ala Leu Thr Arg Ala Pro Ala Arg Asn
35 40 45
Leu Leu Pro Pro Ala Ala Ala Ala Ala Ala Thr Pro Ala Leu Ala Pro
50 55 60
Ala Pro Ala Leu Ala Leu Ala Leu Ala Leu Ala Arg Ala Pro Pro Leu
65 70 75 80
Ala Pro Glu Pro Pro Pro Pro Pro Ser Ser Pro Arg Ala Pro Pro Ala
85 90 95
Pro Ser Arg Ala Arg Ser Pro Pro Ala Leu Trp Cys Ser Ala Pro Ser
100 105 110
Leu Pro Cys Trp His Ser Lys Gln Asn Asp Asp Phe Gly Leu Met His
115 120 125
Asp Thr His His Glu Gly Asp Val Arg Thr Ile His Phe Gly Ile Gly
130 135 140
Val Ser Pro Ser Phe Gly Val
145 150

<210> 27085
<211> 141
<212> PRT
<213> A.fumigatus

<400> 27085
Arg Cys Gly Arg Ala Tyr Ala His Val Gln Arg Cys Gln Gly Trp His
1 5 10 15
Ser Leu Pro Ser Asp Ser Tyr Ala Pro Glu Thr Trp Gln Leu Gly Arg
20 25 30
Arg Arg Pro Gln Gln Pro Gln Gly His His Arg Val Gly Arg Trp Leu
35 40 45
Asp Arg Leu Gln Arg Gly Thr Val His His Val Arg Gln Val Arg Pro
50 55 60
Tyr Arg Glu Arg Gln Pro Arg Arg Val Leu His Leu Leu Gly Gln Leu
65 70 75 80
Trp Leu Leu Ala Glu His Gln Val Arg Arg Leu Arg Arg Tyr Leu Leu
85 90 95
Gln Leu Phe Arg Asp Leu Leu His His Gln His Arg Gln Leu Arg Gln
100 105 110
Leu Tyr Leu Glu Gln Asp Pro Phe His Leu His Pro Gly His Phe His
115 120 125
Gln Gly Asp Ser His Pro Val Trp Asn Gln Leu Arg Leu
130 135 140

<210> 27086
<211> 69
<212> PRT
<213> A.fumigatus

<400> 27086
Cys Thr Ile His Ile Met Lys Gly Thr Ser Glu Leu Tyr Ile Ser Ala
1 5 10 15

```
Ser Gly Phe Arg His Arg Leu Glu Tyr Asp Tyr Ser Ile Val Leu Ile
            20                  25                  30
Asp Phe Ile Leu Cys Pro Tyr Leu Phe Leu Ile Pro Arg Thr Tyr Asn
        35                  40                  45
Met Gln His Val Thr Tyr Leu Met Lys Val Arg Tyr Cys Ser Gly Arg
    50                  55                  60
Gly Ile Cys Leu Leu
65
```

<210> 27087
<211> 293
<212> PRT
<213> A.fumigatus

<400> 27087

```
Leu Gly Lys Pro Ala Cys Leu Ser Cys Val Arg Leu Glu Pro Asp Leu
1               5                   10                  15
Thr Lys Ala Gln Glu Val Leu Gly Gly Asp Thr Thr Gln Val Gln Thr
            20                  25                  30
Asn Tyr Phe Gly Lys Gly Asp Thr Thr Thr Tyr Asp Arg Gly Thr Tyr
        35                  40                  45
Val Pro Val Ala Thr Pro Gln Glu Thr Phe His Thr Tyr Thr Ile Asp
    50                  55                  60
Trp Thr Lys Asp Ala Val Thr Trp Ser Ile Asp Gly Ala Val Val Arg
65                  70                  75                  80
Thr Leu Thr Tyr Asn Asp Ala Lys Gly Gly Thr Arg Phe Pro Gln Thr
                85                  90                  95
Pro Met Arg Leu Arg Leu Gly Ser Trp Ala Gly Gly Asp Pro Ser Asn
            100                 105                 110
Pro Lys Gly Thr Ile Glu Trp Ala Gly Gly Leu Thr Asp Tyr Ser Ala
        115                 120                 125
Gly Pro Tyr Thr Met Tyr Val Lys Ser Val Arg Ile Glu Asn Ala Asn
    130                 135                 140
Pro Ala Glu Ser Tyr Thr Tyr Ser Asp Asn Ser Gly Ser Trp Gln Ser
145                 150                 155                 160
Ile Lys Phe Asp Gly Ser Val Asp Ile Ser Ser Ser Ser Ser Val Thr
                165                 170                 175
Ser Ser Thr Thr Ser Thr Ala Ser Ser Ala Ser Ser Thr Ser Ser Lys
            180                 185                 190
Thr Pro Ser Thr Ser Thr Leu Ala Thr Ser Thr Lys Ala Thr Pro Thr
        195                 200                 205
Pro Ser Gly Thr Ser Ser Gly Ser Asn Ser Ser Ser Ser Ala Glu Pro
    210                 215                 220
Thr Thr Thr Gly Gly Ser Gly Ser Ser Asn Thr Gly Ser Gly Ser Gly
225                 230                 235                 240
Ser Gly Ser Gly Ser Gly Ser Ser Ser Ser Thr Gly Ser Ser Thr Ser
                245                 250                 255
Ala Gly Ala Ser Ala Thr Pro Glu Leu Ser Gln Gly Ala Ala Gly Ser
            260                 265                 270
Ile Lys Gly Ser Val Thr Ala Cys Ala Leu Val Phe Gly Ala Val Ala
        275                 280                 285
Ala Val Leu Ala Phe
    290
```

<210> 27088
<211> 203

<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (28)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27088
Ser Ser Trp Ile His Trp Pro Cys Gly Pro Thr Arg Gly Val Pro Asn
1 5 10 15
Leu Phe Asp Asp Ser Ser Ile Gln Asn Thr Gln Xaa Phe Tyr Val Tyr
20 25 30
Ala Asp Asp Ala Gly Asp Ile Lys Ala His Pro Phe Phe His Gly Ile
35 40 45
Asn Trp Arg Thr His His Leu Thr Glu Pro Pro Phe Thr Pro Lys Val
50 55 60
Asp Gly Trp Glu Asp Thr Arg Tyr Phe Asp Asp Asn Glu Asp Ser Leu
65 70 75 80
Asp Asn Asp Asp Val Ser Ile Thr Ser Glu Asp Asn Gln Gly Gln Gly
85 90 95
Glu Val Asp Gly Gly His Ala His Glu Pro Gly Leu Glu Arg Val Gln
100 105 110
Ser Gln Gln Lys Gly Cys Gln Pro Asp Gln Lys Asp Ser Pro Asp Leu
115 120 125
Ala Lys Lys Asn Lys His Arg Lys Lys Asp Lys His Lys Arg Arg Arg
130 135 140
Pro Arg Asp Lys Leu Leu Arg Asp Pro Arg Val Gly Lys Thr Val Leu
145 150 155 160
Asp Ile Arg Lys Arg Gly Ala Phe Leu Gly Tyr Thr Tyr Arg Arg Pro
165 170 175
Asn Ala Val Ala Leu Ala Leu Val Pro Glu Arg Gly Arg Ser Met Phe
180 185 190
Arg Arg Gly Gln Leu Pro Glu Leu Tyr Gly Tyr
195 200

<210> 27089
<211> 74
<212> PRT
<213> A.fumigatus

<400> 27089
Trp Thr Ile His Arg Ser Asp Leu Leu Asn Thr Val Val Tyr Ala Val
1 5 10 15
Gly Leu Leu Ala Thr Leu Arg Ser Lys Lys Leu Ser Gly Gln Trp Ile
20 25 30
Gly Val Met Val Thr Ala Ser His Asn Pro Ala Glu Asp Asn Gly Val
35 40 45
Lys Leu Val Asp Pro Met Val Ser Ser Tyr Gly Thr Phe Asp Gly Gly
50 55 60
Met Lys Gly Glu Phe Ala Asp Val Leu Ile
65 70

<210> 27090
<211> 128
<212> PRT

<213> A.fumigatus

<220>
<221> UNSURE
<222> (119),(125),(126)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27090
Ala Glu Trp Glu Ala Tyr Ala Thr Lys Leu Ala Asn Ala Pro Leu Glu
1 5 10 15
Asn Ile Gly Asp Val Tyr Asp Glu Leu Val Lys Glu Ile Asp Val Ser
20 25 30
Met Glu Asn Pro Ala Arg Val Val Phe Ala Arg Asp Thr Arg Ala Ser
35 40 45
Gly Ser Arg Leu Ile Gly Val Leu Ser Ala Ala Leu Thr Ala Thr Glu
50 55 60
Ala Glu Phe Ile Asp Met Lys Phe Met Thr Thr Pro Gln Leu His Tyr
65 70 75 80
Val Val Arg Cys Lys Asn Thr Leu Gly Thr Gln Tyr Glu Tyr Gly Glu
85 90 95
Pro Thr Glu Gln Gly Tyr Tyr Glu Lys Leu Ala Ala Ala Phe Lys Arg
100 105 110
Val Phe Thr Arg Gly Gly Xaa Gly Met Gln Val Asn Xaa Xaa Leu His
115 120 125

<210> 27091
<211> 504
<212> PRT
<213> A.fumigatus

<400> 27091
Thr Leu Gln Leu Gly Phe Thr Leu Arg Tyr Pro Pro Ser Leu Gln Arg
1 5 10 15
Gly Arg Leu Leu Cys Val Pro Phe Asn Ser Ala Pro Pro His His Tyr
20 25 30
Leu Leu Leu Leu Gln Leu Arg His Leu Ser Ser Ile Glu Glu Leu His
35 40 45
Leu Leu Ser Ser Gln Leu Asp Leu Lys Phe Cys Leu Pro Cys Phe Leu
50 55 60
Thr Pro Thr Asp His Phe Arg Leu Cys Pro Ser Thr Ser Ser Ala Arg
65 70 75 80
Asn Asn Gln Ala Leu His Phe Pro Arg Ser Lys Val Gly Arg Asn Cys
85 90 95
Thr Ile Ser Gly Leu Thr Ala Asn Arg Met Ala Asp Ser Ser Ser Phe
100 105 110
Pro Gly Thr Asn Pro Phe Leu Lys Val Ser Thr Lys Asp Asp Lys Tyr
115 120 125
Ser Pro Ile Gln Lys Ile Ser Glu Glu Glu Glu Tyr Glu Val Thr Ser
130 135 140
Pro Thr Asp Pro Thr Phe Arg Ser Ala His Ser Gly Ala Thr Ala Pro
145 150 155 160
Thr Ala Gly Asn Ser Phe Asn Gly Asp Asn Gly Ser Asn Glu Gly Gly
165 170 175
Glu Gly Ile Gln Phe Asn Arg Pro Phe Asp Ala Gly Phe Gly Gln Gly
180 185 190
Ser Glu Gly Gln Gly Glu His Val Glu Pro Pro Gly Gly Ala Arg Pro

```
        195                 200                 205
Thr Ala Ala Ala Asn Gln Gly Phe Pro Asn Asn Tyr Ala Leu Gly Arg
    210                 215                 220
Arg Thr Ser Val Ser Ala Glu Ser Leu Asn Pro Thr Ser Ala Gly Ser
225                 230                 235                 240
Asp Ser Trp Thr Pro Pro Cys His Pro Lys Thr Glu Glu Gln Leu Ser
                245                 250                 255
Arg Leu Lys Thr Ala Val Ser Asn Asn Phe Leu Phe Ser His Leu Asp
            260                 265                 270
Asp Asp Gln Phe Arg Thr Val Leu Asp Ala Leu Val Glu Lys Pro Ile
        275                 280                 285
Pro Ala Lys Asp Ile Lys Val Ile Ser Gln Gly Asp Ala Gly Asp Tyr
    290                 295                 300
Phe Tyr Ile Val Glu Asn Gly His Phe Asp Val Tyr Ile Asn Pro Ala
305                 310                 315                 320
Gly Ser Val Gln Pro Gly Pro Asp Gly Ile Gly Asn Lys Val Ser Thr
                325                 330                 335
Ile Gly Pro Gly Gly Ser Phe Gly Glu Leu Ala Leu Met Tyr Asn Ala
            340                 345                 350
Pro Arg Ala Ala Thr Ile Val Ser Ala Asp Pro Lys Ser Thr Leu Trp
        355                 360                 365
Ala Leu Asp Arg Ile Thr Phe Arg Arg Ile Leu Met Asp Ser Ala Phe
    370                 375                 380
Gln Arg Arg Arg Met Tyr Glu Ala Phe Leu Glu Glu Val Pro Leu Leu
385                 390                 395                 400
Ser Ser Leu Lys Pro Tyr Glu Arg Ala Lys Ile Ala Asp Ala Leu Asp
                405                 410                 415
Ala Ile Lys Tyr Pro Ala Gly Ser Thr Ile Ile Glu Glu Gly Ala Pro
            420                 425                 430
Gly Asp Ala Phe Tyr Leu Leu Glu Ser Gly Glu Ala Glu Ala Phe Lys
        435                 440                 445
Lys Asp Val Glu Gly Pro Val Lys Ser Tyr Arg Arg Gly Asp Phe Phe
    450                 455                 460
Gly Glu Leu Ala Leu Leu Asp Asp Lys Pro Arg Ala Ala Ser Val Phe
465                 470                 475                 480
Ala Lys Thr Asp Val Lys Val Ala Arg Leu Gly Arg Asp Gly Ser Ser
                485                 490                 495
Pro Arg Gly Trp Lys Val Arg Val
            500
```

<210> 27092
<211> 84
<212> PRT
<213> A.fumigatus

<400> 27092

```
Asn Gln Trp Ile Lys Thr Ala Ser Gln Thr Ser Gly Glu Asp Leu Val
1               5                   10                  15
Asn Phe Phe Ala Leu Ser Asp Asp Asp Leu Arg Leu Ser Leu Leu Thr
            20                  25                  30
Leu Val Tyr Arg Ala Ala Pro Pro Thr Lys Gly Ser Ser Thr Thr Phe
        35                  40                  45
Ser Leu Ser Cys Ile Lys Ala Ala Glu Thr Ala Leu Arg Arg His His
    50                  55                  60
Asp Val Ile Asp Val Ile Arg Lys Asn Gly Ser Ile Tyr Phe Ala Lys
65                  70                  75                  80
```

Tyr Ile His Trp

<210> 27093
<211> 134
<212> PRT
<213> A.fumigatus

<400> 27093
Asn Val Tyr Ser Glu Asn Asp Ser Val Leu Ala Leu Leu Tyr Arg Thr
1 5 10 15
Ser Ser Leu Gln Leu Gly Val Ala Gly Leu Gln Pro Val Glu Gly Val
20 25 30
Ser Gly Val Glu Asn Leu Asp Val Ser Asp Leu Ile Ser Gly His Leu
35 40 45
Arg Tyr Gln Phe Leu Val Gly Arg Ile Leu Ser Val Val Gly Leu Glu
50 55 60
Ser Ile Asp Ala Arg Glu Val Ala Leu Glu Glu Ala Ala Leu Glu Ala
65 70 75 80
Lys Asp Arg Arg Gln Glu Gln Glu Arg Ala His Asn Glu Arg Gln Ala
85 90 95
Gly Phe Met Gly Glu Gly Arg Ser Pro Ser Gln Arg Leu Glu Ser Gln
100 105 110
Glu Asp Leu Gln Gly Glu Glu Asp Arg Leu Gln Lys Glu Met Gly Lys
115 120 125
Ala Arg Val Arg His Ser
130

<210> 27094
<211> 200
<212> PRT
<213> A.fumigatus

<400> 27094
Leu Lys Gln Asp Phe Arg Ala Ile Val Pro Val Arg Cys Gln Leu Val
1 5 10 15
Ala Leu Ile Ser Ala Phe Phe Phe Arg Asn Arg Gln Ile Cys Ser Thr
20 25 30
Met Asn Ser Pro Lys Val Ala Leu Ile Thr Gly Ala Ser Arg Gly Leu
35 40 45
Gly Ala Ala Ile Ala Arg Cys Leu Ala Glu Glu Gly Met Asn Ile Val
50 55 60
Ile Asn Tyr Asn Ser Asp Pro Ala Pro Ala Glu Arg Leu Leu Gln Glu
65 70 75 80
Met Arg Ala Leu Ser Gln Ala Lys Val Pro Gly Ala Asn Ala Pro Arg
85 90 95
Tyr Ala Ala Phe Gln Ala Asn Leu Ala Asn Gln Ser Ser Thr Gln Gln
100 105 110
Leu Val Gln Gln Thr Ile Gln Thr Met Gly Arg Leu Asp Val Val Val
115 120 125
Ser Asn Val Gly Trp Thr Arg Met Thr Asn Phe Met Asn Leu Glu Asp
130 135 140
Ala Asp Asn Glu Met Asp Trp Asp Arg Cys Phe Ser Met Asn Val Lys
145 150 155 160
Ser His Phe Gln Leu Phe Arg Val Cys Gln Glu His Leu Glu Arg Ser
165 170 175

```
Glu Gly Val Phe Ile Ala Thr Ala Ser Val Ala Gly Val Lys Pro Ser
            180                 185                 190
Gly Ser Ser Leu Val Trp Val Ile
        195                 200
```

<210> 27095
<211> 421
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (378),(397),(408)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27095

```
His Leu Ser Glu Leu Thr Asp Phe Pro Leu Gly Thr Val Pro Gly Leu
1               5                   10                  15
Pro Thr Ser Ile Met Ala Ser Thr Glu Glu Pro Val Pro Pro Pro Ala
            20                  25                  30
Pro Val Pro Ala Asp Ala Pro Ala Ser Ala Glu Val Asp Ala Glu Met
        35                  40                  45
Ala Pro Pro Ala Thr Pro Val Asp Ser Thr Ile Leu Ser Gly Ser Glu
    50                  55                  60
Gly Pro Val Thr Ser Pro Asp Ala Ser Ile Arg Asp Lys Glu Asn Ile
65                  70                  75                  80
Lys Ser Ser Pro Glu Lys Thr Thr Thr Thr Thr Asn Arg Pro Leu Ser
                85                  90                  95
Gly Thr Ala Ala Ala Lys Arg Pro Ser Ser Val Ser Gly Ala Thr Lys
            100                 105                 110
Thr Ala Ala Ser Thr Ala Arg Ala Ala Ala Asn Gly Ser Thr Leu Ser
        115                 120                 125
Lys Pro Pro Thr Arg Pro Thr Thr Ser Gly Thr Val Arg Lys Pro Leu
    130                 135                 140
Ser Thr Ser Thr Thr Ala Ser His Arg Ser Arg Pro Ser Val Ser Ser
145                 150                 155                 160
Ser Ala Asp Glu Lys Thr Arg Ser Val Ala Ser Ser Gly Asp Glu Arg
                165                 170                 175
Arg Gly Ile Ser Gly Ser Ala Lys Arg Met Ser Leu Val Gly Thr Thr
            180                 185                 190
Ser Ser Arg Ala Pro Pro Lys Thr Thr Thr Ser Thr Leu Asp Arg Arg
        195                 200                 205
Ser Ser Ile Ala Gly Thr Thr Thr Ser Arg Ser Pro Ala Thr Arg Pro
    210                 215                 220
Ser Thr Ala Pro Ser Thr Lys Pro Ala Thr Lys Pro Thr Gly Val Ser
225                 230                 235                 240
Ser Thr Ser Arg Thr Ser Asn Ser Thr Ser Thr Thr Val Ala Arg Pro
                245                 250                 255
Ala Ala Arg Pro Met Ala Thr Ala Thr Arg Pro Thr Thr Thr Ala Ser
            260                 265                 270
Lys Arg Leu Ser Thr Ala Ile Lys Val Ser Asp Asp Glu Ala Glu Lys
        275                 280                 285
Leu Gln Ser Leu Gln Asn Lys Leu Ser Glu Ser Glu Ala Thr Val Ala
    290                 295                 300
Ser Leu Lys Ala Glu Leu Glu Thr Val Asn Glu Lys Leu Ser Gln Leu
305                 310                 315                 320
```

```
Ser Val Ser His Gly Gly Ala Ser Lys Glu Asn Asp Asp Glu Val Ala
                325                 330                 335
Ser Ala Arg Arg Lys Glu His Ala Ala Glu Thr Ala Lys Leu Ala Ala
            340                 345                 350
Glu His Ala Glu Gln Leu Gln Ala Leu Gln Ala Gln Leu Asp Glu Ala
        355                 360                 365
Glu Thr Lys Arg Lys Glu Leu Glu Asp Xaa Val Leu Gln Asp Leu Glu
    370                 375                 380
Tyr Ala Ala Lys Ala Ala Ala His Glu Arg Asp Asp Xaa Thr Thr Ala
385                 390                 395                 400
Ala Leu Glu Glu Leu Lys Gln Xaa His Gln Ser Gln Leu Glu Thr Leu
                405                 410                 415
Glu Lys Arg Thr Cys
            420
```

<210> 27096
<211> 199
<212> PRT
<213> A.fumigatus

<400> 27096

```
Thr Asp Leu Phe Arg Ser Leu Phe Tyr Ser Phe Val Ser Leu Ala Phe
1               5                   10                  15
Gln Ile Pro Phe Ala His Ser Pro Ala Pro Asp Thr Leu Pro Ala Asp
            20                  25                  30
Asp Pro Asn Ala Tyr Gly His Gly Ser Phe Val Val Phe Trp Met Leu
        35                  40                  45
Asn Trp Val Gly Met Thr Ala Leu Gly Leu Pro Cys Glu Asn Met Gly
    50                  55                  60
Met Ile Leu Gly Phe Pro Tyr Ser Ala Leu Phe Leu Ile Phe Trp Val
65                  70                  75                  80
Ile Thr Asn Val Ala Thr Gly Phe Tyr Ala Leu Asp Leu Ala Pro Gly
                85                  90                  95
Phe Phe Ala Trp Gly Tyr Ala Phe Pro Leu His Arg Ser Lys Ser Ser
            100                 105                 110
Ile Leu Arg Thr Ala Leu Arg Leu Ser Asn Ser Cys Ser Cys Arg Gly
        115                 120                 125
Ala Pro Asp Tyr Ser Leu Arg His Ala Phe Leu Asp Trp Thr Arg Leu
    130                 135                 140
Trp His Ser Val Cys Val Asp Arg Ile Val His His Ile Ile Pro Ile
145                 150                 155                 160
Cys Arg Ile Cys His Ala Leu Glu Asp Glu Ala Arg Ile Val Ile Phe
                165                 170                 175
Ala Arg Asp Arg Ser Ile His Ser Asn Gln Phe Ile Ile Leu Asp Thr
            180                 185                 190
Ser Gln His Asn Leu Phe Ser
        195
```

<210> 27097
<211> 109
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (52)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27097

```
His Ser Ile Leu Ser Leu Ser Phe Asp Met Ala Thr Thr Asn Asp Phe
1               5                  10                  15
Leu Ser Ser Asp Val Asn Ser Tyr Asp Tyr Val Ile Val Gly Gly Gly
            20                  25                  30
Thr Ala Gly Cys Val Ile Ala Ser Arg Leu Ala Gln Tyr Leu Pro Asn
        35                  40                  45
Lys Arg Ile Xaa Val Ile Glu Gly Gly Pro Ser Asp Phe Met Asp Asp
    50                  55                  60
Arg Val Leu Asn Leu Arg Glu Trp Leu Asn Leu Leu Gly Gly Glu Leu
65                  70                  75                  80
Asp Tyr Asp Tyr Pro Thr Thr Glu Gln Pro Met Gly Val Tyr Ser Ser
                85                  90                  95
His Ile Leu Cys Phe Ile Arg Thr Ser Leu Arg Val Ile
            100                 105
```

<210> 27098
<211> 62
<212> PRT
<213> A.fumigatus

<400> 27098

```
Val Tyr Ala Ile Arg Ser Ile Asn Ile Pro Pro Trp Ser Thr Met Lys
1               5                  10                  15
Asp Glu Val Asp Glu Asn Ser Pro Lys Leu Thr Ile Asp Leu Phe Ile
            20                  25                  30
Glu Lys Trp Arg Tyr Gln Met Ile Ile Lys Trp Val Leu Arg His Ile
        35                  40                  45
Gly Ala Cys Leu Ala Lys Asp Asp Asn Thr Pro Lys Gly Leu
    50                  55                  60
```

<210> 27099
<211> 86
<212> PRT
<213> A.fumigatus

<400> 27099

```
Thr Arg Ser Cys Arg Ala Leu Pro Ile Gln Asp Ser Tyr Ser Leu Gln
1               5                  10                  15
Leu Tyr Leu Ser Leu Tyr Phe Leu Val Tyr Ser Asp Cys Leu Phe Ala
            20                  25                  30
Leu Asn Gln Leu Ser Ala Leu Ala Ser Thr Ser Thr Val Ile Cys Cys
        35                  40                  45
Phe Ile Leu Tyr Ile Gly Lys Cys Leu Pro Ser Gly Phe Lys Asn Pro
    50                  55                  60
Ala His Ala Thr Leu Val Asp Thr Tyr Cys Asn Asn Glu Glu Lys Arg
65                  70                  75                  80
Leu Gly Leu Trp His Ile
                85
```

<210> 27100
<211> 279
<212> PRT
<213> A.fumigatus

<400> 27100
Val Lys Ile Leu Arg Gln Arg Arg Cys Pro Leu Pro Gly Arg Leu Arg
1 5 10 15
Cys Cys Ser Trp Pro Ala Leu Gly Thr Pro Ser Ala Tyr His Ala Ala
20 25 30
Arg Cys Ala Val Ser Leu Thr Asn Leu Glu Leu Arg Lys Val Glu Leu
35 40 45
Asp Ser Met Ala Ser Ile Leu Arg Val Leu Met Asn Asn Val Arg Arg
50 55 60
Arg Arg Leu Ser Ser Arg Glu Cys Ser Thr Val Ala His Ile Ile His
65 70 75 80
Thr Glu Thr Pro Ile Glu Glu Glu Thr Leu Pro His Tyr Lys Ala Glu
85 90 95
His Tyr Tyr Pro Val Arg Ile Gly Asn Val Tyr His Ala Arg Tyr Lys
100 105 110
Val Ala Gly Lys Leu Gly Tyr Arg Ala Tyr Ser Thr Thr Trp Leu Cys
115 120 125
Arg Asp Leu Gln Cys Ala Asn Pro Ser Leu Ile Asn Pro Arg Ala Ala
130 135 140
Leu Thr Ser His Gly Tyr Arg Ala Asn Asn Tyr Thr Val Leu Lys Val
145 150 155 160
Ser Thr Ser Leu Pro Asp Tyr Pro Thr Ala Ala Asp Arg Glu Leu Arg
165 170 175
Val Tyr Lys His Leu Ala Lys Ile Asp Ser Ser His Pro Gly Arg Ser
180 185 190
Leu Ile Arg Glu Leu Tyr Asp Ser Phe Asp Leu His Gly Pro Gly Gly
195 200 205
Thr His Arg Cys Leu Val Leu Gln Leu Met Asn Val Thr Leu Leu Lys
210 215 220
Met Met Arg Met Asn Pro Arg Leu Phe Asp Leu Pro Leu Leu Arg Met
225 230 235 240
Thr Ile Lys Arg Leu Leu Leu Ala Leu Asp Phe Leu His Thr Glu Ala
245 250 255
Glu Val Ile His Thr Gly Arg Asp Leu Cys Phe Ile Lys Val Gly Phe
260 265 270
Asp Thr Asp Val His Gln Thr
275

<210> 27101
<211> 357
<212> PRT
<213> A.fumigatus

<400> 27101
Asn Asn His Pro Tyr Arg Pro His Thr Leu Thr Ile Lys Met Ser Ser
1 5 10 15
Asn Lys Ala Leu Val Phe Lys Lys Val Pro Glu Gly Tyr Pro Val Pro
20 25 30
Gly Glu His Leu Thr Ile Glu Pro Val Glu Tyr Asp Ala Asn Thr Pro
35 40 45
Ala Pro Glu Asn Gly Val Val Leu Gln Ser Leu Tyr Thr Ser Phe Asp
50 55 60
Pro Tyr Met Arg Gly Arg Met Arg Pro Ala His Val Lys Ser Tyr Ser
65 70 75 80
Pro Ala Phe Glu Leu Gly Lys Pro Ile Asp Ser Thr Thr Ile Ala Lys

```
                85                  90                  95
Val Leu Arg Ser Asn Asn Ala Ser Phe Lys Glu Gly Asp Leu Val Ile
            100                 105                 110
Gly Phe Val Pro Ile Gln Glu Tyr Ile Val Leu Asp Gly Ser Gln Val
        115                 120                 125
Ala Arg Ile Arg Pro Leu Glu Asn Pro Leu Gly Ile Glu Asp Ile Arg
    130                 135                 140
Val Phe Leu Gly Ala Leu Gly Met Pro Gly Leu Thr Ala Tyr Ser Ser
145                 150                 155                 160
Leu Tyr Glu Ile Gly Lys Pro Lys Lys Gly Glu Thr Ile Phe Val Ser
                165                 170                 175
Ala Ala Ser Gly Ala Val Gly Gln Leu Val Gly Gln Leu Ala Lys His
            180                 185                 190
Glu Gly Leu Lys Val Ile Gly Ser Val Gly Ser Asp Glu Lys Leu Glu
        195                 200                 205
Tyr Ile Thr Lys Asp Leu Gly Phe Asp Gly Gly Phe Asn Tyr Gln Lys
    210                 215                 220
Glu Lys Pro Ala Asp Ala Leu Ala Arg Leu Ala Pro Gln Gly Ile Asp
225                 230                 235                 240
Ile Tyr Tyr Glu Asn Val Gly Gly Glu His Leu Glu Ala Ala Leu Asp
                245                 250                 255
Ala Met Asn Asn Phe Gly Arg Val Val Val Cys Gly Leu Ile Ser Gln
            260                 265                 270
Tyr Asn Thr Ala Pro Tyr Pro Ile Lys Asn Ile His Asn Val Leu Ile
        275                 280                 285
Lys Arg Ile Asp Met Arg Gly Phe Ile Val Ser Asp Pro Gly Met Gly
    290                 295                 300
Asp Lys Tyr Thr Glu Glu His Gln Lys Asn Val Gln Lys Trp Ile Lys
305                 310                 315                 320
Glu Gly Ser Phe Lys Ala Leu Leu His Glu Thr Thr Gly Ile Asp Asn
                325                 330                 335
Ala Ala Glu Gly Leu Val Gly Ile Phe Tyr Gly Lys Asn Lys Gly Lys
            340                 345                 350
Ala Val Leu Lys Phe
        355
```

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<210> 27102
<211> 140
<212> PRT
<213> A.fumigatus

<400> 27102

```
Ala Gln Thr Arg Pro Ser Ser Ser Arg Lys Ser Pro Lys Asp Thr Gln
1               5                   10                  15
Ser Pro Ala Ser Thr Leu Pro Ser Ser Leu Ser Ser Met Thr Pro Thr
            20                  25                  30
Pro Pro Pro Pro Arg Met Val Leu Ser Tyr Ser Pro Ser Thr Pro Ala
        35                  40                  45
Leu Thr Pro Thr Cys Val Ala Ala Cys Ala Pro Leu Thr Ser Ser His
    50                  55                  60
Thr Leu Pro Leu Ser Ser Leu Ala Ser Pro Ser Thr Ala Gln Arg Leu
65                  70                  75                  80
Arg Arg Ser Ser Ala Pro Thr Met Leu Leu Ser Arg Lys Ala Ile Trp
                85                  90                  95
Ser Ser Ala Ser Ser Pro Ser Arg Ser Thr Ser Phe Ser Met Ala Pro
            100                 105                 110
```

```
Arg Leu Pro Ala Ser Ala Leu Ser Arg Thr Pro Ser Ala Ser Arg Thr
        115                 120                 125
Ser Val Cys Ser Ser Val Leu Trp Val Cys Pro Val
    130                 135                 140

<210> 27103
<211> 203
<212> PRT
<213> A.fumigatus

<400> 27103
Arg Val Tyr Glu Met Ile Leu Leu Leu Thr Cys Arg Ile Phe Phe Gln
1               5                   10                  15
Arg Ser Thr Ser His Leu Glu Leu Gln Asp Ser Leu Ala Leu Val Leu
            20                  25                  30
Thr Val Glu Asp Thr His Gln Thr Leu Gly Gly Ile Val Asp Thr Gly
        35                  40                  45
Gly Leu Val Gln Lys Ser Leu Glu Arg Ala Leu Leu Asp Pro Leu Leu
    50                  55                  60
His Val Leu Leu Val Leu Phe Ser Val Leu Val Thr His Ala Arg Val
65                  70                  75                  80
Ala Asp Asp Glu Ala Thr His Val Asn Thr Leu Asp Gln His Ile Val
                85                  90                  95
Asp Val Leu Asp Gly Val Arg Ser Ser Val Val Leu Gly Asp Gln Ala
            100                 105                 110
Ala Asp Asn Asp Thr Thr Lys Val Val His Ser Val Gln Ser Arg Leu
        115                 120                 125
Glu Val Leu Ala Thr Asp Val Leu Val Val Asp Val Asp Thr Leu Gly
    130                 135                 140
Arg Gln Ala Gly Gln Ser Ile Ser Gly Leu Phe Leu Leu Val Val Glu
145                 150                 155                 160
Thr Thr Val Lys Ala Gln Val Leu Gly Asp Val Leu Glu Leu Leu Val
                165                 170                 175
Arg Thr Asn Thr Ala Asp Asp Leu Glu Thr Phe Val Leu Ser Gln Leu
            180                 185                 190
Thr Asn Glu Leu Ser Asp Ser Ala Ala Arg Ser
        195                 200

<210> 27104
<211> 473
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (331)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27104
Thr His Ser Ala Val Pro Ser Ala Arg Gly Val Lys Ser Ser Ser Ser
1               5                   10                  15
Phe Gly Leu Ile Gly Glu Ile Arg Glu Arg Ser Pro Ser Ala Ala Ile
            20                  25                  30
Pro Pro Ala Pro Lys Pro Ser Thr Ala Ser Thr Gly Phe Pro Gln His
        35                  40                  45
Arg Arg Arg Val Asn Gln Ser Ala Phe Lys Gln Arg Arg Ala Asn Arg
```

```
    50                  55                  60
Gln Gln Glu Ser Thr Pro Pro Pro Ala Ala Thr Pro Ser Thr Thr Leu
65                  70                  75                  80
Ser Asp Glu Lys Lys Ser Ile Asp Glu Glu Asn Arg Arg Gln Leu Ala
                85                  90                  95
Ser Met Ser Pro Ala Gln Ile Gln Gln Glu Arg Glu Glu Leu Met Ser
            100                 105                 110
Ser Leu Asn Pro Ser Leu Leu Glu Arg Phe Leu Arg Arg Ala Arg Ile
        115                 120                 125
Asp Asp Asp Asp Ser Ile Thr Pro Ser Glu Lys Ser Ser Ser Gln Pro
    130                 135                 140
Glu Pro Pro Leu Ser Ser Ala Ser Ser Ala Gln Asp Ala Ser Thr Ala
145                 150                 155                 160
Lys Ser Lys Lys Ser Val Ser Phe Asp Val Glu Glu Asp Ser Lys Thr
                165                 170                 175
Ala Thr Glu Lys Leu Glu Arg Ser Gln Arg Lys Arg Thr Pro Pro Thr
            180                 185                 190
Val Thr Ser Ser Val Leu Thr Pro Glu Asp Leu Pro Pro Ala Gln Pro
        195                 200                 205
Pro Ala Asp Leu His Pro Ala Ser Glu Met Pro Ser His Glu Ala Phe
    210                 215                 220
His Phe Pro Thr Pro Pro Arg Gln Asp Lys Pro Pro Asn Leu Asp Pro
225                 230                 235                 240
Ala Ser Pro Ser Phe Leu Ser Asp Leu Gln Ala His Tyr Phe Pro Glu
                245                 250                 255
Ile Ser His Asp Pro Ser Ala Leu Ser Trp Leu Gln Pro Pro Ser Ala
            260                 265                 270
Asp Pro Glu Asp Pro Asp Ser Thr Ser Ala Tyr His Pro Ala Ser Ser
        275                 280                 285
Ala Glu Ala Val His Pro Ser Ala Leu Arg Phe Ser Leu Leu Gly Asn
    290                 295                 300
Val Leu Ser Pro Ala Thr Ser Leu Ser Leu Pro Thr Thr Leu Gly Leu
305                 310                 315                 320
His His His Gly Lys Asp Pro His Ala Ala Xaa Tyr Thr Ile Pro Glu
                325                 330                 335
Leu Ala Ile Leu Ser Arg Ser Thr Phe Pro Ala Gln Arg Cys Ile Ala
            340                 345                 350
Trp Gln Val Leu Gly Arg Ile Leu Phe Arg Leu Gly Lys Gly Gln Phe
        355                 360                 365
Gly Glu Arg Gly Ser Pro Leu Val Glu Gly Leu Trp Ser Val Ile Glu
    370                 375                 380
Arg Glu Gly Val Val Ala Gly Met Leu Ala Glu Ala Asp Gly Ala Pro
385                 390                 395                 400
Ser Gly Pro Thr Arg Ser Ala Ala Ala Gln Asp Ser Thr Ala Ala Asp
                405                 410                 415
Leu Asn His Pro Ser Pro Leu Pro Ala Gln Gly Thr Pro Val Pro Lys
            420                 425                 430
Gly Ala Thr Gly Ile Gly Arg His Ala Ser Ala Ser Ala Trp Ala Val
        435                 440                 445
Glu Gly Val Trp Leu Trp Gln Met Gly Gly Gly Gly Asp Arg Gly Ile
    450                 455                 460
Leu Lys Glu Asn Thr Ile Arg Ser Gln
465                 470
```

<210> 27105
<211> 74

<212> PRT
<213> A.fumigatus

<400> 27105
Arg Pro Leu Arg Asp His Leu Ser Ser Ile Ser Gln Asn Asn Asn His
1 5 10 15
Arg Ile Lys Leu Thr Tyr Val Glu Ser Tyr Ala Gln Ile Lys Lys Lys
20 25 30
Lys Ile Cys Ser Asn Gln Asp Lys Ser Gln Phe Thr Ser Phe Ser Phe
35 40 45
Arg Leu Tyr Asp Ile Leu Pro Ile Cys Thr Pro Gln Thr Phe His Arg
50 55 60
Val Ser Ser Gln Lys Leu Pro Pro Gln Pro
65 70

<210> 27106
<211> 371
<212> PRT
<213> A.fumigatus

<400> 27106
Leu Gly Gln Cys Gly Lys Glu His Pro Arg Cys Ser His Cys Met Lys
1 5 10 15
Arg His Ile Leu Cys His Tyr Met Pro Ser Trp Lys Tyr Ser Arg Ser
20 25 30
Thr Ser Thr Gln Asn Arg Ser Ser Met Lys Thr Leu Pro Ser Ile Ser
35 40 45
Val Leu Thr Cys Val Ala Gln Ser Gln Ser Gln Met Ser Pro Thr Gly
50 55 60
Pro Asn Asp Ala Lys Asp Asn Leu Asn Val His Asp Leu Glu Leu Met
65 70 75 80
Met Gln Trp Cys Thr Lys Thr Tyr Arg Ser Leu Ser His Ser Ser Asn
85 90 95
Val Glu Ser Ile Trp Gln Thr Val Ile Pro Arg Glu Ala Met Arg His
100 105 110
Pro Ala Leu Met His Gly Ile Leu Ala Leu Ser Ala Leu His Leu Ala
115 120 125
Ser Ser Thr Gly Gly Ser Met Tyr Glu Arg Tyr Ile Lys Thr Ala Glu
130 135 140
Ala His Lys Asp Leu Ala Leu Ser Gly Phe Arg Lys Arg Phe Thr Asn
145 150 155 160
Ile Asp His Ser Asn Cys Asp Ala Ala Phe Ala Leu Cys Ser Leu Thr
165 170 175
Thr Ile Ser Ser Leu Ala Phe Pro Leu Ile Ala Gly Gln Gly Gln Thr
180 185 190
Asn Thr Ala Leu Asp Asp Ile Cys Glu Ala Phe Gln Val Ala Arg Asn
195 200 205
Ser Met Asn Val Leu Val Gln Ile Ala Asp Gln Val Lys Ser Gly Glu
210 215 220
Leu Lys Pro Leu Leu Glu Glu Asp Glu Gly Gly Pro Lys Met Pro Asp
225 230 235 240
Thr Ser Arg Leu Ala Ile Met Ser Leu Ser Met Thr Asn Ser Gln Leu
245 250 255
Val Asn Arg Asn Pro Lys His Glu Arg Glu Met Phe Glu Ala Thr Ile
260 265 270
Arg Gln Leu Gly Gln Ser Leu Glu Lys Leu Ala Gln Gly Arg Glu Ala

```
        275                 280                 285
Ser Ile Val Ala Phe Gln Trp Met His His Ile Pro Pro Arg Phe Met
    290                 295                 300
Asp Leu Val His Glu Arg His Pro Phe Ala Leu Val Ile Leu Ala His
305                 310                 315                 320
Tyr Ala Val Val Leu His Phe Met Arg Ser Arg Trp Trp Met Gly Asp
                325                 330                 335
Trp Gly Ala Arg Ile Ile Gln Gln Val Gly Gln Leu Leu Asp Ser Gln
            340                 345                 350
Trp Arg Gln Ser Ile Ser Trp Val Leu Asp Ala Thr Gly Cys Tyr Ile
        355                 360                 365
Ala Pro Thr
    370
```

<210> 27107
<211> 73
<212> PRT
<213> A.fumigatus

```
<400> 27107
Gln Tyr Asn Ala Ser Lys Ala Gly Val Val Gln Leu Ala Lys Cys Leu
1               5                   10                  15
Ser Val Glu Trp Val Asp Phe Cys Arg Val Asn Cys Ile Ser Pro Gly
            20                  25                  30
Phe Ile Glu Thr Asp Ile Leu Asp Ile His Pro Lys Glu Trp Arg Glu
        35                  40                  45
Lys Trp Tyr Ser Met Val Pro Ala Gln Arg Phe Ala Asp Ala Tyr Glu
    50                  55                  60
Leu Lys Gly Val Ser Phe Pro Phe Leu
65                  70
```

<210> 27108
<211> 153
<212> PRT
<213> A.fumigatus

```
<400> 27108
Arg Lys Asn Lys Lys Lys Ala His Asp Gln Val Ala Leu Ile Tyr Asn
1               5                   10                  15
Ser Ser Lys Thr Ala Asp Thr Thr Ala Ala Glu Ile Ala Ser Ala Asn
            20                  25                  30
Asn Val Arg Ala Ala Ala Tyr Gln Ala Asn Val Ser Asn Lys Ala Glu
        35                  40                  45
Ile Glu Arg Thr Ile Gln Gln Ile Ala Ser Asp Phe Gly Gly Leu Asp
    50                  55                  60
Ile Ile Val Val Asn Ser Gly Ile Thr Ser Asn Val Ala Ala Glu Asp
65                  70                  75                  80
Tyr Thr Ala Glu Gln Trp Lys Glu Val Met Gln Val Asn Leu Asp Gly
                85                  90                  95
Ala Phe Tyr Thr Ala Gln Ala Ala Ala Gln Ile Phe Lys Ala Gln Gly
            100                 105                 110
Arg Gly Asn Val Ile Phe Thr Ala Ser Val Ser Ala Thr Leu Val Asn
        115                 120                 125
Val Pro Gln Lys Gln Ala Ala Val Cys Gly Phe Ser Cys Ser Ala Thr
    130                 135                 140
Ala Ala Arg Leu Leu Thr Val Ala Val
```

145 150

<210> 27109
<211> 144
<212> PRT
<213> A.fumigatus

<400> 27109
Thr Glu Tyr Ala Ile Tyr Thr Thr Lys Ser Ala Gln Gln Pro Tyr His
1 5 10 15
Pro Ala Gly Pro Leu Pro Phe Ala Ala Thr Asn Gln Pro Pro Ser His
20 25 30
Gln Ala Thr Thr Ala Ala Ala Gln His Thr Pro Pro Ala Asn Val Ala
35 40 45
Arg Tyr Ser Pro Ser Arg Gln Gln Thr Ala His Ser Thr Ala Thr Ala
50 55 60
Pro His Arg Cys Ala Pro Ala Ser Gln Gln Asp Thr Pro Pro Gly Cys
65 70 75 80
Pro His Gln Thr Thr Pro Leu Ala Pro Pro Ala Ala Pro Tyr Pro Thr
85 90 95
Pro Arg Ala His Ser Thr Ala Pro Ala Gln Thr Gly Pro Asp Ser Pro
100 105 110
Asp Cys Pro Ala Ala Arg Arg Thr Gln Arg Met Cys Ser Arg Ser Ser
115 120 125
Arg Ser Gly Gly Tyr Gly Thr Arg Val Val Pro Ala Gln Arg Gly Cys
130 135 140

<210> 27110
<211> 163
<212> PRT
<213> A.fumigatus

<400> 27110
Met Gly Phe Ser Pro Val Gly Arg Gln Leu Gln Ile Leu Trp Gln Gly
1 5 10 15
Ile Arg Pro Leu Thr Thr Pro Trp Thr Cys Thr Ser Gln Ile Thr Pro
20 25 30
Ser Val Gln Pro Thr Ile Thr Leu Ile Gly Leu Gly Ala Arg Leu Leu
35 40 45
Ile Gln Pro Pro Gln Ile His Pro Ile Pro Ser Pro Gln Ser Arg Pro
50 55 60
Arg Pro Arg Pro Ser Pro Pro Met Leu Arg Gly Asn Lys Gln Asn Met
65 70 75 80
Pro Tyr Ile Arg Gln Asn Pro Pro Ser Asn Pro Ile Ile Arg Arg Gly
85 90 95
Arg Ser Pro Ser Pro Arg Arg Thr Ser Pro His Pro Ile Lys Gln Pro
100 105 110
Leu Pro Gln Arg Asn Ile Leu Pro Pro Arg Met Ser Pro Asp Ile Leu
115 120 125
Pro Arg Asp Asn Lys Leu Arg Thr Ala Leu Arg Pro His Arg Ile Val
130 135 140
Ala Pro Gln Arg Arg Ser Lys Ile Pro Leu Pro Val Val Pro Thr Lys
145 150 155 160
Gln His Pro

<210> 27111
<211> 530
<212> PRT
<213> A.fumigatus

<400> 27111

```
Ser Leu Thr Arg Phe Gln Gly Ser Ser Asp Leu Ala Gln Lys Met Met
1               5                  10                  15
Ser Thr Met Leu Ser Arg Pro Ala Ala Asn Ile Thr Pro Pro Glu Val
            20                  25                  30
Leu Leu Gln Ile Phe Tyr Leu Leu Asn Pro Arg Asp Phe Asp Asn Ala
        35                  40                  45
Arg Arg Thr Cys Ser Gln Trp Met Arg Ala Ser Leu Asp Lys Asn Leu
    50                  55                  60
Leu Glu Ser Met Leu Lys Arg Ala Gly Trp Trp Asp Ala Trp Lys Gln
65                  70                  75                  80
Asp Cys His Asn Tyr Arg Val Asp Pro Ser Ala Ser Glu Gln Ser Leu
                85                  90                  95
Val Trp Arg Met Ser Arg Arg Phe Ala Thr Glu Cys Thr Leu Ser Gly
            100                 105                 110
Ser Lys Ser Asn Val Glu Arg Ala Gly Phe Leu Thr Thr Gly Val Val
        115                 120                 125
Asp Phe Ser Arg Leu Ser Gln Gly Gln Ser Leu Ala Lys His Gly Ala
    130                 135                 140
Ser Ala Pro His Ser Val Ala Gly Ser Val Met Asn Pro Asp Ser Arg
145                 150                 155                 160
Pro Leu Ala Thr Ser Arg Phe His Val Ser Lys Cys Ala Asn Tyr Leu
                165                 170                 175
Leu Val Thr Ser Gly Arg Met Ile Tyr Val Tyr His Leu Leu Tyr Arg
            180                 185                 190
Lys Ser Gly Ser Asp Val Phe Thr Thr Met Asp Ala Leu Thr Asp Leu
        195                 200                 205
Asp Ile Ala Pro Val Thr Ser Ile Ile Cys Pro Val Glu Val Ile Ser
    210                 215                 220
Ala Ser Ile Asp Thr Ser Thr Pro Arg Ile Val Ile Ala Ala Leu Leu
225                 230                 235                 240
Arg Asp Arg Leu Gly Phe Val Cys Asp Leu Asn Ala Ser Ser Glu Arg
                245                 250                 255
Ser Ser Ala Gln Ser Glu Val Met Gln Leu Leu Asp Pro Ser Phe Ile
            260                 265                 270
His Tyr Phe Arg Asp Ile Cys Ser Pro Glu Asp Pro Pro Arg Ser Val
        275                 280                 285
Ser Ile Cys Pro Gly Arg Arg Cys Val Ala Phe Gly Ser Gly Thr Ser
    290                 295                 300
Ile Glu Leu His Trp Val Asp Glu Lys Thr Arg Glu Asn Arg Arg Lys
305                 310                 315                 320
Arg Phe Pro Met Ser Gln Pro Ser Glu Ile Leu His Phe Leu Pro Asn
                325                 330                 335
Arg Pro Glu Thr Pro Met Glu Met Arg Leu Ile Ser Ser Leu Ala Gly
            340                 345                 350
Pro Gly Met Pro Gly Cys Glu Cys His Lys Val Ser Tyr Gly Glu Met
        355                 360                 365
Arg Ala Pro Cys Gln Leu His Leu Leu Thr Asp Val Gln Ser Leu Thr
    370                 375                 380
Arg Trp Thr Pro Ser Asn Asn Asp Ser Leu Ser Ile Val Arg Ala Thr
385                 390                 395                 400
```

```
His Cys His His Tyr Arg Ala Ile Pro Ile Asn Asp Gly Leu His Ile
                405                 410                 415
Leu Phe Ile Glu Pro Arg Thr Gly Leu Leu Cys Ile Gly Ser Asp Ala
            420                 425                 430
Pro Ile Gly Gly Pro Thr Ser Leu Thr Gln Ala Leu Val Cys Val Pro
        435                 440                 445
Pro Phe Gly Lys Asp Cys Leu Asn Val Ser Lys Asp Asp Leu Ala Pro
    450                 455                 460
Thr Val Phe Ala Ser Gly Trp Asn Leu Asp Trp Gly Leu Arg Val Val
465                 470                 475                 480
Ala Ala Tyr Gly Asp Arg Ile Val Leu Tyr Ser Val Pro Val Asp Val
                485                 490                 495
Tyr Asn Val Ile Arg Lys Glu Arg Glu Arg Gln Gly Asp Gly Val Met
            500                 505                 510
Gly Asp Ser Asp Leu Ser Ser Pro Arg Gly Trp Lys Glu Pro Leu Pro
        515                 520                 525
Ser Gln
    530
```

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<210> 27112
<211> 354
<212> PRT
<213> A.fumigatus

<400> 27112

```
Ser Leu Ser Leu Val Ile Met Ser Ser Asn Thr Phe Ser Asp Ile Leu
1               5                   10                  15
Tyr Tyr Thr Thr Asp Ser Asp Tyr Leu Ala Ala Ala Leu Phe Phe Ala
            20                  25                  30
Phe Gly Ile Val Ile Leu Ser Leu Trp Leu Val Asn Leu Leu Val Ala
        35                  40                  45
Val Ile Thr His Ser Phe Gln Val Ile Arg Glu Glu Ser Lys Arg Ser
    50                  55                  60
Ala Phe Ala Val Gln Lys Leu Asp Ser Leu Asp Thr Glu Asn Thr Ser
65                  70                  75                  80
Thr Arg Lys Thr Ser Ser Phe Lys Arg Phe Tyr Asp Arg Thr Glu Trp
                85                  90                  95
Leu Trp Ile Gly Ile Ile Ile Leu Asp Leu Val Val Gln Ala Met Arg
            100                 105                 110
Ser Ser Thr Met Glu Glu Asp Arg Ala Asn Leu Ile Asn Val Val Glu
        115                 120                 125
Val Phe Val Thr Ile Ile Leu Leu Phe Glu Ile Ile Leu Arg Phe Ala
    130                 135                 140
Ser Asp Trp Arg Arg Phe His Arg Ser Arg Arg Asn Trp Val Asp Leu
145                 150                 155                 160
Gly Leu Ala Leu Ile Thr Cys Val Ile Gln Ile Pro Ala Ile Lys His
                165                 170                 175
Ser Gly Arg Pro Tyr Asp Val Leu Thr Leu Phe Gln Ile Leu Arg Val
            180                 185                 190
Tyr Arg Val Val Leu Ala Phe Ser Val Thr Arg Asn Leu Ile Met Val
        195                 200                 205
Val Phe Arg Asn Ala Thr Gly Leu Leu Asn Leu Ile Met Phe Val Phe
    210                 215                 220
Leu Ile Thr Phe Leu Ala Ser Ile Phe Ala Thr Gln Leu Phe Arg Gly
225                 230                 235                 240
Gln Ile Pro Ala Glu Asn Asn Gly Gly Asp Glu Ile Asp Ile Asn Phe
```

```
                245                 250                 255
Ala Asp Ile Tyr Asn Ser Phe Leu Gly Met Tyr Gln Ile Leu Ser Ser
            260                 265                 270
Glu Asn Trp Thr Thr Met Leu Tyr Asp Ala Thr Ala Phe Thr Tyr Pro
        275                 280                 285
Phe Asn Thr Ala Trp Ile Ser Ala Ile Phe Ile Ile Leu Trp Phe Ile
    290                 295                 300
Val Ala Asn Phe Ile Val Leu Asn Met Phe Ile Ala Val Ile Gln Glu
305                 310                 315                 320
Ser Phe Asp Val Ser Glu Asp Glu Lys Arg Leu Gln Gln Val Arg Ala
                325                 330                 335
Phe Leu Glu Gln Lys Gln Ser Ser Pro Arg Gly Trp Thr Asp Pro Arg
            340                 345                 350
Leu Gly
```

<210> 27113
<211> 101
<212> PRT
<213> A.fumigatus

<400> 27113

```
Val Thr Asp Ala Thr Thr Met Val Phe Leu Pro Pro Ala Thr Ala Gly
1               5                   10                  15
Glu Leu Ala Pro Ile Pro Asp Asn Ile Pro Ile Ser Glu Phe Met Leu
            20                  25                  30
Asn Glu Lys Tyr Gly Arg His Pro Ala Ser Gln Ser Arg Asp Pro Tyr
        35                  40                  45
Thr Cys Gly Leu Thr Gly Lys Ser Tyr Ser Val Pro Gln Val Thr Glu
    50                  55                  60
Gln Val Asp Leu Leu Ala Arg Ala Leu Ala Arg Glu Leu Asn Trp Ala
65                  70                  75                  80
Pro Asn Ser Gly Thr Glu Trp Asp Lys Thr Leu Ala Ile Phe Ser Leu
                85                  90                  95
Asn Thr Val Ser Thr
            100
```

<210> 27114
<211> 138
<212> PRT
<213> A.fumigatus

<400> 27114

```
Ile Asp Thr Leu Pro Leu Ser Trp Ala Val His Gln Leu Gly Gly Val
1               5                   10                  15
Val Ser Pro Ala Asn Ala Ala Tyr Ser Ala Ala Glu Leu Lys His Gln
            20                  25                  30
Leu Leu Asp Ser Lys Ala Lys Ala Leu Phe Thr Cys Ala Pro Leu Leu
        35                  40                  45
Arg Thr Ser Leu Glu Ala Ala Ala Met Val Gly Leu Pro Lys Asp Arg
    50                  55                  60
Ile Tyr Leu Leu Glu Val Pro Pro Gln Ala Gly Gly Gly Lys Glu Ala
65                  70                  75                  80
Gly Leu Gly Phe Lys Thr Val Ser Gln Leu Ile Glu Lys Gly Lys Leu
                85                  90                  95
Leu Pro Lys Val Glu Arg Leu Asn Trp Ser Ala Gly Glu Gly Ala Arg
```

```
            100                 105                 110
Arg Thr Ala Phe Leu Cys Tyr Ser Gln Trp Asn Val Phe Tyr His Glu
        115                 120                 125
Gly Asp Glu Ala Ser Ala Leu Ser Asp Gly
    130                 135
```

<210> 27115
<211> 524
<212> PRT
<213> A.fumigatus

<400> 27115

```
Cys Ile Ser Val Pro Thr Leu Leu Thr Thr Ala Ala Asp Pro His Arg
1               5                   10                  15
Tyr Met Ser Glu Thr Gln Ala Phe Phe Leu Leu Ser Val Leu Cys Asp
            20                  25                  30
Arg Leu Leu Pro Gly Tyr Tyr Ser Thr Thr Met Tyr Gly Thr Leu Leu
        35                  40                  45
Asp Gln Lys Val Phe Glu Ser Leu Val Glu Lys Thr Met Pro Val Leu
    50                  55                  60
Trp Asp His Leu Ser Lys Ser Asp Val Gln Leu Ser Val Val Ser Leu
65                  70                  75                  80
Pro Trp Phe Leu Ser Leu Tyr Ile Asn Ser Met Pro Leu Val Phe Ala
                85                  90                  95
Phe Arg Val Leu Asp Val Phe Phe Leu Glu Gly Pro Lys Val Leu Phe
            100                 105                 110
Gln Val Gly Leu Ala Ile Leu Arg Ile Asn Gly Glu Glu Leu Leu Asp
        115                 120                 125
Val Gln Asp Asp Gly Ser Phe Ile Ser Val Leu Lys Ser Tyr Phe Ser
    130                 135                 140
Arg Leu Asp Glu Ser Ala His Pro Lys Ser Glu Asn Pro Lys Leu Arg
145                 150                 155                 160
Ala Ile Thr Arg Phe Gln Glu Leu Met Val Val Ala Phe Lys Glu Phe
                165                 170                 175
Ser Gly Ile Thr His Ser Thr Ile Thr Glu Gln Arg Glu Lys His Lys
            180                 185                 190
Asp Ala Val Leu Glu Asn Ile Glu Ser Phe Ala Lys Arg Thr Ser Ile
        195                 200                 205
Arg Asn Leu Gly Pro Asp Ser Lys Arg Leu Ser Met Asp Asp Leu Gly
    210                 215                 220
Leu Ile Tyr Asp Arg Phe Tyr Glu Val Leu Tyr Asp Arg Gln Gln Lys
225                 230                 235                 240
Gln Arg Leu Ile Asp Glu Glu Lys Lys Arg Gln Glu Lys Lys Arg Ser
                245                 250                 255
Glu Arg Thr Ser Ile Leu Gly Pro Pro Val Asp Gln Glu Met Gly Arg
            260                 265                 270
Val Gly Leu Gly Pro Ser Pro Thr His Met Asp Tyr Asp Ala Phe Arg
        275                 280                 285
Asp Phe Leu Ala Ile Thr Ala Lys Trp Ala Val Thr Asp Ser Pro Gly
    290                 295                 300
Pro Ser Arg Lys Glu Ser Ser Ala Asp Ile Asn Gly Ser Phe Arg Gly
305                 310                 315                 320
Phe Gly Lys Trp Thr Ser Gly Ala Asn His Lys Pro Glu Pro Ala Asp
                325                 330                 335
His Glu Phe Met Gln Arg Leu Phe Arg Lys Trp Ala Thr Asp Pro Ser
            340                 345                 350
```

```
Glu Gly Leu Ser Leu Gln Asn Val Val Asn Gly Leu Ala Arg Leu Lys
        355                 360                 365
Gly Thr Arg Asp Ile Met Asn Ser Ile Asn Tyr Phe Phe Asp Leu Tyr
    370                 375                 380
Asp Asp Asn Gly Asp Gly Lys Ile Asp Arg Glu Gly Ile Leu Arg Met
385                 390                 395                 400
Ser Glu Ala Leu Leu Phe Leu Ser Arg Arg Gly Phe Asp Gly Thr Ile
                405                 410                 415
Thr Pro Ser Gln Ser Leu Glu Asp Leu Asn Asp Arg Asn His Pro Glu
            420                 425                 430
Arg Asp Lys Leu Ser Thr Asp Glu Arg Phe Leu Gly Ser Val Ser Ser
        435                 440                 445
Phe Ile Arg Arg Cys Phe Glu Tyr Ala Asp Pro Ser Lys Pro Glu Gly
    450                 455                 460
Lys Thr Thr Asp Thr Ala Asn Asp Thr Asn Glu Ala Pro Asp Lys Leu
465                 470                 475                 480
Asp Ser Phe Ala Ile Gly Asp Asp Asp Glu Glu Asp Leu Ile Asp Met
                485                 490                 495
Glu Glu Asn Lys Asn Pro Lys Gly Ser Ser Ser Val Thr Lys Arg Arg
            500                 505                 510
Asp Asn Asp His Asp Ala Gly Cys His Pro Arg Ala
        515                 520
```

<210> 27116
<211> 139
<212> PRT
<213> A.fumigatus

<400> 27116

```
Arg Ala Phe Val Lys Met Ser Cys Asn Leu Glu Asn Gly Arg Asn Ala
1               5                   10                  15
Thr Leu Val Arg Gln Pro Thr Phe His Lys Leu Ile Arg Val Gly Leu
            20                  25                  30
Pro Asn Arg Leu Arg Gly Glu Ile Trp Glu Val Thr Ser Gly Ser Leu
        35                  40                  45
Tyr Leu Arg Leu Arg Ser Pro Lys Leu Tyr Thr Asp Thr Leu Ala Lys
    50                  55                  60
Phe Ser Gly Arg Glu Ser Leu Ala Ile Asp Glu Ile Glu Lys Asp Leu
65                  70                  75                  80
Asn Arg Ser Leu Pro Glu Tyr Pro Gly Phe Gln Ser Glu Glu Gly Ile
                85                  90                  95
Gly Arg Leu Arg Arg Val Leu Thr Ala Tyr Ser Trp Thr Asn Ala Glu
            100                 105                 110
Ile Gly Tyr Cys Gln Ala Met Asn Ile Val Val Ala Ala Leu Leu Met
        115                 120                 125
Tyr Ile Ser Pro Tyr Pro Ala Asn Asn Arg Cys
    130                 135
```

<210> 27117
<211> 142
<212> PRT
<213> A.fumigatus

<400> 27117

```
Arg Leu Ala Leu Val Thr Gly Gly Gly Ser Gly Ile Gly Leu Met Ile
1               5                   10                  15
```

```
Ile Gln Ala Leu Ala Val Ser Gly Ala Lys Val Tyr Ile Thr Gly Arg
            20                  25                  30
Thr Gly Glu Lys Leu Asp Arg Val Ala Glu Leu Tyr Ser His Asn Ile
        35                  40                  45
Pro Gly Gln Ile Ile Pro Ile Thr Ala Asp Val Thr Ser Lys Gln Ser
    50                  55                  60
Ile Gln Lys Leu Val Asp Glu Ile Ser Ser Glu Glu Lys Ala Leu His
65                  70                  75                  80
Ile Leu Val Asn Asn Ala Gly Ile Ser Gly Thr Thr Gln Asp Thr Asp
                85                  90                  95
Ser Gln Ser Ala Glu Glu Leu His Gln Lys Leu Phe Lys Asp Glu Ser
            100                 105                 110
Asn Ser Val Glu Glu Trp Asp Glu Ile Phe Arg Thr Asn Val Thr Gln
        115                 120                 125
Leu Tyr Phe Thr Thr Ala Ala Phe Leu Pro Leu Leu Asn Lys
    130                 135                 140

<210> 27118
<211> 132
<212> PRT
<213> A.fumigatus

<400> 27118
Thr Asp Leu Glu His Gly Trp Ser Ser Thr Val Val Asn Ile Ser Ser
1               5                   10                  15
Ile Ser Gly Ile Leu Lys Thr Ala Gln His His Phe His Tyr Asn Ala
            20                  25                  30
Ser Lys Gly Ala Ala Ile His Val Ser Arg Met Leu Ala His Gly Ile
        35                  40                  45
Ala Ser Ser Asn Leu Lys Ile Arg Val Asn Asn Ile Ala Pro Gly Val
    50                  55                  60
Phe Pro Leu Glu Met Thr Ala Asn Asp Ser Asp Glu Lys Gln Lys Ser
65                  70                  75                  80
Ser Leu Pro Lys Glu Lys Tyr Glu Gly Lys Val Pro Ala Gly Arg Pro
                85                  90                  95
Gly Lys Asp Lys Asp Met Gly Ser Ala Ile Phe Ser Ile Cys Asn Gln
            100                 105                 110
Tyr Leu Asn Gly Gln Thr Ile Val Val Asp Gly Gly Phe Val Leu Ala
        115                 120                 125
Ala Gly Thr Val
    130

<210> 27119
<211> 98
<212> PRT
<213> A.fumigatus

<400> 27119
Ser Cys His Tyr Arg Ile Val Gln Gln Gln Lys Ala Glu Phe Gly Tyr
1               5                   10                  15
Ser Thr Glu Val Val Ala Val Val Phe Leu Arg Asn Gln Val Asp Leu
            20                  25                  30
Glu Thr Glu Asp Gly Val Thr Ser Gln Met Leu Thr Arg Tyr Lys Phe
        35                  40                  45
Phe His Ala Asn Lys His Arg Ser Thr Lys Cys Lys Cys Cys His Ile
    50                  55                  60
```

```
Lys Cys Ser Ile Asn Leu Lys Ser Ser Ser Pro Ser Leu Pro Ile Ala
65                  70                  75                  80
Pro Asn Leu Trp Leu Thr Ser Tyr Ile Glu Gly Ile Ile Gln Tyr Leu
                85                  90                  95
Arg Asp
```

<210> 27120
<211> 220
<212> PRT
<213> A.fumigatus

<400> 27120

```
Gly Leu Thr Gln Gly Phe Ala His Ser Leu Gly Pro Gln Ile Ala Trp
1               5                   10                  15
Arg Thr Val Phe Ile Ile Glu Tyr Leu Gly Pro Leu Leu Ile His Pro
            20                  25                  30
Leu Phe Leu Phe Pro Leu Arg Pro Tyr Ile Tyr Tyr Asn Phe Asp Lys
        35                  40                  45
Pro Leu Pro Glu Pro Ser Gly Leu Gln Leu Leu Val Cys Gly Leu Leu
    50                  55                  60
Thr Val His Phe Val Lys Arg Glu Leu Glu Thr Leu Phe Val His Arg
65                  70                  75                  80
Phe Ser Asn Ala Thr Met Pro Val Arg His Ile Phe Arg Asn Ser Ala
                85                  90                  95
His Tyr Trp Val Leu Ala Gly Phe Asn Ile Ala Tyr Trp Val Phe Arg
            100                 105                 110
Pro Asp Ala Gly Ala Ala Thr Asn Glu Pro Asn Pro Ala Leu Leu Tyr
        115                 120                 125
Ser Gly Leu Thr Leu Phe Val Phe Gly Glu Leu Ala Asn Leu Asn Thr
    130                 135                 140
His Leu Val Leu Arg Asp Leu Arg Arg Pro Gly Thr Thr Glu Arg Gly
145                 150                 155                 160
Ile Pro Thr Gly Phe Gly Phe Asn Leu Val Thr Cys Pro Asn Tyr Leu
                165                 170                 175
Phe Glu Ile Ile Ala Trp Ile Gly Val Tyr Leu Val Ser Gly Met Ser
            180                 185                 190
Trp Ser Val Leu Phe Phe Ile Thr Ile Gly Gly Ser Thr Met Ala Ser
        195                 200                 205
Val Phe Thr Thr Gly Leu Glu Gly Ser Ala Glu Ala
    210                 215                 220
```

<210> 27121
<211> 177
<212> PRT
<213> A.fumigatus

<400> 27121

```
Leu Ser Leu Cys Asp Ile Ser Ser Lys Met Gln Phe Thr Ser Lys Leu
1               5                   10                  15
Ser Val Ala Leu Leu Ala Ile Leu Ala Ala Gly Gly Glu Ala Asn His
            20                  25                  30
Gln Ala Leu His Gly Arg Lys Phe Phe His Pro Arg Gly Leu Asn Ser
        35                  40                  45
Thr Thr Pro Ala Ser Thr Ser Thr Val Val Val Tyr Pro Thr Pro Ile
    50                  55                  60
```

```
Glu Ser Ser Ser Ala Ala Gly Asp Ser Ile Ser Ala Ile Thr Ser Thr
65                  70                  75                  80
Thr Ile Pro Leu Ser Thr Gly Ala Pro Gly Ser Gly Asp Ser Gly Asp
                85                  90                  95
Asp Asn Gly Gly Gln Asp Val Thr Ile Thr Tyr Thr Leu Gly Ser Gly
            100                 105                 110
Ser Thr Lys Ser Val Val Thr Thr Thr Ile His Lys Thr Ser Thr Asp
        115                 120                 125
Leu His Thr Val Phe Ala Val Cys Cys Ile Asp His Ile Thr Leu Leu
    130                 135                 140
Leu Ser His Cys Ser Arg Leu Thr Asp Phe Leu Tyr Arg Arg Leu Pro
145                 150                 155                 160
Leu Arg Ile Leu Pro Pro Gln Ser Leu Pro Pro Leu Pro Pro Pro Leu
                165                 170                 175
Pro
```

<210> 27122
<211> 147
<212> PRT
<213> A.fumigatus

<400> 27122

```
Ile Lys Gly Thr Arg Thr Phe Val Met Asp Ile Val Gln Phe Leu Glu
1               5                   10                  15
Glu Thr Ser Ser Lys Gln Pro Ile Arg Cys Ile Asp Met His Thr Thr
            20                  25                  30
Gly Glu Pro Thr Arg Ile Ile Tyr Ser Gly Phe Pro Pro Leu Phe Gly
        35                  40                  45
Thr Leu Leu Glu Gln Arg Asp Gln Ala Lys Gln His His Asp His Ile
    50                  55                  60
Arg Lys Cys Leu Met Leu Glu Pro Arg Gly His Asn Gly Met Tyr Gly
65                  70                  75                  80
Ala Ile Ile Arg Pro Glu Thr Glu Leu Val Ser Ser Gly Ala Ala His
                85                  90                  95
Ile Gly Val Leu Phe Ile His Asn Glu Gly Phe Ser Thr Met Cys Gly
            100                 105                 110
Asn Ala Thr Ile Ala Leu Gly Arg Phe Leu Val Asp Thr Thr Thr Thr
        115                 120                 125
Leu Tyr Ser Leu Ala Ala Arg Thr Ser Ser Ser Arg Gln Thr Arg Arg
    130                 135                 140
Pro Ser Asn
145
```

<210> 27123
<211> 197
<212> PRT
<213> A.fumigatus

<400> 27123

```
Cys His Leu His Arg Glu Glu Ala Leu Lys Val Arg Pro Gly Arg Cys
1               5                   10                  15
Asp Ser Tyr Ile Ser Ser Ala Val His Asn Met Glu Asn Ala Ala Tyr
            20                  25                  30
Phe Gly Glu Gln Glu Asp Gln Met Asn Ile Leu Ser Arg Gly Phe Ser
        35                  40                  45
```

```
Glu Ala Glu Gly Leu Glu Gly Met Asn Met Ser Glu Leu Arg Ile Ser
    50                  55                  60
Ile Glu Glu Leu Thr Lys Arg Met Cys Pro Phe Gln Pro Pro Pro Pro
65                  70                  75                  80
Pro Val Ala Tyr Asp Glu Ala Lys Asp Ala Ser Ala Thr Arg Glu Thr
                85                  90                  95
Ser Ser Phe Ser Thr Val Leu Thr Ile His Glu Ser Thr His Pro Asp
            100                 105                 110
Gly Arg Lys Thr Tyr Gln Ala His Ala Ser Pro Phe Val Pro Thr Gln
        115                 120                 125
Asp Leu Glu Ala Pro Gly Ala Gly Glu Asn Asp Ala Ile Ile Asp Ile
    130                 135                 140
Pro His Gly Ser Asp Asn Ser Tyr Ile Glu Arg Leu Arg Asp Asn Asn
145                 150                 155                 160
Thr Met His Ala Ile Ser Thr Arg Arg Arg Arg Lys Leu Lys Met Lys
                165                 170                 175
Lys His Lys Phe Lys Lys Leu Leu Arg Arg Thr Arg Thr Leu Arg Arg
            180                 185                 190
Lys Leu Asp Lys Ala
        195
```

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<210> 27124
<211> 229
<212> PRT
<213> A.fumigatus

<400> 27124

```
Val Gln Pro Phe Ser Asn Pro Gln Leu Asn Val Arg Gln Ser Leu Leu
1               5                   10                  15
Gln Glu Asp Ala Leu Ala Trp Pro Glu Leu Glu Asn Ala Val Thr Pro
            20                  25                  30
Glu Val Ala Tyr Asp Pro Leu Ile Gln Leu Tyr Tyr Gln Thr Phe His
        35                  40                  45
Arg Ser His Pro Leu Leu Ile Pro Arg Lys Ala Leu His Ser His Leu
    50                  55                  60
Val Ala Lys Ile Pro Gln Tyr Ile Leu Ser Ile Met Arg Phe Ile Gly
65                  70                  75                  80
Ala His Gln His His Asp Pro Ser Leu Lys Glu Leu Phe Arg Gln Ser
                85                  90                  95
Ala Tyr Ser Val Leu Ser Ala Leu Thr Pro Arg Asp Gly Phe Met Val
            100                 105                 110
Gln Gly Met Val Leu Leu Ala Ile Val Glu His Ala Arg Gly Ala Glu
        115                 120                 125
Asp Ser Ala Thr Arg Ile Met Gln Ala Ala Val Asn Leu Ala Leu Glu
    130                 135                 140
Leu Gly Met Asn Lys Ala Ala Phe Ala Ala Glu His Ser Gly Gly Asn
145                 150                 155                 160
Ser Ile Leu Glu Glu Ser Trp Arg Arg Thr Tyr Trp Glu Leu Tyr Phe
                165                 170                 175
Val Asp Gly Phe Leu Ala Ala Met Arg Asp Gln Ser Ala Phe Gln Leu
            180                 185                 190
Phe His Ser Pro Ala Asp Val Arg Leu Pro Cys Asp Glu Glu Leu Tyr
        195                 200                 205
Asn Ser Gly Asp Val Val Arg Arg Ser Lys Cys Pro Ser Gly Arg Ala
    210                 215                 220
Pro Leu Ile Thr Cys
```

225

<210> 27125
<211> 252
<212> PRT
<213> A.fumigatus

<400> 27125
Val Ile Pro Ser Asn Leu Thr Phe Lys Asp Leu Thr Asn Lys Trp His
1 5 10 15
Phe Asp Glu Glu Arg Arg Phe Pro Ser Ser Ala Tyr Arg Ile Gln Ala
20 25 30
Val Arg Val Leu Gly Met Val Met Glu Leu Asn Arg Ser Leu Asp Ile
35 40 45
Asp Leu Asp Thr Gln Ile Glu Thr Ile Asp Ala Val Leu Ala Ala Leu
50 55 60
Leu Met Gln Leu Pro Ser Ser Gln Arg Asp Ala Tyr Gly Ser His Cys
65 70 75 80
Gly Leu Asp Glu Met Thr Phe Gln Ala Gln Met Thr Ser Tyr Leu Cys
85 90 95
Val His His Leu Tyr Lys Pro Leu Ser Val Pro Thr Asn Lys Leu Ser
100 105 110
Leu Pro Ser Ala Leu Ile Tyr Leu His His Pro Arg Ser Asn Met Arg
115 120 125
Tyr Ala Ser Ile His Ala Tyr Thr Ser Cys Thr Arg Leu Pro Thr Ile
130 135 140
Arg Glu Thr Thr Pro Pro Ser Ala Ser Leu Asp Leu His Ser Gln Lys
145 150 155 160
Leu Leu Arg Ala Ala Asp Leu Leu Cys Asn Leu Ala Thr Leu Pro Asn
165 170 175
Pro Val Lys Tyr Arg Thr Pro Phe Phe Thr Cys Ala Leu Ala Met Cys
180 185 190
Val Val Val His Thr Val Ala Cys Leu Val Val Ser Ile Pro Glu Lys
195 200 205
Gln Glu Ser Ile Lys Ala Arg Ile Gln Leu Gly Val Gly Ala Leu His
210 215 220
Val Leu Gly Lys Leu Trp Pro Leu Ala Lys Thr Val Arg Gln Arg Leu
225 230 235 240
Ile Ser Met Tyr Gln Glu Leu Gly Leu Arg Cys Arg
245 250

<210> 27126
<211> 126
<212> PRT
<213> A.fumigatus

<400> 27126
Pro Thr Met Tyr Phe Asn Pro Ile Asn His Gly Cys His Tyr Phe Gly
1 5 10 15
Ser Leu Arg Arg Asn Arg Arg Leu Ser Val Val Cys Gly Tyr Cys Ile
20 25 30
His Phe His Pro Pro Pro Thr Ile Ile Asp Ser Leu Gly Ser Ala Ser
35 40 45
Phe Pro Thr Pro Val Leu Asp Phe Leu Thr Ala Ser Met Asp Ser Phe
50 55 60
Glu Asn Ile His Ala Ser Lys Asn Leu Glu His Ser Lys Asp Gly Leu

```
65                  70                  75                  80
Leu Thr Asn Ala Leu Thr Gly Gly Arg Ala Glu Phe Pro Val Val Cys
                85                  90                  95
Gln Asp Ser Pro Cys Gly Ser Phe Ala Asn Leu Thr Phe Val Asp Ile
            100                 105                 110
Asp Ser Gln Val Leu Phe Gly His Leu Gly Lys Tyr Val Tyr
        115                 120                 125
```

<210> 27127
<211> 220
<212> PRT
<213> A.fumigatus

<400> 27127

```
Gly Ile Ser Ser Gln Gln Val Met Thr Ile Leu Ser Ser Ser Ser Cys
1               5                   10                  15
Ile Arg Ser Ser Met Met Arg Leu Val Pro Ala Phe His Asp Ala Glu
            20                  25                  30
Ser Lys Leu Arg Phe Lys Ile Asp Phe Phe Ile Leu Thr Phe Cys Cys
        35                  40                  45
Ile Thr Tyr Phe Phe Asn Tyr Leu Asp Arg Ala Asn Leu Ser Asn Ala
    50                  55                  60
Tyr Val Ser Gly Met Lys Glu Glu Leu Ala Phe His Gly Asn Gln Leu
65                  70                  75                  80
Asn Val Ile Asn Thr Ile Phe Thr Val Gly Tyr Ile Leu Gly Gln Val
                85                  90                  95
Pro Ser Asn Leu Ala Leu Thr Tyr Phe Arg Pro Arg Ile Phe Phe Pro
            100                 105                 110
Ala Met Ile Phe Leu Trp Gly Gly Leu Thr Met Ile Thr Ala Ala Val
        115                 120                 125
His Ser Pro Gln Gly Ile Met Ala Ile Arg Phe Phe Leu Gly Leu Ala
    130                 135                 140
Glu Ser Ser Thr Phe Val Gly Thr His Tyr Ile Leu Gly Ser Trp Tyr
145                 150                 155                 160
Thr Glu Glu Glu Leu Gly Lys Arg Ser Gly Ile Phe Thr Ala Ser Gly
                165                 170                 175
Leu Ala Gly Thr Met Phe Gly Gly Phe Ile Gln Thr Gly Ile His Ser
            180                 185                 190
Ser Leu Asp Gly Val Arg Gly Leu Ser Gly Trp Arg Trp Leu Phe Ile
        195                 200                 205
Val Arg Phe Leu Leu Ser Gln Asn Val Ile Arg Cys
    210                 215                 220
```

<210> 27128
<211> 82
<212> PRT
<213> A.fumigatus

<400> 27128

```
Ile Asp Gly Leu Ile Thr Leu Pro Ile Ala Ile Tyr Gly Leu Phe Leu
1               5                   10                  15
Phe Pro Asp Thr Pro Ala Thr Thr Arg Ala Pro Tyr Leu Thr Glu Ser
            20                  25                  30
Glu Arg Ala Leu Ala Ile Ser Arg Leu Pro Val Thr Asn Ala Glu Arg
        35                  40                  45
Ala Pro Leu Asn Arg Ala Phe Ile Lys Arg Leu Phe Thr Thr Trp Tyr
```

```
    50                  55                  60
Trp Trp Ala Phe Val Ile Leu Trp Val Ile Ala Gly Glu Thr Glu Ser
65                  70                  75                  80
Phe Ser
```

<210> 27129
<211> 383
<212> PRT
<213> A.fumigatus

<400> 27129

```
Thr Met Glu Leu Tyr Ser Gly Leu Arg Arg Leu Leu Ser Arg Lys Thr
1               5                  10                  15
Leu Thr Gly Ser Arg Gly Leu Leu Thr Ala Thr Glu Asn Val Phe Asp
            20                  25                  30
Gly Gln Arg Gln Glu Ala Glu Lys Leu Tyr Arg Arg Asn Phe Leu Glu
        35                  40                  45
Asn Tyr Ser Asp Thr Glu Thr Ala Gln Phe Ser Phe Phe Thr Thr Lys
    50                  55                  60
Leu Asp Ser Val Ile His Ala Ser Ser Ile Asn Ser Leu Ala Ser Ile
65                  70                  75                  80
Tyr Gly Pro Leu His Thr Leu Leu Asp Ser Gly Glu His Asp Gly Ile
                85                  90                  95
Trp Trp Leu Asp Val Thr Asp Pro Ser Asp Gly Asp Ile Glu Leu Leu
            100                 105                 110
Ser Arg Leu Phe Asp Ile His Pro Leu Thr Thr Glu Asp Ile Lys Ile
        115                 120                 125
Arg Glu Thr Arg Glu Lys Ile Glu Leu Phe Gly Pro Tyr Tyr Phe Leu
    130                 135                 140
Ser Leu Arg Pro Pro Gln Gln Ala Glu Asp Val Pro Gly Ser Arg Thr
145                 150                 155                 160
Ser Gly Cys Asn Val Tyr Ala Ile Ile Phe Arg Glu Gly Val Leu Ser
                165                 170                 175
Phe Thr Phe Gly Asn Asn Pro His Thr Ser His Val Arg Ser Arg Ile
            180                 185                 190
Lys Asp His Gln Ser His Leu Phe Leu Thr Ser Asp Trp Ile Ser Tyr
        195                 200                 205
Ala Leu Met Tyr Gly Asn Leu Leu Ser Tyr Val Glu Tyr Ile Leu Thr
    210                 215                 220
Asp Glu Cys Ser Asp Asp Ile Val Asp Gly Phe Ala Pro Leu Ile Asn
225                 230                 235                 240
Arg Val Glu Ala Ser Val Glu Thr Met Glu Asp Ser Val Ser Ile Thr
                245                 250                 255
Arg Pro Asp Asp Ile Gly Leu Ala Leu Lys Gln Ile Tyr Thr Ser Arg
            260                 265                 270
Arg Gln Val Leu Gln Ile Arg Gln Leu Leu Asn Asp Lys Thr Asp Val
        275                 280                 285
Ile Arg Cys Phe Ala Arg His Cys Glu Ala Leu Gly Ser Thr Arg Glu
    290                 295                 300
Val Val Ser Tyr Leu Ser Asp Ile Gln Asp His Val Leu Thr Met Val
305                 310                 315                 320
Ser Asn Leu Ala His Ser Glu Gln Lys Leu Ser Arg Ser Gln Asp Lys
                325                 330                 335
Tyr Leu Gly Gln Leu Ser Phe Asp Ser Thr Arg Met Arg Asn Gln Ile
            340                 345                 350
```

```
Val Ala Thr Leu Ser Arg Leu Thr Val Ile Ala Ser Cys Ile Val Pro
        355                 360                 365
Met Gln Ile Ile Thr Gly Leu Phe Arg Met Asn Val Met Gly Thr
    370                 375                 380
```

<210> 27130
<211> 97
<212> PRT
<213> A.fumigatus

<400> 27130

```
Arg Arg Asp Ser Glu Gln Ala Ser Ser Gln Ser Leu Pro Pro Ser Gln
1               5                   10                  15
Gln Ser Asn Phe Gly Ile Leu Gly Asp Ser Val Asp Ser Lys Asn Lys
            20                  25                  30
Arg Arg Arg Gly Asn Leu Pro Lys Pro Val Thr Asp Ile Leu Arg Ala
        35                  40                  45
Trp Phe His Glu His Leu Asp His Pro Tyr Pro Ser Glu Glu Asp Lys
    50                  55                  60
Gln Met Phe Met Thr Arg Thr Gly Leu Thr Ile Ser Gln Val Ser Phe
65                  70                  75                  80
Pro Ala Pro Phe Phe Ser Thr Pro Phe Thr Asp Asp Leu Arg Thr Ala
                85                  90                  95
Asp
```

<210> 27131
<211> 152
<212> PRT
<213> A.fumigatus

<400> 27131

```
His Phe Cys Pro Ala Glu Asp Asn Met Asn Val Gln Leu Lys Asp Ile
1               5                   10                  15
Thr Val Thr Ala Arg Asp Gly Arg Val Ser His Leu Asp Gln Val Tyr
            20                  25                  30
Ile Arg Gly Ser His Val Lys Phe Phe Ile Val Pro Asp Met Leu Arg
        35                  40                  45
Tyr Tyr Ile Tyr Thr Val Asn Val Val Tyr Val Leu Thr Ser Ala Glu
    50                  55                  60
Thr His Pro Cys Ser Val Arg Ala Ala Ser Ala Val Glu Val Leu Ala
65                  70                  75                  80
Leu Leu Val Val Arg Arg Gln Cys Arg Gly Pro Gly Asp Asn Gly Gly
                85                  90                  95
Val Asp Leu Leu Asn Phe Phe Phe Ser Leu Ala Phe Leu Ser Cys Gly
            100                 105                 110
Phe Arg His Ser Ser Phe Leu Met Val Pro Tyr Leu Cys Gly Ile Glu
        115                 120                 125
Lys Cys Asp Ser Leu Lys Thr Gly Phe Gly Ala Met Thr Val Arg Tyr
    130                 135                 140
Ser Ser Ser Thr Gly Thr Thr Asp
145                 150
```

<210> 27132
<211> 69
<212> PRT

<213> A.fumigatus

<400> 27132
Phe Asn Cys Ser His Thr Tyr Ala Leu Leu Val Leu Phe Ser Leu Pro
1 5 10 15
Tyr Ser Thr Gly Leu Thr Ile Tyr Gln Thr Ala His Thr Asn Ser Lys
20 25 30
Ser Ile Glu His Phe Tyr Leu Ile Lys Met Leu Thr Cys Pro Ile Leu
35 40 45
Ala Leu Arg Val Gln Leu Gln Arg Phe Thr Arg Glu Thr Asn Ile His
50 55 60
Cys Leu His Val Lys
65

<210> 27133
<211> 71
<212> PRT
<213> A.fumigatus

<400> 27133
Leu Asp Thr Thr Lys Leu Asn Asp Leu Ile Gly Gln Phe Lys Phe Pro
1 5 10 15
Glu Leu Ile Gly Lys Lys Asp Leu Val Ser Met Ala Lys Glu Ile Glu
20 25 30
Asp Asp Asp Gly Met Pro Gln Phe Val Asp Phe Ile Ser Arg Met Leu
35 40 45
Arg Trp Arg Pro Glu Asp Arg Thr Thr Ala Glu Asp Leu Leu Ser His
50 55 60
Ala Trp Leu Leu Ala Ser Leu
65 70

<210> 27134
<211> 119
<212> PRT
<213> A.fumigatus

<400> 27134
Asp Pro Leu Ile Asp Glu Gln Asp Leu Lys Ser Asp Asn Ile Leu Leu
1 5 10 15
Ala Leu Arg Asn Pro Ser Ile Leu Asp Ser Val Ala Gln Asp Glu Met
20 25 30
Asn Asn Pro Ser Pro Arg Lys Gln Leu Asp Asp Arg Asp Ile Tyr Leu
35 40 45
Ser Arg Asn Tyr Trp Gly Leu Ser Pro Ala Glu Leu Gly Arg Ser Val
50 55 60
Ile Thr Asp Phe Gly Leu Ala Val Arg Gly Asp Gly Ala Pro Asn Ser
65 70 75 80
His Pro Ile Gln Pro Glu Glu Tyr Arg Ala Pro Glu Val Cys Leu Gly
85 90 95
Ala Asp Trp Ser Tyr Ser Ala Asp Ile Trp Asn Leu Gly Val Met Val
100 105 110
Lys Thr Ser Leu Ser Leu Tyr
115

<210> 27135
<211> 63

<212> PRT
<213> A.fumigatus

<400> 27135
Leu Arg Asp Ser Val Ala Gly Cys Leu Phe Gly Glu Arg Tyr Ile Ala
1 5 10 15
Ala Gly Thr Ser Arg Ile Leu Val Glu Met Leu Thr Tyr His Ser Ser
20 25 30
Ile Leu Trp Asp Ile Asn Cys Leu Arg Asn Ile His Thr Val Asp Glu
35 40 45
Leu Tyr Ile Arg Ser Ile Thr Asn Ala Tyr Ile Asp Ser Thr Pro
50 55 60

<210> 27136
<211> 115
<212> PRT
<213> A.fumigatus

<400> 27136
Arg Ile Trp Leu Gly Val Gly Ser Ala Ser Phe Gln Leu Met Thr Trp
1 5 10 15
Leu Ile Pro Asn Val Ile Gly Asp Ala Val Ser Val Ala Ile Val Gly
20 25 30
Leu Leu Leu Gly Pro Val Tyr Pro Cys Ala Thr Ala Val Phe Ser Lys
35 40 45
Leu Leu Pro Lys Asn Ile Gln Ile Ser Ser Leu Ser Phe Ile Ser Ala
50 55 60
Met Gly Ser Ser Gly Gly Ala Val Ala Pro Phe Phe Thr Gly Leu Leu
65 70 75 80
Ala His Ser Val Gly Thr Tyr Val Leu His Pro Ile Cys Ile Gly Leu
85 90 95
Tyr Gly Val Met Leu Val Gly Trp Ala Leu Met Pro Lys Val Ser Asn
100 105 110
Arg Ser Glu
115

<210> 27137
<211> 546
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (51)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27137
Lys Glu Ala Lys Leu Thr Glu Gln Phe Pro Leu Ile Ile Val Cys Asp
1 5 10 15
Arg Phe Thr Phe Ile His Asp Leu Val Leu Tyr Leu Tyr Gln Asn Gln
20 25 30
Gln Tyr Lys Ser Ile Glu Val Tyr Val Gln Arg Val Asn Pro Ser Arg
35 40 45
Thr Pro Xaa Val Val Gly Gly Leu Leu Asp Val Asp Cys Asp Glu Ala
50 55 60
Ile Ile Lys Asn Leu Leu Ser Thr Val Glu Pro Ser Val Ile Pro Ile

```
65                  70                  75                  80
Asp Glu Leu Val Ser Glu Val Glu Thr Arg Asn Arg Leu Lys Leu Leu
                85                  90                  95
Leu Pro Phe Leu Glu Ala Thr Leu Ala Thr Gly Asn Gln Gln Gln Ala
            100                 105                 110
Val Tyr Asn Ala Leu Ala Lys Ile Tyr Ile Asp Ser Asn Asn Asn Pro
        115                 120                 125
Glu Lys Phe Leu Lys Glu Asn Asp Met Tyr Asp Thr Leu Thr Val Gly
    130                 135                 140
Lys Tyr Cys Glu Lys Arg Asp Pro Asn Leu Ala Tyr Ile Ala Tyr Arg
145                 150                 155                 160
Lys Gly Gln Asn Asp Leu Glu Leu Ile Asn Ile Thr Asn Glu Asn Ala
                165                 170                 175
Met Tyr Arg Ala Gln Ala Arg Tyr Leu Val Glu Arg Ala Asp Pro Glu
            180                 185                 190
Ile Trp Ser Phe Val Leu Ser Glu Asn Asn Leu His Arg Arg Pro Leu
        195                 200                 205
Val Asp Gln Val Ile Ala Thr Ala Val Pro Glu Ser Thr Glu Pro Asp
    210                 215                 220
Lys Val Ser Val Ala Val Lys Ala Phe Leu Asp Ala Asp Leu Pro Gly
225                 230                 235                 240
Glu Leu Ile Glu Leu Leu Glu Lys Ile Ile Leu Glu Pro Ser Pro Phe
                245                 250                 255
Ser Asp Asn Gly Ser Leu Gln Asn Leu Leu Met Leu Thr Ala Ala Lys
            260                 265                 270
Ala Asp Lys Gly Arg Leu Met Glu Tyr Ile His Gln Leu Asn Glu Phe
        275                 280                 285
Ser Ala Asp Glu Ile Ala Glu Met Cys Ile Ser Val Gly Leu Tyr Glu
    290                 295                 300
Glu Ala Phe Glu Ile Tyr Lys Lys Val Asn Asn Tyr Ile Ala Ala Val
305                 310                 315                 320
Asn Val Leu Val Glu Asn Ile Val Ser Ile Asp Arg Ala Gln Glu Phe
                325                 330                 335
Ala Glu Arg Val Glu Leu Pro Asp Val Trp Ser Lys Val Ala Lys Ala
            340                 345                 350
Gln Leu Asp Gly Leu Arg Val Ser Asp Ser Ile Glu Ser Tyr Ile Arg
        355                 360                 365
Ala Asn Asp Pro Ser Asn Tyr Leu Glu Val Ile Glu Ile Ala Thr His
    370                 375                 380
Ala Gly Lys Asp Glu Glu Leu Val Lys Tyr Leu Lys Met Ala Arg Lys
385                 390                 395                 400
Thr Leu Arg Glu Pro Ala Ile Asp Thr Ala Leu Ala Phe Cys Tyr Ala
                405                 410                 415
Arg Leu Asp Gln Leu Pro Glu Leu Glu Asp Phe Leu Arg Thr Thr Asn
            420                 425                 430
Val Ala Asp Val Glu Thr Ser Gly Asp Lys Ala Tyr Ala Glu Gly Tyr
        435                 440                 445
His Gln Ala Ala Lys Ile Phe Tyr Thr Ser Ile Ser Asn Trp Ala Lys
    450                 455                 460
Leu Ala Thr Thr Leu Val His Leu Glu Asp Tyr Gln Ala Ala Val Glu
465                 470                 475                 480
Cys Ala Arg Lys Ala Asn Ser Val Lys Val Trp Lys Glu Val Asn Gln
                485                 490                 495
Ala Cys Val Asp Lys Lys Glu Phe Arg Leu Ala Gln Ile Cys Gly Leu
            500                 505                 510
Asn Leu Ile Val His Ala Glu Glu Leu Gln Asp Leu Val Arg Gln Tyr
```

```
        515                 520                 525
Glu Arg Asn Gly Tyr Phe Asp Glu Leu Ile Ser Gly Leu Glu Ala Gly
    530                 535                 540
Leu Gly
545
```

<210> 27138
<211> 149
<212> PRT
<213> A.fumigatus

<400> 27138

```
Arg Cys Asn Val Ala Leu Thr Gly Glu Arg Cys Val Asn Thr Ile Gly
1               5                  10                  15
Pro Thr Leu Gly Gly Gly Leu Gly Pro Leu Tyr Gly Ile Arg Gly Pro
            20                  25                  30
Gln Val Asp Ser Leu Val Ser Ala Arg Leu Val Thr Ala Ser Gly Asp
        35                  40                  45
Val Ile Thr Val Ser Arg Ser Glu Asn Arg Asp Leu Phe Trp Ala Ile
    50                  55                  60
Arg Gly Ala Gly Ala Asn Phe Gly Ile Val Thr Ser Ala Thr Tyr Arg
65                  70                  75                  80
Ile Tyr Asp Gln Thr Asn Gly Gly Met Ala Val Ser Ala Gln Phe Ala
                85                  90                  95
Phe Ala Pro Ala Val Asn Arg Ser Val Phe Asp Leu Met Glu Ser Met
            100                 105                 110
Asn Asp Glu Tyr Pro Leu Gly Met Ser Gly Gly Met Ile Leu Ser Tyr
        115                 120                 125
Asn His Thr Thr Asn Glu Val Thr Ile Leu Leu Gly Ser Pro Leu Ser
    130                 135                 140
Phe Ser Ser Cys Pro
145
```

<210> 27139
<211> 121
<212> PRT
<213> A.fumigatus

<400> 27139

```
Pro Ser Val Gln Trp Asn Leu Leu Phe Met Gly Ser Asn Glu Asp Ala
1               5                  10                  15
Gln Pro Trp Leu Asp Lys Ile Gln Ala Leu Gly Pro Ile Asp Ser Ser
            20                  25                  30
Ile Arg Asn Val Pro Trp His Arg Arg Asp Glu Pro Glu Val Pro Tyr
        35                  40                  45
Cys Glu Arg Gly Gln His Tyr Ile Leu Tyr Asn Leu Asn Leu Arg Arg
    50                  55                  60
Thr Asp Ala Ala Thr Leu Gln Ser Tyr Phe Asp Ser Phe Val Asp Phe
65                  70                  75                  80
Ser Ser Lys Asn Pro Trp Phe Asp Cys Asp Leu Met Tyr Glu Arg Gln
                85                  90                  95
Ala Thr Asp Ala Ala Leu Ala Val Pro Leu Ser Glu Arg Gly Val Gly
            100                 105                 110
Pro Trp Arg Asp Ser Lys Ile Asn Ala
        115                 120
```

<210> 27140
<211> 128
<212> PRT
<213> A.fumigatus

<400> 27140
Cys Tyr Ile Ala Thr Leu Val Ser Cys Ile Cys Leu Tyr Met Glu Leu
1 5 10 15
Lys Leu Ser Ala Gly Gln Lys Asp Val Arg Val Cys Thr Gly Leu Phe
20 25 30
Pro His Gly Gly Gln Lys Val Ile Lys Leu Gly Ile Phe His Pro Gly
35 40 45
Ser Asp Gly Asp His Leu Ile Val Lys Val Gln Ile Asp Glu Val Lys
50 55 60
Gln Ala Gln Phe Asp Ile Tyr Gly Ile Leu His Ile Ala Lys Val Gln
65 70 75 80
Leu Tyr Ala Val Ser Ala Thr Ser Cys Glu Lys Ser Tyr Ile Val Arg
85 90 95
Gly Ser Ser Gly Asn Leu Ile Phe Ser Leu Ser Ile Thr Gly Ala Ala
100 105 110
Ser Leu Ala Ser Leu Val Asp Val Leu Thr Ile Ala Trp Ile Ile Leu
115 120 125

<210> 27141
<211> 60
<212> PRT
<213> A.fumigatus

<400> 27141
Pro Val Tyr Leu Glu Gly Tyr Phe Phe Lys Met Cys Ser Gln Tyr Phe
1 5 10 15
Tyr Lys Tyr Asp Cys Gly Cys Thr Leu Pro Glu Gly Asp Val Val Tyr
20 25 30
Cys Ala Lys Arg Gly Thr Ser Cys Thr Gly Val Arg Gln Gln Ile Arg
35 40 45
Arg Arg Glu Gly Tyr Asn Cys Pro Ala His Gly Gly
50 55 60

<210> 27142
<211> 69
<212> PRT
<213> A.fumigatus

<400> 27142
Leu Arg Gln Ala Gly Gly Arg Ser Asn Arg Lys Leu Arg Ile Leu Phe
1 5 10 15
Ser Phe Lys Ala Leu Asn Ser Glu Leu Gly Ala Lys Lys Met Arg His
20 25 30
Lys Leu Ile Val Phe Phe Asp Gly Glu Thr Gln Ser Pro Leu Pro Pro
35 40 45
Arg Leu Val Lys Leu Met Tyr Asp Phe Glu Ile Arg Ser Ser Thr Ala
50 55 60
His Arg Leu Leu Ile
65

<210> 27143

<211> 169
<212> PRT
<213> A.fumigatus

<400> 27143
Ile Ser Asn Ala Leu Leu Thr Phe Ala Arg Ser Ala Val Gln Arg Ser
1 5 10 15
Ser Tyr Ala Ser Leu Tyr Arg Pro His Val Gln Pro Leu Ala Gln Leu
20 25 30
Asn Ser Gln Arg Arg His Gln Ser Gln Thr Ile Arg Ala Asp Arg Pro
35 40 45
Phe Arg Val Ala Ile Val Gly Ser Gly Pro Ala Gly Phe Tyr Ala Ala
50 55 60
Tyr Arg Leu Leu Ser Lys Val Glu Asp Ala Met Val Asp Met Tyr Glu
65 70 75 80
Lys Leu Pro Val Pro Phe Gly Leu Ala Arg Tyr Gly Val Ala Pro Asp
85 90 95
His Pro Glu Val Lys Val Arg Ser Met Pro Leu Ser Thr Pro Ser Glu
100 105 110
Thr Met Leu Ile Pro Phe Trp Gln Ile Glu Leu Arg Gly Lys Val Tyr
115 120 125
Arg Ser Gly Ser Ile Ser Glu Val Gln Leu Tyr Arg Gln His Arg Thr
130 135 140
Arg His Lys Ser Pro Ser Gln Ser Ala Glu Thr Thr Leu Arg Arg His
145 150 155 160
Ser Ile Arg Ile Arg Gly Ala Glu Arg
165

<210> 27144
<211> 160
<212> PRT
<213> A.fumigatus

<400> 27144
Asn Cys Glu Glu Lys Phe Thr Glu Val Ala Ala Ser Pro Arg Phe Asn
1 5 10 15
Phe Ile Gly Asn Ile Glu Leu Gly Thr Asn Leu Pro Leu Lys Ala Leu
20 25 30
Lys Pro His Tyr Asp Ala Ile Leu Phe Ala Tyr Gly Ala Pro Lys Asp
35 40 45
Lys Lys Leu Gly Ile Pro Gly Glu Asp Ala Leu Arg Asn Val Tyr Ser
50 55 60
Ala Arg Glu Phe Val Gly Trp Tyr Asn Gly Leu Pro Glu His Arg Asp
65 70 75 80
Leu Ala Pro Asp Leu Thr Ala Gly Glu Asp Ala Val Ile Val Gly Gln
85 90 95
Gly Asn Val Ala Leu Asp Val Ala Arg Ile Leu Leu Ser Asp Ile Asn
100 105 110
Thr Leu Arg Ser Thr Asp Ile Ala Glu Tyr Ala Val Glu Glu Leu Val
115 120 125
Arg Ser Lys Ile Lys Arg Val Arg Val Val Gly Arg Arg Gly Pro Leu
130 135 140
Gln Val Arg Trp Thr Ser Phe Pro Arg Tyr Ala Met Leu Ile Cys Ser
145 150 155 160

<210> 27145

<211> 101
<212> PRT
<213> A.fumigatus

<400> 27145
Ala Ala Phe Thr Ile Lys Glu Leu Arg Glu Leu Leu Gln Leu Pro Ser
1 5 10 15
Val Ser Phe Asp Pro Val Pro Arg Asp Leu Phe Pro Pro Asp Glu Val
20 25 30
Ile Ser Thr Leu Pro Arg Ala Gln Lys Arg Leu Met Gln Leu Leu Ala
35 40 45
Lys Gly Ser Pro Asn Asp Pro Asn Thr Ala Ser Lys Ser Trp Ser Leu
50 55 60
Asp Phe Leu Leu Ser Ser Gly Met Pro Glu Leu Val Thr Cys Leu Ser
65 70 75 80
Phe Pro Pro Leu Val Arg Gln Val Leu Pro His Arg Thr Gly Ser Glu
85 90 95
Gln Ser Ser His Thr
100

<210> 27146
<211> 137
<212> PRT
<213> A.fumigatus

<400> 27146
Ile Ser Phe Phe Pro Pro Glu Cys Leu Asn Trp Ser Pro Val Tyr Pro
1 5 10 15
Phe Arg Leu Ser Ser Val Arg Phe Ser Arg Ile Glu Leu Asp Pro Ser
20 25 30
Asn Pro His Thr Pro Ser Ala Lys Ile Thr Pro Lys Tyr Leu Ser Ser
35 40 45
Gly Lys Arg Ala Gln Val Asp Ile Pro Ala Asn Thr Phe Phe Arg Ser
50 55 60
Val Gly Tyr Lys Ser Leu Pro Leu Pro Gly Leu Glu Asp Leu Gly Ile
65 70 75 80
Gln Phe Asp Ser Asp Arg Gly Val Leu Pro Asn Asp Gly Phe Gly Arg
85 90 95
Ile Thr Val Pro Thr Thr Ser Gly Gly Asn Glu Arg Leu Pro Asp Gly
100 105 110
Ser Leu Ile Ser His Leu Pro Gly Leu His Cys Ala Gly Trp Cys Leu
115 120 125
Asn Ala Gly Asp Gly Ser Ile Arg Ser
130 135

<210> 27147
<211> 61
<212> PRT
<213> A.fumigatus

<400> 27147
Leu Arg Lys Gly Arg Val Lys Arg Ser Leu Thr Gln Ala Tyr Ile Asn
1 5 10 15
Asp Ile Phe Ala Ser Leu Leu Pro Ser Ile Gly Asp Leu Leu Ser His
20 25 30
Gln Thr Asn Asn Ser Leu Tyr Asp Arg Ile Lys Asp Gly Ala Gln Val

```
        35                  40                  45
Gly Thr Asn Thr Ser Gln Gln His Ile Asp Arg Arg Gln
    50                  55                  60

<210> 27148
<211> 103
<212> PRT
<213> A.fumigatus

<400> 27148
Thr Ser Gly Gly Lys Cys Gly Ser Thr Ala Val Asp Arg Asn Phe Tyr
1               5                   10                  15
Lys Leu Met Ser Asp Arg Phe Gly Asp Ala Phe Asp Arg Leu Pro Arg
            20                  25                  30
Lys Arg Lys Ser Pro Gly Ser Glu Phe Met Arg Lys Phe Glu Ile Ile
        35                  40                  45
Lys Arg Asp Phe Gly Asn Ser Asp Glu Asp Thr Thr Phe Glu Leu Pro
    50                  55                  60
Leu Asn Met Thr Val Asp Asn Pro Asp Pro Glu Phe Phe Asp Glu Glu
65                  70                  75                  80
Glu Arg Leu Val Leu Ile Ser Arg Leu Gly Thr Leu Thr Asp Val Asp
                85                  90                  95
Gln Cys Ala Ala Asp Ser Cys
            100

<210> 27149
<211> 235
<212> PRT
<213> A.fumigatus

<400> 27149
Asn Val Ser Leu Ser Phe Pro Leu Gly Thr Val Pro Ala Ala Asn Ala
1               5                   10                  15
Asp Asp Asn Ser Val Leu Thr Thr Pro Thr His Ala Val Gln Phe Phe
            20                  25                  30
Arg Asn Ser His Arg His Thr Lys Ala Val Asn Asn Asp Ser Gly Trp
        35                  40                  45
Leu Phe Gly Glu Val Leu Gly Val Cys Val Gly Leu Leu Ser Gly Thr
    50                  55                  60
Asp Trp Lys Arg Val Arg Gln Gln Val Glu Asp Gly Phe Ser Arg Pro
65                  70                  75                  80
Thr Ala Ala Arg Tyr Thr Gly Asp Leu Val Phe Leu Ala Arg Glu Tyr
                85                  90                  95
Leu Gln Asn Thr Leu Leu Ala Ser Ser Glu Gln Ser Leu Glu Asn Lys
            100                 105                 110
Gly Ile Ile His Val Glu Pro Ala Lys Thr Leu Gln Phe Tyr Pro Phe
        115                 120                 125
Leu Ser Val Ala Gln Ile Leu Phe Gly Arg Leu Ser Pro Met Gln Arg
    130                 135                 140
Thr Gln Leu Thr Thr Leu Ala Pro Leu Arg Glu Glu Leu Phe Lys Glu
145                 150                 155                 160
Val Ile Arg Gly Gly Ile Asn Arg Leu Ser Ile Ala Pro Trp Phe Lys
                165                 170                 175
Ser Arg Gly Val Arg Leu Leu Asn Glu Phe Gln Thr Gln Trp Glu Gln
            180                 185                 190
Phe Val Glu Asp Ala Tyr His Ala Ala Val Lys Arg Asn Gln Ser Pro
```

```
        195                 200                 205
Arg Pro Leu Val Ile Gly Leu Trp Glu Ala Tyr Gln Ala Gly Thr Ile
    210                 215                 220
Ser Lys Arg Glu Val Ser Ala Cys Pro Asp Thr
225                 230                 235

<210> 27150
<211> 83
<212> PRT
<213> A.fumigatus

<400> 27150
Ser Thr Leu Gly Cys Val Asp Lys Ser Phe Ile Leu Gln Ile Ser Ile
1               5                  10                  15
Leu Leu Cys Met Ser Asp Glu Tyr Ser Val Pro Trp Gly Gly Gln Phe
            20                  25                  30
Glu Leu Phe Pro Leu Glu His Asp Thr Ala Ser Arg Pro Thr Tyr Leu
        35                  40                  45
Phe Ser Ser Pro Glu Pro Phe Leu Glu Ser Asn Thr Tyr Ala Ser Arg
    50                  55                  60
Ser Ser Trp Arg Cys Ile Leu Gly Gly Gly Gly Ser Ile Asn Gly Arg
65                  70                  75                  80
Pro Tyr Ala


<210> 27151
<211> 199
<212> PRT
<213> A.fumigatus

<400> 27151
Ile Trp Tyr Arg Ile Met Arg Gly Ser Glu Leu Ile Leu Ile Pro Val
1               5                  10                  15
Gly Leu Pro Thr Ser Ile Leu Gly Val Leu Leu Tyr Ile Cys Leu Asn
            20                  25                  30
Ala Ser Tyr Thr Val Ala Val Phe Thr Asp Pro Gly Ser Pro Leu Thr
        35                  40                  45
Thr Gly Ala Gly Arg His Gln Tyr Ser Ala Leu Pro Val Ser Glu Leu
    50                  55                  60
Pro Glu Tyr Thr Ala Tyr Thr Val Ser Ser Thr Gly Gly Ser Arg Tyr
65                  70                  75                  80
Cys Lys Lys Cys Gln Cys Pro Lys Pro Asp Arg Ala His His Cys Ser
                85                  90                  95
Thr Cys Lys Arg Cys Val Leu Lys Met Asp His His Cys Pro Trp Leu
            100                 105                 110
Ala Thr Cys Val Gly Leu Tyr Asn Tyr Lys Ala Phe Leu Leu Phe Leu
        115                 120                 125
Ile Tyr Thr Ser Leu Phe Cys Trp Val Asp Phe Ala Val Ser Ala Thr
    130                 135                 140
Trp Ile Trp Thr Glu Val Phe Asn Asp Ala Pro Tyr Leu Glu Thr Met
145                 150                 155                 160
Leu Pro Val Asn Val Val Leu Leu Ala Ile Leu Gly Gly Ile Ile Gly
                165                 170                 175
Leu Val Leu Thr Gly Phe Thr Ala Trp His Ile Ser Ala Arg Pro His
            180                 185                 190
His Val Glu Glu Ala Arg Arg
```

195

<210> 27152
<211> 69
<212> PRT
<213> A.fumigatus

<400> 27152
Gln Ser Gln Cys Ser Asn Leu Phe Leu Asn Leu Ser Ile Arg Ser Arg
1 5 10 15
Ala Thr Thr Asn Cys Glu Ile Ile Met Glu Tyr Leu Val Ala Ile Ala
20 25 30
Ser Val Pro Glu Cys Cys Gln Glu Ile Lys Tyr Met Asp Ile Asn Lys
35 40 45
Ser Ala Ala Thr Thr Cys Ile Ser Leu Lys Ile Ser Val Leu Asp Leu
50 55 60
Glu Thr Ser Ser Arg
65

<210> 27153
<211> 787
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (233),(237)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27153
Asn Glu Val Phe Thr Leu Ser Val Trp Phe Leu Ala Ser Gly Val Met
1 5 10 15
Lys Glu Tyr Pro Pro Thr Gly Ala Pro Ala Thr Val Asn Thr Arg Ala
20 25 30
Ile Leu Ser Gly Asn Ile Pro Gly Arg Gly Ser Ser His Lys Gln Ile
35 40 45
Asp Arg Gly Gln Gly Cys Cys Val Leu Ile Ala Ala Cys Ser Gly Pro
50 55 60
Ala Cys Glu Pro Ser Ser Ile Met Ser Arg Thr Ser Ala Gly Phe Ala
65 70 75 80
Asp Phe Phe Pro Thr Ala Pro Ser Val Leu Gln Gln Lys Arg Val Arg
85 90 95
Ala Pro Arg Asp Arg Pro Cys Pro Lys Asp Arg Pro Glu Asp Gln Leu
100 105 110
His Val Gln Asp Asp Asn Gly Gln Ser Ser Cys Ser Pro Gly Ala Ser
115 120 125
Ala Ala Asn Val Ser Thr Asn Gly Ser Pro Pro Ser Val Ser Val Ser
130 135 140
Glu Thr Gly Thr Gly Val Glu Asn Ser Gly Cys Lys Leu Val Gly Glu
145 150 155 160
Thr Asn Thr Asp Ile Thr Gly Thr Asp Thr Ser Ile Leu Ser Ala Ser
165 170 175
Leu Ala Gln Cys Arg Ala Thr Gln Val Asn Glu Ala Arg Phe Asp Asn
180 185 190
Leu Thr Pro Val Thr Asn Ala Glu Ser Ser Pro Pro Arg Lys Leu Ser
195 200 205

```
Leu His Gln Ser Lys Ser Val Glu Val Ala Glu Tyr Glu Ser Asn Lys
    210                 215                 220
Phe Ala Thr Asp Glu Ser Lys Leu Xaa Ala Thr Pro Xaa His Thr Pro
225                 230                 235                 240
Pro Thr Pro Arg Ser Gln Thr Ser Arg Ser Gly Val Ile Lys Gly Cys
                245                 250                 255
Lys Leu Val Tyr Asp Pro Asp Leu Glu Lys Arg Ser Ser Lys Glu Lys
            260                 265                 270
Arg Arg Lys Pro Gln Tyr Val Asp Phe Val Val Asn Glu Gln Asp Gly
        275                 280                 285
Cys Ser Pro Asp Pro Arg Leu Ser Ile Leu Asn Tyr Thr Arg Gly Ala
    290                 295                 300
Gly Cys Lys Gln Lys Thr Lys Tyr Arg Pro Ala Pro Tyr Arg Leu Lys
305                 310                 315                 320
Gln Trp Pro Tyr Asp Thr Ala Thr Thr Ile Gly Pro Gly Pro Pro Val
                325                 330                 335
Gln Ile Val Val Thr Gly Phe Asp Pro Leu Thr Pro Val Ala Pro Ile
            340                 345                 350
Asn Ala Leu Phe Ser Ser Phe Gly Glu Ile Ser Glu Ile Asn Asn Arg
        355                 360                 365
Thr Asp Pro Ile Thr Gly Arg Phe Leu Gly Val Cys Ser Val Lys Tyr
    370                 375                 380
Lys Asp Ser Thr Ser Phe Arg Gly Ala Gly Pro Val Pro Ala Ala Thr
385                 390                 395                 400
Ala Ala Arg Arg Ala Tyr Val Glu Cys Lys Lys Glu Gln Arg Ile Gly
                405                 410                 415
Thr Arg Arg Ile Arg Val Glu Leu Asp Arg Asp Gly Ala Val Ser Asp
            420                 425                 430
Arg Ile Val Ala Arg Ala Ile Glu Ser Gln Arg Met Gly His Lys Lys
        435                 440                 445
Asn Ile Val Gly Glu Glu Ala Lys Val Glu Pro Gln Ala Lys Lys Asn
    450                 455                 460
Glu Pro Pro Pro Thr Ala Pro Lys Gly Pro Ser Arg Ser Ser Thr Arg
465                 470                 475                 480
Pro Val Ala Ala Val Pro Glu Gly Pro Arg Ala Ser Phe Leu Lys Pro
                485                 490                 495
Ala Ile Pro Ser Leu Ile Glu Glu Thr Pro Ile Leu Ala Gln Ile Lys
            500                 505                 510
Arg Asp Pro Tyr Ile Phe Ile Ala His Cys Tyr Val Pro Val Leu Ser
        515                 520                 525
Thr Thr Ile Pro His Leu Lys Lys Arg Leu Lys Leu Phe Asp Trp Lys
    530                 535                 540
Asp Ile Arg Cys Asp Lys Thr Gly Tyr Tyr Ile Ile Phe Glu Asn Ser
545                 550                 555                 560
Arg Arg Gly Glu Glu Glu Thr Glu Arg Cys Phe Lys Val Cys His Met
                565                 570                 575
Lys Pro Leu Phe Thr Tyr Ile Met Asn Met Glu Ser Gln Pro Tyr Gly
            580                 585                 590
Asn Pro Asn Tyr Glu Arg Ser Pro Ser Pro Glu Arg Leu Gln Ala Glu
        595                 600                 605
Arg Arg Glu Arg Ala Glu Arg Glu Arg Leu Lys Lys Glu Ala Asp Leu
    610                 615                 620
Asp Leu Glu Glu Glu Lys Lys Gln Arg Ala Ile Asp Leu Asp Pro Cys
625                 630                 635                 640
Arg Glu Val Leu Ala Leu Ile Val Arg Asp Leu Lys Asp Lys Leu Leu
                645                 650                 655
```

```
Glu Asp Val Lys Ser Arg Ile Ala Ala Pro Thr Leu Tyr Asp Tyr Leu
            660                 665                 670
Asp Pro Asp Arg His Ala Ala Arg Arg Arg Ala Leu Gly Ile Pro Asp
        675                 680                 685
Pro Glu Gly Ile Arg Lys His Thr Phe Arg Leu Asp Ala Asp Asn Phe
    690                 695                 700
Gly Ser Asn Asn Pro Arg Ser Phe Leu Pro Gly Asp Arg Ser Phe Ser
705                 710                 715                 720
Pro Tyr Gly Leu Asn Ile Leu Ala Leu Pro Arg Ile Arg Lys Ala Arg
                725                 730                 735
Arg Leu Lys Arg Ala Asn Ala Ala Phe Leu Asp Glu Lys Arg Lys Gln
            740                 745                 750
Pro Val Arg Arg Lys Glu Ile Arg Pro Leu Tyr His Arg Met Gln Gln
        755                 760                 765
Leu His Asp Val Asp Asp Ser Asp Glu Glu Gln Arg Ser Pro Val Leu
    770                 775                 780
Gln Gly Phe
785
```

<210> 27154
<211> 91
<212> PRT
<213> A.fumigatus

```
<400> 27154
Gly Arg Pro Thr Cys Ala Gly Arg Pro Arg Ala Ala Arg Ala Ala Met
1               5                   10                  15
Cys Pro Ser Gln Leu Val Thr Ala Leu Arg His Gln Ala Ala Ala Ala
            20                  25                  30
Arg Gly Ser Pro Arg Pro Ser Arg Pro Ala Asn Trp Arg Glu Ser Met
        35                  40                  45
Glu Val Glu Ile Pro Arg Gly Pro Ala Val Thr Gly Ala Pro Pro Arg
    50                  55                  60
Leu Arg Arg Lys Val Ser Gly Pro Pro Ser Lys Arg Pro Ala Leu Pro
65                  70                  75                  80
Gly Pro Leu Met Gly Gly Val Cys Gln Gln Ile
                85                  90
```

<210> 27155
<211> 193
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (168),(172)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 27155
Gly Arg Glu Val Gly Asp Arg Asp Val Val His Lys Asp Ser Val Leu
1               5                   10                  15
Val Ile Asp Asp Val Gly Met Leu Ala Leu Arg Gln Leu Pro Glu Pro
            20                  25                  30
Gly Pro Phe His Ser Arg Arg Gly Ala Pro Asp Leu Thr Arg Asn Gly
        35                  40                  45
Tyr Thr His Gln Gly Arg Arg Tyr Glu Ala Pro Gly Pro Pro Leu Pro
```

```
    50                  55                  60
Ala His Arg Leu Gly Glu Ala His Leu Arg Arg Gln Thr Ala Arg Arg
65                  70                  75                  80
Pro Cys Gly His Val Pro Gln Pro Thr Gly His Cys Pro Ser Ser Pro
                85                  90                  95
Gly Gly Gly Gly Ala Arg Val Pro Ala Ala Ile Ser Ala Gly Gln Leu
            100                 105                 110
Ala Arg Val His Gly Gly Gly Asp Pro Glu Gly Thr Gly Arg His Arg
        115                 120                 125
Cys Pro Pro Ala Ser Pro Glu Lys Gly Val Trp Ala Pro Leu Gln Ala
    130                 135                 140
Pro Gly Ala Ala Gly Pro Val Asp Gly Arg Cys Leu Pro Thr Asn Leu
145                 150                 155                 160
Ala Lys Asp Arg Ala Asp Ala Xaa Arg Leu Val Xaa Thr Arg Leu Leu
                165                 170                 175
Asp Arg Leu His Asp Pro Leu Gly His Phe Ser Arg Leu Gln Arg Ile
            180                 185                 190
His
```

<210> 27156
<211> 159
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (15),(18)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27156

```
Ser Asp Gln Ala Gly Arg Val Ser Gly Gln Val Ala Leu Leu Xaa Arg
1               5                   10                  15
Val Xaa Glu Arg Gln Pro Asp Pro Trp Leu Asp Leu Leu Ala Asn Thr
            20                  25                  30
Ser His Gln Arg Ala Arg Gln Arg Arg Ala Leu Gly Gly Gly Pro Arg
        35                  40                  45
His Leu Ser Pro Glu Thr Arg Gly Gly Thr Gly Asp Gly Arg Ser Pro
    50                  55                  60
Arg Asp Leu His Leu His Gly Leu Ser Pro Val Gly Arg Pro Arg Trp
65                  70                  75                  80
Pro Arg Gly Pro Ala Arg Arg Arg Arg Leu Val Thr Lys Gly Ser Asp
                85                  90                  95
Gln Leu Ala Gly Ala His Gly Arg Thr Gly Gly Ala Arg Ser Ala Gly
            100                 105                 110
Ala Gly Gly Pro Pro Leu Ala Gly Val Gln Val Ala Val Ala Gln Val
        115                 120                 125
Leu Arg Ser Gly Asp Leu Asp Val Tyr Thr His Ser Ala Ser Asp Arg
    130                 135                 140
Ala Arg Leu Ser Trp Asn Glu Lys Gly Leu Ala Pro Glu Ala Ala
145                 150                 155
```

<210> 27157
<211> 207
<212> PRT
<213> A.fumigatus

<400> 27157
Cys Trp Leu Gln Pro Cys Gln Pro Gly Gln Gln Gln Pro Lys Pro Leu
1 5 10 15
Arg Cys Ile Ile Thr Ala His Asp Pro Lys Ser Gly Lys Ala Val Phe
20 25 30
Ser Asn Ala Ile Ser Glu Gln Val Ser Phe Ser Gly Phe Pro Val Pro
35 40 45
Pro Gly Lys Pro Pro Ala Thr Asp Tyr Val Leu Ala Tyr Asn Thr Asn
50 55 60
Glu Leu Pro Val Lys Gly Leu Ser Pro Pro Ser Ser Thr Asn Pro Ala
65 70 75 80
Ser Lys Ala Asp Leu Asp Ile Lys His Tyr Gln Ser His Leu Ser Gln
85 90 95
Pro Ser Pro Leu Pro Pro Val Asn Gly Thr Ser Cys Thr Ile Ile Glu
100 105 110
Val Pro Pro Gly Ser Ala Val Pro Met His Arg Thr Thr Thr Leu Asp
115 120 125
Tyr Ala Val Ile Ile Asp Gly Thr Thr Glu Leu Val Leu Asp Ser Asp
130 135 140
Glu Lys Lys Val Leu Lys Lys Gly Asp Val Ile Val Gln Arg Gly Thr
145 150 155 160
Ala His Ala Trp Arg Asn Val Thr Glu Gln Ser Asp Asn Ser Gly Val
165 170 175
Leu Arg Ile Phe Phe Val Phe Leu Pro Ile Glu Lys Val Gln Val Glu
180 185 190
Ser Gly Leu Ile Asp Met Asp Leu Thr Leu Ser Leu Lys Gln Thr
195 200 205

<210> 27158
<211> 76
<212> PRT
<213> A.fumigatus

<400> 27158
Thr Leu Ile Ile Asp Pro Arg Arg Val Asp Lys Leu Glu Cys Thr Ala
1 5 10 15
Leu Ile Ser Leu Ser Ile Val Arg His Gly Phe Leu Pro Ser Thr Thr
20 25 30
Met Ser Glu Glu Lys Pro Leu Asn Ala Ala Lys Asp Gln Asp Lys Asp
35 40 45
Asp Ile Val Tyr Pro Thr Gly Leu Lys Leu Ala Leu Leu Met Thr Ser
50 55 60
Ile Phe Ile Gly Met Phe Leu Val Ser Leu Val Trp
65 70 75

<210> 27159
<211> 226
<212> PRT
<213> A.fumigatus

<400> 27159
Pro Leu Gln Asp Arg Leu Ile Ile Ser Pro Ala Ile Pro Gln Ile Thr
1 5 10 15
Asp Glu Phe His Ser Ala Gly Asp Ile Gly Trp Tyr Gly Thr Ala Tyr
20 25 30

```
Leu Leu Thr Asn Cys Ala Phe Gln Leu Leu Phe Gly Lys Val Tyr Thr
        35                  40                  45
Val Phe Ser Ile Lys Ala Thr Phe Met Thr Ser Ile Val Leu Phe Glu
    50                  55                  60
Val Gly Ser Ala Leu Cys Gly Ala Ala Pro Asn Ser Ile Gly Phe Ile
65                  70                  75                  80
Leu Gly Arg Ala Ile Ala Gly Leu Gly Ser Gly Gly Ile Phe Ala Gly
                85                  90                  95
Ala Leu Thr Val Ile Val Tyr Ala Leu Pro Leu His Lys Arg Pro Lys
            100                 105                 110
Tyr Gln Gly Ala Phe Gly Ala Val Phe Gly Val Ala Ser Val Ala Gly
        115                 120                 125
Pro Leu Val Gly Gly Ala Phe Thr Thr Asn Val Thr Trp Arg Trp Cys
    130                 135                 140
Phe Tyr Ile Asn Leu Pro Leu Gly Ala Val Val Ile Ala Thr Thr Leu
145                 150                 155                 160
Leu Phe Phe Glu Ile Pro Asp His Gln Asn Ala Pro Lys Pro Leu Lys
                165                 170                 175
Gly Lys Leu Arg Gln Leu Asn Gly Leu Gly Val Leu Thr Ile Met Pro
            180                 185                 190
Gly Val Val Cys Leu Cys Leu Ala Leu Gln Trp Gly Gly Ser Gln Tyr
        195                 200                 205
Ala Val Arg Ser His Ser Ser Leu Ala Leu Phe Thr Thr Gly Ile Asp
    210                 215                 220
Cys Val
225
```

<210> 27160
<211> 75
<212> PRT
<213> A.fumigatus

<400> 27160

```
Trp Gly Glu Gly Arg Ile Val Ala Leu Leu Val Leu Thr Phe Leu Cys
1               5                   10                  15
Leu Ile Ala Phe Val Leu Ile Gln Val Trp Lys Pro Glu Gln Ala Thr
            20                  25                  30
Leu Pro Pro Arg Val Phe Leu Gln Arg Ser Ile Ala Ser Gly Phe Trp
        35                  40                  45
Ala Ser Cys Cys Phe Gly Ala His Met Ile Val Phe Gly Glu Ser Ala
    50                  55                  60
Gly Phe Gln Pro Pro Leu Met Gly Ser Ala Cys
65                  70                  75
```

<210> 27161
<211> 63
<212> PRT
<213> A.fumigatus

<400> 27161

```
Ile Gln Cys Arg Trp Ile Gly Ile Ser Ala Leu Arg Pro Cys Trp Thr
1               5                   10                  15
Thr Ala Thr Arg Arg Asn Lys Thr Thr Asp Asp Met Asn Leu Thr Gly
            20                  25                  30
Asn Ser Gly Val Val Arg Ala Gln Phe Arg His Asn Leu Pro Pro Lys
        35                  40                  45
```

```
Ser Phe Gly Ala Thr Val Arg Val Met Leu Tyr Pro Ser Asn Ile
    50                  55                  60

<210> 27162
<211> 185
<212> PRT
<213> A.fumigatus

<400> 27162
Met Arg Phe Pro Ser Ser Arg Ala Val Lys Thr Asn Ser Cys Gly Ser
1               5                  10                  15
Met Ser Leu Leu Asp Phe Trp Asp Thr Leu Arg Pro Pro Val Lys Arg
            20                  25                  30
Arg Lys Thr Thr Pro Lys Glu Gly Gln Glu Ser Pro Arg Thr Val Ala
        35                  40                  45
Leu Arg Lys Glu Gly Ser Arg Ile Lys Glu Asn Glu Ile Asp Ser Ser
    50                  55                  60
Asp Ser Pro Ser Asp Thr Trp Asp Ser Leu Pro Ser Ala Gln Val Gly
65                  70                  75                  80
Asp Phe Ala Val Glu Asp Glu Ser Leu Val Pro Asn Ser Gln Thr Glu
                85                  90                  95
Leu Glu Ser Ser Leu Pro Asp Ile Pro Thr Asp Gln Gln Ala Ile Ala
            100                 105                 110
Glu Tyr Glu Thr Ser His Val Val Gly Gln Asp Asp Glu Pro Asn Leu
        115                 120                 125
Arg Gln Arg Leu Gln Asp Gly Lys Trp Arg Lys Gly Lys Thr Ser Ile
    130                 135                 140
Tyr Val Asp Ala Phe Asn Leu Ala Leu Glu Thr Val Leu Asp Glu Glu
145                 150                 155                 160
Ala His Leu Phe Asn Glu Ala Glu Leu Glu Val Phe Glu Gln Trp Lys
                165                 170                 175
Gly Leu Ser Tyr Glu Ser Gln Tyr Leu
            180                 185

<210> 27163
<211> 69
<212> PRT
<213> A.fumigatus

<400> 27163
Gln Val Gly Asp Phe Gln Arg Leu Arg Thr Pro Gln Gln Ala Gly Tyr
1               5                  10                  15
Lys Trp Ala Pro Lys Ser Leu Leu Asn Phe Arg Thr Pro Gln Leu Thr
            20                  25                  30
Cys Pro Asp Glu Lys Lys Thr Ala Pro Leu Glu Lys Asp Asn Gly Pro
        35                  40                  45
Val Arg Pro Ser Gly Phe Val Ile Gly Ala Ile Met Gly Leu Cys Leu
    50                  55                  60
Leu Lys Thr Cys Pro
65

<210> 27164
<211> 227
<212> PRT
<213> A.fumigatus
```

<400> 27164
Asn Glu Gly Val Pro Ala Gly Asp Lys Asp Arg Lys Arg Lys Ala Ile
1 5 10 15
Arg Asn Met Arg His Val Tyr Ser Asn Ala Lys Ala Val Leu Val Leu
20 25 30
Asp Lys Phe Ile Gln Lys Ile Pro Ser Thr Ala Pro Ala Leu Asp Lys
35 40 45
Val Ala Arg Leu Tyr Leu Ser Asn Trp Thr Lys Arg Leu Trp Thr His
50 55 60
Gln Glu Gly Phe Leu Pro Ser Leu Val Tyr Ile Gln Phe Ser Asp Arg
65 70 75 80
Pro Val Glu Leu Arg Ala Leu Ala Glu Glu Phe Met Thr Tyr Asn Arg
85 90 95
Glu His Leu Glu Lys Ser Gly Lys Tyr Leu Gly Phe Pro Phe Ala Ala
100 105 110
Asn Leu Arg Leu Leu Asp Leu Tyr Ser Ala Leu Arg Gly Leu Met Lys
115 120 125
Leu Val Lys Glu Lys Trp Met Leu Tyr Glu Pro Leu Ala His His Leu
130 135 140
Ser Pro Arg Arg Ser Thr Arg Leu Ala Asp Glu Thr Val Cys Met Ala
145 150 155 160
Thr Ile Ile Asp Ile Asp Leu Asp Arg Ile Gln Ala Ile Ser Cys Asp
165 170 175
Asp Asp Glu Gly Val Ala Glu Glu Arg Met Ala Ala Phe Leu Glu Gln
180 185 190
Phe Gly Thr Phe Asp Arg Ser Val Ile Phe Asn Asp Tyr Glu Arg Leu
195 200 205
Asn Lys Arg Asp Thr Ser Gly Leu Pro Asn Pro Cys Ser Thr Phe Gly
210 215 220
Leu Leu Asn
225

<210> 27165
<211> 97
<212> PRT
<213> A.fumigatus

<400> 27165
Ser Leu Val Pro Thr Leu Trp Ser Ala Met Ala Cys Val Cys Asn Ala
1 5 10 15
Val Cys Ser Trp Arg Thr Ala Arg Ser Arg Thr Met Leu Gly Ser Ser
20 25 30
Arg Leu Leu Ser Val Gly Thr Ala Pro Leu Ala Ser Gly Leu Ala Trp
35 40 45
Arg Met Ser Arg Ser Trp Val Thr Met Ser Pro Leu Leu Thr Arg Cys
50 55 60
Met Ser Met Ala Ala Leu Phe Cys Pro Thr Arg Ala Ser Ser Arg Thr
65 70 75 80
Ser Met Val Cys Tyr His Ser Arg Tyr Thr Asn Val Met Asn Cys Glu
85 90 95
Asn

<210> 27166
<211> 235
<212> PRT

<213> A.fumigatus

<400> 27166

```
Gln Thr Ile Pro Phe Ala Leu Ile Val Ser Ser Lys Lys Pro Val Glu
1               5                  10                  15
Phe Gly Gly Asn Arg Asn Tyr Arg Arg Asp Ser Thr Ser Ser Pro Leu
            20                  25                  30
Val Phe Ser Ser Ala Leu Ser Cys Val Leu Pro Pro Ser Asn Arg Gly
        35                  40                  45
His Ser Pro Ala Ile Cys Ser Asp Gly Gln Ser His Ser Phe Asp Leu
    50                  55                  60
Glu Gly Phe Trp Met Asp Val Gly Gln Pro Lys Ile Phe Leu Thr Gly
65                  70                  75                  80
Thr Cys Leu Tyr Leu Thr Ser Leu Ala Lys Arg Asn Ser Lys Leu Leu
                85                  90                  95
Ala Pro Asn Ser Glu Pro Tyr Val Tyr Gly Gly Asn Val Met Val Asp
            100                 105                 110
Pro Ser Ala Lys Ile Gly Lys Asn Cys Arg Ile Gly Pro Asn Val Val
        115                 120                 125
Ile Gly Pro Asn Val Val Val Gly Asp Gly Val Arg Leu Gln Arg Cys
    130                 135                 140
Val Leu Leu Glu Asn Ser Lys Val Lys Asp His Ala Trp Ile Lys Ser
145                 150                 155                 160
Thr Ile Val Gly Trp Asn Ser Ser Val Gly Lys Trp Ala Arg Leu Glu
                165                 170                 175
Asn Val Thr Val Leu Gly Asp Asp Val Thr Ile Ala Asp Glu Val Tyr
            180                 185                 190
Val Asn Gly Gly Ser Ile Leu Pro His Lys Ser Ile Lys Gln Asn Ile
        195                 200                 205
Asp Gly Met Leu Pro Leu Ala Leu Tyr Glu Arg His Glu Leu Arg Glu
    210                 215                 220
Leu Thr His Cys Ile Val Pro Ala Ile Ile Met
225                 230                 235
```

<210> 27167
<211> 222
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (161)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27167

```
Val Arg Asp Lys Pro Cys Ala Gly Glu Arg Ala Asp Leu Tyr Leu Ser
1               5                  10                  15
Thr Gly Val Phe His Arg Val Ser Arg Leu Ala Arg Tyr Ser Gly Leu
            20                  25                  30
Trp Leu Ile Leu Asp Ser Tyr His Gly Asp Arg Gly His Pro Tyr Pro
        35                  40                  45
Ser Ser Asp Asp Gly Leu Leu Gly Ser Cys Thr Gly Met Leu Ser Cys
    50                  55                  60
Thr Ala Val Ser Ser Cys Lys Asn Val Gly Glu Leu Leu Pro Leu Ala
65                  70                  75                  80
Val Glu Ile Val Arg Leu Thr Ile His Leu Gly Leu Cys Val Met Arg
```

```
                85                  90                  95
Val Arg Glu Met Val Asp Ser Thr Glu Ser Ser Ser Gly Ser Trp Ser
            100                 105                 110
Ile Leu Val Ser Glu Ile Asn Glu Ala Asp Ala Thr Ser Leu Ile Gly
        115                 120                 125
Asp Phe Val Lys Lys Arg Val Ser Thr Val Tyr Asp His Trp Lys Lys
    130                 135                 140
Asn Ile Asp Asn Thr Arg Glu Phe Pro Pro Arg Arg Asn Arg Thr Ser
145                 150                 155                 160
Xaa Arg Leu Asp Arg Lys Val Ser Pro Ser Val His His Pro Lys Phe
                165                 170                 175
Ser Thr Thr Leu Ser Lys Lys Val Phe Arg Arg Ser Thr Asn Thr Ser
            180                 185                 190
Arg Leu Leu Glu Ser Val Val Arg Thr Thr Arg Pro Ile Cys Thr Met
        195                 200                 205
Thr Glu Lys Phe Ala Ile Ser Ser Ala Ser Ala Pro Arg Thr
    210                 215                 220
```

<210> 27168
<211> 139
<212> PRT
<213> A.fumigatus

```
<400> 27168
Val Ala Leu Lys Asp Ser Ser Phe Gln Ser Gly Leu Leu Phe Ser Ser
1               5                   10                  15
Ala Leu Tyr Gln Lys Thr Pro Cys Ala Ala Val Gln Asp Asn His Tyr
            20                  25                  30
Ser Leu Gln Ser Arg Pro Arg Lys Pro Leu Ala Met Glu Asp Leu His
        35                  40                  45
Arg Leu Tyr Leu Phe Gly Asp Gln Thr Ile Ser Cys Asp Glu Gly Leu
    50                  55                  60
Arg Asn Leu Leu Gln Ala Lys Asn His Thr Ile Val Ala Ser Phe Ile
65                  70                  75                  80
Glu Arg Cys Phe His Ala Leu Arg Gln Glu Ile Thr Arg Leu Pro Pro
                85                  90                  95
Ser Gln Arg Thr Leu Phe Pro Arg Phe Thr Ser Ile Ala Asp Leu Leu
            100                 105                 110
Ala Gln His Arg Glu Ser Gly Thr Asn Pro Ala Leu Gly Ser Ala Leu
        115                 120                 125
Thr Cys Ile Tyr Gln Leu Gly Cys Phe Ile Glu
    130                 135
```

<210> 27169
<211> 396
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (14)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 27169
Gln Tyr Gln Gly Ile Pro Pro Ser Ser Gln Pro Tyr Ile Xaa Ala Val
1               5                   10                  15
```

```
Gly Ser Lys Gly Leu Thr Ile Ser Ala Pro Pro Glu Ile Leu Asp Asn
            20                  25                  30
Phe Ile Glu Glu Gly Leu Pro Lys Glu Tyr Lys His Phe Lys Ala Pro
        35                  40                  45
Gly Val Ser Gly Pro Tyr His Ala Pro His Leu Tyr Asn Asp Arg Glu
    50                  55                  60
Ile Arg Asn Ile Leu Ser Phe Cys Ser Glu Asp Val Ile Leu Arg His
65                  70                  75                  80
Thr Pro Arg Val Pro Leu Val Ser Ser Asn Thr Gly Lys Leu Val Gln
                85                  90                  95
Val Lys Ser Met Arg Asp Leu Leu Lys Val Ala Leu Glu Glu Ile Leu
            100                 105                 110
Leu Arg Lys Ile Cys Trp Asp Lys Val Thr Glu Ser Cys Leu Ser Ile
        115                 120                 125
Val Gln Ala Thr Asn Asp Lys Pro Trp Arg Ile Leu Pro Ile Ala Ser
    130                 135                 140
Asn Ala Thr Gln Gly Leu Val Thr Ala Leu Gln Arg Met Gly Asn Cys
145                 150                 155                 160
Gln Ile Glu Val Asp Thr Gly Val Gly Ala Pro Gln Met Asp Pro Ala
                165                 170                 175
Ala Pro Asn Ala Thr Gly Asn Ala Ser Arg Ser Lys Ile Ala Ile Ile
            180                 185                 190
Gly Met Ser Gly Arg Phe Pro Glu Ala Asp Gly Ile Glu Ala Phe Trp
        195                 200                 205
Asp Leu Leu Tyr Lys Gly Leu Asp Val His Lys Lys Val Pro Pro Glu
    210                 215                 220
Arg Trp Asp Val Asp Ala His Val Asp Leu Thr Gly Thr Lys Arg Asn
225                 230                 235                 240
Thr Ser Lys Val Pro Tyr Gly Cys Trp Ile Asn Glu Pro Gly Leu Phe
                245                 250                 255
Asp Ala Arg Phe Phe Asn Met Ser Pro Arg Glu Ala Leu Gln Ala Asp
            260                 265                 270
Pro Ala Gln Arg Leu Ala Leu Leu Ser Ala Tyr Glu Ala Leu Glu Met
        275                 280                 285
Ala Gly Phe Val Pro Asn Ser Ser Pro Ser Thr Gln Arg Asp Arg Val
    290                 295                 300
Gly Ile Phe Met Gly Met Thr Ser Asp Asp Tyr Arg Glu Ile Asn Ser
305                 310                 315                 320
Gly Gln Asp Ile Asp Thr Tyr Phe Ile Pro Gly Gly Asn Arg Ala Phe
                325                 330                 335
Thr Pro Gly Arg Ile Asn Tyr Tyr Phe Lys Phe Ser Gly Pro Ser Val
            340                 345                 350
Ser Val Asp Thr Ala Cys Ser Ser Ser Leu Ala Ala Ile His Leu Ala
        355                 360                 365
Cys Asn Ala Ile Trp Arg Asn Asp Cys Asp Thr Ala Ile Ser Gly Gly
    370                 375                 380
Leu His His Gly Ala Gly Arg Ser Thr Val Val Ile
385                 390                 395
```

<210> 27170
<211> 196
<212> PRT
<213> A.fumigatus

<400> 27170
Lys Gly Glu Ile Thr Asp Pro Pro Thr Ala Glu Thr Asn Pro Ala Val

```
1               5                   10                  15
Tyr Gly Pro Gly Gly Thr Asp Val Pro Phe Glu Ser Val Asp Phe Thr
            20                  25                  30
Gly Ser Gly Leu Phe Cys Ala Gln Cys Val Arg Asn Gln His Leu Phe
        35                  40                  45
Thr Ser Ala Leu Ala Ser Tyr Phe Pro Ser Pro Glu Asp Pro Asn Tyr
    50                  55                  60
Ser Ala Tyr Glu Arg Glu Tyr Pro Ser Phe Arg Arg Asn Leu Glu Glu
65                  70                  75                  80
Arg Tyr Pro Gln Val Cys Ala Asn Cys Glu Pro Arg Val Lys Glu Arg
                85                  90                  95
Ile Arg Gln Ala Gly Tyr Glu Ala Lys Ser Asp His Leu Arg Arg Met
            100                 105                 110
Met Asp Arg Ser Lys Ala Gly Arg Ala Ala Arg His Ala Arg Arg Trp
        115                 120                 125
Asn Trp Arg Asn Leu Leu Val Ser Ala Gly Ala Met Gly Tyr Trp Gly
    130                 135                 140
Ser Val Ala Gly Gln Leu Ser Trp Asp Thr Leu Gly Ala Leu Ser Ala
145                 150                 155                 160
Asp His His Leu Arg Asp Met Tyr Asn Asp Leu Ser Pro Pro Ser Ile
                165                 170                 175
Ala Phe Cys Ala Arg Ala Asp Ile Thr Glu Thr Ala Asn Tyr Gln Val
            180                 185                 190
Leu Cys Leu Gly
        195
```

<210> 27171
<211> 146
<212> PRT
<213> A.fumigatus

<400> 27171

```
Thr Ala Ala Pro Lys Ala Thr Ala Ser Ser Gly Leu Ile Pro Leu Glu
1               5                   10                  15
Ala Phe Leu Pro Pro Lys Asn Ser Ser Arg Arg Ala Trp Thr Leu Gly
            20                  25                  30
Ile Arg Val Glu Pro Pro Thr Arg Thr Met Ser Leu Thr Ser Asp Phe
        35                  40                  45
Leu Thr Leu Ala Ser Leu Ser Thr Cys Ser Thr Gly Phe Arg Val Phe
    50                  55                  60
Leu Asn Arg Ser Met Leu Ser Ser Ser Asn Leu Ala Arg Val Arg Val
65                  70                  75                  80
Ser Glu Lys Ser Ser Pro Leu Trp Lys Asp Ser Ile Ser Met Arg Val
                85                  90                  95
Asp Ile Trp Glu Asp Arg Val Arg Leu Ala Phe Ser Thr Ser Arg Leu
            100                 105                 110
Ser Leu Pro Met Ala Leu Met Ser Leu Glu Thr Ser Thr Leu Cys Phe
        115                 120                 125
Leu Leu Tyr Cys Leu Thr Met Tyr Ser Ile Thr Arg Trp Ser Lys Ser
    130                 135                 140
Ser Pro
145
```

<210> 27172
<211> 228
<212> PRT

<213> A.fumigatus

<400> 27172
Gly Ile Met Tyr Trp Ala Ser Asn His Thr Ser Arg Arg Leu Trp Arg
1 5 10 15
Ile Ser Lys Gly Lys Ser Ile Met Asn Gln Leu Thr Tyr Gln Asn Ser
20 25 30
Val Asn Pro Ser Lys Val Ile Leu Gln Phe Val Met Ser Ala Gly Leu
35 40 45
Ile Leu Leu Ile Arg Trp Cys Arg Ala Ile Gln Leu Ala Ser Asp Gly
50 55 60
Val Gly His Ile Gly Gln Leu Leu Leu Leu Leu Leu Lys Val Leu Gly
65 70 75 80
Gly Gly Ser Gly Gly Val Val Leu Gln Pro Val Gly His Leu Leu Asp
85 90 95
Ser Ile Gln Asp Gly Leu Leu Val Ile Leu Ile Asp Leu Ala Thr Lys
100 105 110
Pro Val Leu Val Val Asp Leu Val Leu Gln Ala Glu Gly Ile Val Leu
115 120 125
Glu Arg Val Ala Ser Leu Asn Leu Gly Leu Asp Gly Leu Val Leu Leu
130 135 140
Gly Glu Phe Leu Gly Leu Arg Asp His Ala Val Asp Leu Leu Leu Gly
145 150 155 160
Gln Thr Thr Leu Val Val Cys Asn Gly Asp Gly Leu Gly Leu Ala Gly
165 170 175
Thr Leu Val Ala Gly Ala Asn Leu Gln Asp Thr Val Gly Ile Gln Val
180 185 190
Glu Gly Asp Leu Asn Leu Arg His Ala Thr Arg Ser Gly Arg Asp Thr
195 200 205
Arg Gln Leu Glu Leu Ser Glu Glu Ile Val Val Leu Gly Gln Arg Thr
210 215 220
Phe Ser Leu Ile
225

<210> 27173
<211> 260
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (64)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27173
Gly Thr Pro Arg Gly Ala Gly Gly Ile Pro Val Asn Ser Asn Phe Pro
1 5 10 15
Arg Arg Leu Leu Ser Leu Val Arg Glu Arg Ser Pro Ser Ser Glu Ile
20 25 30
Ser Gln Tyr Ile Ser Ile Ser Ser Ile Lys Tyr Asn Gly Lys Thr Leu
35 40 45
Thr Asn Leu Asp Gln Asp Gly Gly Leu Val Val Ser Gly Gly Arg Xaa
50 55 60
Asp Leu Arg Leu Ala Gly Arg Asn Asp Gly Val Ala Gly Asn Glu Leu
65 70 75 80
Gly His Asp Thr Thr Gly Gly Leu Asn Thr Gln Gly Lys Arg Val Asp

```
                85                  90                  95
Val His Glu Asn Asp Ile Ala Gly Thr Phe Leu Thr Arg Glu Asp Thr
            100                 105                 110
Thr Leu Asn Gly Ser Thr Glu Ser Asp Ser Leu Ile Gly Val Asp Thr
        115                 120                 125
Leu Gly Gly Leu Leu Ala Ala Lys Glu Leu Phe Glu Glu Ser Leu Asp
    130                 135                 140
Leu Gly Asn Thr Ser Gly Thr Thr Asp Gln Asn Asn Val Val Asp Ile
145                 150                 155                 160
Arg Leu Leu Asp Leu Gly Val Leu Glu His Leu Leu Asp Arg Leu Gln
                165                 170                 175
Ser Leu Leu Glu Gln Ile His Val Glu Phe Phe Glu Leu Gly Ala Ser
            180                 185                 190
Glu Ser Leu Arg Glu Val Leu Ala Val Val Glu Gly Phe Asp Phe Asn
        195                 200                 205
Ala Ser Gly His Leu Gly Arg Gln Ser Thr Leu Gly Leu Leu Asp Phe
    210                 215                 220
Ala Leu Glu Leu Thr His Gly Leu Asp Val Leu Gly Asp Ile Asn Val
225                 230                 235                 240
Val Leu Leu Val Val Leu Leu Asp Asp Val Phe His Asn Ala Val Val
                245                 250                 255
Lys Val Leu Thr
            260
```

<210> 27174
<211> 220
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (197)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27174

```
Gly Glu Asp Phe Asp His Arg Val Met Glu Tyr Ile Val Lys Gln Tyr
1               5                   10                  15
Asn Lys Lys His Asn Val Asp Val Ser Lys Asp Ile Lys Ala Met Gly
            20                  25                  30
Lys Leu Lys Arg Glu Val Glu Lys Ala Lys Arg Thr Leu Ser Ser Gln
        35                  40                  45
Met Ser Thr Arg Ile Glu Ile Glu Ser Phe His Asn Gly Glu Asp Phe
    50                  55                  60
Ser Glu Thr Leu Thr Arg Ala Lys Phe Glu Glu Leu Asn Met Asp Leu
65                  70                  75                  80
Phe Lys Lys Thr Leu Lys Pro Val Glu Gln Val Leu Lys Asp Ala Lys
                85                  90                  95
Val Lys Lys Ser Asp Val Asn Asp Ile Val Leu Val Gly Gly Ser Thr
            100                 105                 110
Arg Ile Pro Lys Val Gln Ala Leu Leu Glu Glu Phe Phe Gly Gly Lys
        115                 120                 125
Lys Ala Ser Lys Gly Ile Asn Pro Asp Glu Ala Val Ala Phe Gly Ala
    130                 135                 140
Ala Val Gln Gly Gly Val Leu Ser Gly Glu Glu Gly Thr Gly Asp Val
145                 150                 155                 160
Val Leu Met Asp Val Asn Pro Leu Thr Leu Gly Ile Glu Thr Thr Gly
```

```
                165                 170                 175
Gly Val Met Thr Lys Leu Ile Pro Arg Asn Thr Val Ile Pro Thr Arg
            180                 185                 190
Lys Ser Gln Ile Xaa Ser Thr Ala Ala Asp Asn Gln Pro Thr Val Leu
        195                 200                 205
Ile Gln Val Cys Lys Cys Phe Ala Ile Val Leu Asp
    210                 215                 220
```

<210> 27175
<211> 191
<212> PRT
<213> A.fumigatus

<400> 27175

```
Leu Ile Ser Asp Glu Gly Glu Arg Ser Leu Thr Lys Asp Asn Asn Leu
1               5                   10                  15
Leu Gly Lys Phe Glu Leu Thr Gly Ile Pro Pro Ala Pro Arg Gly Val
            20                  25                  30
Pro Gln Ile Glu Val Ser Phe Asp Leu Asp Ala Asn Gly Ile Leu Lys
        35                  40                  45
Val Ser Ala Ser Asp Lys Gly Thr Gly Lys Ala Glu Ser Ile Thr Ile
    50                  55                  60
Thr Asn Asp Lys Gly Arg Leu Ser Gln Glu Glu Ile Asp Arg Met Val
65                  70                  75                  80
Ala Glu Ala Glu Glu Phe Ala Glu Glu Asp Lys Ala Ile Lys Ala Lys
                85                  90                  95
Ile Glu Ala Arg Asn Ser Leu Glu Asn Tyr Ala Phe Ser Leu Lys Asn
            100                 105                 110
Gln Val Asn Asp Glu Asn Gly Leu Gly Gly Gln Ile Asp Glu Asp Asp
        115                 120                 125
Lys Gln Thr Ile Leu Asp Ala Val Lys Glu Val Thr Asp Trp Leu Glu
    130                 135                 140
Asp Asn Ala Ala Thr Ala Thr Thr Glu Asp Phe Glu Glu Gln Lys Glu
145                 150                 155                 160
Gln Leu Ser Asn Val Ala Tyr Pro Ile Thr Ser Lys Leu Tyr Gly Ser
                165                 170                 175
Ala Pro Ala Asp Glu Glu Asp Glu Pro Ser Gly His Asp Glu Leu
            180                 185                 190
```

<210> 27176
<211> 90
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (13)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27176

```
Glu Ser Gly Asn Ser Glu Asp Arg Pro Glu Gln Arg Xaa Gln Ala Val
1               5                   10                  15
Phe Ser Glu Asp Tyr Phe Gln Gln Ile Ile Arg Phe Leu Thr Ala Leu
            20                  25                  30
Ala Arg Leu Pro Val Phe Lys Ser Phe Ser Leu Arg Asp Tyr Tyr Ser
        35                  40                  45
```

```
Gln Pro Val Arg His Glu Tyr Val Ser Ala Glu Asn Ser Val Thr Asn
    50                  55                  60
Asn Trp Asp Asp Glu Thr Asp Pro Val Tyr Pro Leu Pro Ala Ala Asn
65                  70                  75                  80
Cys Gly Leu Asn Ser Val Val Val Asp Gly
                85                  90
```

<210> 27177
<211> 79
<212> PRT
<213> A.fumigatus

<400> 27177

```
Leu Gly Leu Glu Ser Val Arg Leu Gly Phe Thr Gly Asn Val Glu Asn
1               5                   10                  15
Gly Pro Glu Thr Thr Pro Leu Cys Gly Gly Leu Pro Arg Val Phe Pro
            20                  25                  30
Val Ile Glu Ala Leu Leu Phe Gly Gln Ala Glu Glu Thr Ala Gly Pro
        35                  40                  45
Cys Arg Leu Arg Asp Arg Asp Phe Ser Pro Glu Asp Gly Ser Ile Ala
    50                  55                  60
Glu Arg Gly Ser Ala Ala Gly Arg Arg Arg Phe Arg Pro Arg Arg
65                  70                  75
```

<210> 27178
<211> 179
<212> PRT
<213> A.fumigatus

<400> 27178

```
Gly Ser Thr Val Gly Ala Gly Ala Leu Ile Thr Met Pro Pro Ser Thr
1               5                   10                  15
Val Phe Ser Tyr Trp Arg Arg Glu His Arg Arg Ala Ser Ala Pro Pro
            20                  25                  30
Val Ser Ser Ser Gly Gln Val Ser Ser Arg Gly Lys Ser Asn Gly Asn
        35                  40                  45
Arg Pro Gln Leu Pro Val Ile Gln His Thr Pro Ile Leu Ala Thr Thr
    50                  55                  60
Val Glu Glu Ser Ser Pro Cys Pro Asp Thr Leu Thr Pro Leu Thr Ser
65                  70                  75                  80
Ser Glu Tyr Ser Pro Ala Asp Gly Asp Thr Asp Lys Gly Leu Gly Val
                85                  90                  95
Gly Ser Thr Val Ser Thr Asp Ala Pro Ser Ser Ala Ala Thr Asn Leu
            100                 105                 110
Ala Val Pro Ser Ser Thr Ser Asp Lys Gln Ala Arg Pro His Ser Ser
        115                 120                 125
Pro Glu Asp Arg Glu Lys Asn Leu Asp Leu Thr Ala Gln Pro Asn Ser
    130                 135                 140
Ser Gln Val Ser Ile Thr Ala Ser Arg Pro Glu Tyr Gly Asp Ser Asp
145                 150                 155                 160
Ser Ser Lys Pro Asn Ser Pro Cys Leu Thr Arg Pro Gly Leu Glu Lys
                165                 170                 175
Val Arg Ala
```

<210> 27179

<211> 97
<212> PRT
<213> A.fumigatus

<400> 27179
Leu Ser His Ser Arg Thr Ala Ile Met Gly Asn Glu Thr Val Val Pro
1 5 10 15
Ser Glu Asn Glu Leu Lys Asn Phe Asn Pro Gly Asn Pro Asp Val Val
20 25 30
Glu Leu Ile Arg Tyr Ala Gln Glu Ser Asp Ala Ala Asp Arg Leu Leu
35 40 45
Thr Val Arg Gln Ala Leu Ser Lys Tyr Lys Lys Ala Val Phe Trp Ala
50 55 60
Met Phe Leu Ser Thr Ser Leu Ile Met Glu Gly Tyr Asp Leu Val Ile
65 70 75 80
Val Ser Thr Ser Leu Leu Thr Arg Glu Arg Val Ile Thr Lys Ser Lys
85 90 95
Val

<210> 27180
<211> 110
<212> PRT
<213> A.fumigatus

<400> 27180
Gln Ile Thr Ser Phe Tyr Gly Gln Ser Gln Phe Ile Glu Arg Phe Gly
1 5 10 15
Glu Phe Ser Asp Lys Ala Gly Lys Lys Val Ile Thr Ala Ala Trp Gln
20 25 30
Ser Gly Leu Ser Asn Ser Ser Met Val Gly Gln Leu Thr Gly Leu Leu
35 40 45
Leu Asn Ala Tyr Ser Gln Asp Arg Phe Gly Cys Arg Pro Thr Met Met
50 55 60
Phe Phe Met Ala Trp Met Ala Leu Met Ile Phe Ile Pro Val Phe Ala
65 70 75 80
Pro Ser Leu Pro Ile Leu Ala Trp Gly Glu Ala Met Cys Gly Val Ser
85 90 95
Trp Gly Val Phe Gln Val Arg Leu Ser Ala Leu Leu His Ala
100 105 110

<210> 27181
<211> 153
<212> PRT
<213> A.fumigatus

<400> 27181
Thr Leu Ser Thr Thr Tyr Ala Ser Glu Val Val Pro Thr Val Leu Arg
1 5 10 15
Pro Tyr Val Thr Ala Tyr Val Cys Met Cys Trp Gly Ala Gly Ile Leu
20 25 30
Leu Ser Ser Gly Val Val Arg Ala Val Ala Gly Ile Asp Gly Asp Leu
35 40 45
Gly Trp Arg Leu Pro Phe Val Leu Gln Trp Val Trp Pro Ile Pro Leu
50 55 60
Phe Ile Gly Ala Tyr Leu Ala Pro Glu Ser Pro Trp Asn Ala Val Arg

```
65                  70                  75                  80
Arg Gly Lys Val Asp Leu Ala Arg Lys Ser Leu Arg Arg Leu Arg Gln
                85                  90                  95
Asp Thr Pro Asp Lys Glu Arg Glu Val Glu Ala Thr Leu Ala Tyr Ile
            100                 105                 110
Gln His Thr Thr Lys Leu Glu Gln Ala Glu Thr Glu Asn Ala Ser Phe
        115                 120                 125
Leu Glu Cys Phe Lys Gly Thr Asn Leu Arg Arg Thr Glu Ile Val His
    130                 135                 140
Ser Leu Ile Thr Met Ser Asn Gly Ala
145                 150
```

<210> 27182
<211> 62
<212> PRT
<213> A.fumigatus

<400> 27182

```
Asn Cys Val Val Trp Ala Ala Gln Thr Leu Ser Gly Asn Ala Ile Leu
1               5                   10                  15
Gly Tyr Ser Val Val Phe Leu Glu Ala Ala Gly Phe Thr Glu Leu Gln
            20                  25                  30
Ala Phe Asp Val Asn Ile Ser Leu Ser Ala Cys Tyr Ile Val Gly Gly
        35                  40                  45
Val Met Ser Ser Pro Arg Gly Trp Lys Val Arg Gln Cys Gln
    50                  55                  60
```

<210> 27183
<211> 131
<212> PRT
<213> A.fumigatus

<400> 27183

```
Glu Ile Ser Thr Gly Ile Ile Arg Leu Phe Leu Leu Thr Arg Leu Gly
1               5                   10                  15
Cys Leu His Gln His Pro Pro Thr Leu Ala Pro Pro Arg Arg Pro Arg
            20                  25                  30
His Leu Trp Arg Ser Arg His Arg Pro Val Pro Leu Gly Arg Asn Ala
        35                  40                  45
Asn Gly Ala Asp Arg Phe Arg Arg Pro Gln His Ala Leu Leu Leu Arg
    50                  55                  60
Ser Ser Gly Arg Leu Gly Asn Pro Asp Ser Ile Pro Arg Arg Thr Ser
65                  70                  75                  80
Pro Arg Trp Pro Gln Leu His His Pro His Gly Ala Ser Ala Ala Ala
                85                  90                  95
Arg Pro Ala His Leu His Asn Asn Thr Glu Leu Gln Pro Gly Gln Gln
            100                 105                 110
Arg Arg Gln Glu Ala Pro Arg Ala Arg His Ala Gln Thr Glu Ser Arg
        115                 120                 125
Arg Pro Cys
    130
```

<210> 27184
<211> 67
<212> PRT
<213> A.fumigatus

<400> 27184
Val Cys Pro Gly Ser Ile Leu Ile Lys Asn Gly Lys Gly Ala Ile Asn
1 5 10 15
Lys Thr Glu Leu Ala Asp Asn Asn Thr Met Ile Arg Thr Ala Glu Ser
20 25 30
Thr Leu Asn Gly Pro Ile Ser Asp Ala Asn Arg His Leu Lys Ser Ala
35 40 45
His Pro Ser Asp Gly Asp Ala Ser Ala Phe Thr Asn Ser Gly Val Ser
50 55 60
Cys Ser Ala
65

<210> 27185
<211> 166
<212> PRT
<213> A.fumigatus

<400> 27185
Asp Val Phe Thr Asn Thr Arg Pro Leu Trp His Pro Pro Gly Ala Arg
1 5 10 15
Gly Ile Phe Gly Gly Ala Ala Ile Ala Gln Ser Leu Ser Ala Ala Met
20 25 30
Arg Thr Val Pro Thr Asp Phe Ala Val His Ser Met His Cys Tyr Phe
35 40 45
Val Leu Ala Gly Asp Ser Glu Ile Pro Ile Leu Tyr His Val Glu Arg
50 55 60
Val Arg Asp Gly Arg Ser Phe Ile Thr Arg Thr Val Gln Ala Arg Gln
65 70 75 80
Arg Gly Arg Pro Ile Phe Thr Thr Thr Leu Ser Phe Ser Arg Ala Asn
85 90 95
Ser Gly Gly Lys Lys Arg Leu Glu His Ala Thr Pro Lys Pro Ser Leu
100 105 110
Ala Asp Pro Ala Glu Gly Thr Arg Arg Ser Leu Glu Asp Ile Arg Gly
115 120 125
Pro Phe Glu Thr His Met Ala Gly Thr Val Asn Arg Lys Gln Asn Cys
130 135 140
Leu His Ser Pro Ala His Glu Gln Leu Gly Leu Gly Thr Ile Arg Glu
145 150 155 160
Val Leu Arg Ser Asp Thr
165

<210> 27186
<211> 262
<212> PRT
<213> A.fumigatus

<400> 27186
Thr Gln Ala Ile Arg Pro Ile Pro Arg Thr Ser Ala Cys Asp Gly Ser
1 5 10 15
Leu Ala Arg Gly Ala Ala Ser Pro Arg Gln Gly Ala Thr Arg Arg Thr
20 25 30
Ser Pro Arg Leu Ala Tyr Ile Thr Asp Ser Tyr Phe Ile Gly Thr Val
35 40 45
Ala Arg Val Gln Asn Ile Pro Arg Phe Ser Ser Pro Ala Glu Leu Arg
50 55 60

```
Arg Ala Leu Gln Ala Leu Lys Asn Pro Ser Asp Leu Asp Asp Glu Asp
65                  70                  75                  80
Ile Ala Arg Ala Ile Lys Glu Leu Lys Glu Glu Glu Ala Ala Asp Leu
                85                  90                  95
Arg Arg Arg Leu Glu Gly Ala Leu Ser Gln Ala Thr Asn Gln Pro Lys
            100                 105                 110
Glu Asp Arg Lys Glu Val Gly Met Met Val Ser Leu Asp His Ser Ile
        115                 120                 125
Tyr Phe His Asn Pro Trp Ala Phe Arg Ala Asp Glu Trp Met Leu Met
    130                 135                 140
Glu Met Glu Ser Pro Trp Ala Gly Glu Gly Arg Gly Leu Ala Ile Gln
145                 150                 155                 160
Lys Ile Trp Ser Arg Asp Gly Thr Leu Ile Ala Thr Cys Thr Gln Glu
                165                 170                 175
Val Arg Leu Arg Phe His Ser Leu Ser Arg Thr Leu Arg Phe Gly Leu
            180                 185                 190
Leu Pro Ala Arg Lys Arg Pro Leu Thr Leu Val Arg Val Phe Leu Gly
        195                 200                 205
Ser Gly Ala Ile Lys Thr Gly Arg Ala Cys Ser Cys Glu Asp Leu Ala
    210                 215                 220
Val Thr Gly Leu Asp Leu Phe Pro Phe Leu Phe Phe Phe Ser Leu Phe
225                 230                 235                 240
Ala Ile Tyr Tyr Ile Leu Ile Asp Ser Thr Asp Thr Leu Ala Ser Phe
                245                 250                 255
Ala Ser Val Tyr Ser Cys
            260
```

<210> 27187
<211> 281
<212> PRT
<213> A.fumigatus

<400> 27187

```
Asp Thr Thr Gly Pro Glu Thr Ser Leu Pro Gly Leu Pro Glu Leu Thr
1               5                   10                  15
Ser Arg Asn Gln Lys Leu Arg Gly Ala Asp Met Ser Ser Ser Pro Asp
            20                  25                  30
Glu Glu Pro Ala Gly Val Ser Gly Phe Glu Asn Glu Ser Pro Ala Ala
        35                  40                  45
His Thr Ser Gln Gly Met Lys Pro Glu Glu Pro Leu Glu Pro Glu Ala
    50                  55                  60
His Gln Pro Ile Pro Ile Pro Pro Gln Gln Pro Arg Ser Pro Thr Pro
65                  70                  75                  80
Pro Thr Pro Pro Pro Val Arg Asp Ser Ser Pro Ile Arg Val Ala Val
                85                  90                  95
Pro Val Gly Arg Gly Glu Val Ala Asp Ala His Asp Glu Gln Tyr Ser
            100                 105                 110
Pro Pro Pro Val Met Pro Thr Gln Ser Leu Arg Gln Ala Val Pro Asp
        115                 120                 125
Asp Glu Arg Leu Glu Asp Thr Thr Ile Asp Ile Gly Arg Glu Ala Ser
    130                 135                 140
Lys Ser Thr Ala Phe His Arg Pro Gln Asp Glu Ala Leu Gln Ala Ile
145                 150                 155                 160
Val Gln Tyr Asp Tyr Glu Lys Ala Glu Asp Asn Glu Ile Asp Leu Lys
                165                 170                 175
Glu Gly Glu Tyr Val Ser Asp Ile Glu Met Val Asp Lys Asp Trp Trp
```

```
            180                 185                 190
Leu Gly Ser Asn Ser Arg Gly Glu Arg Gly Leu Phe Pro Ser Asn Tyr
        195                 200                 205
Val Glu Leu Val Lys Asp Asn Gln Lys His Leu Ala Ser Val Ala Gly
    210                 215                 220
Ala Glu Asp Pro Lys Glu Ile Pro Pro Ala Ala Ser Ile His Ser Pro
225                 230                 235                 240
Gly Gly Gly Lys Gly Thr Ser Gln Pro Thr Ala Met Ala Leu Tyr Asp
                245                 250                 255
Tyr Glu Ala Ala Glu Asp Asn Glu Leu Ser Phe Pro Glu Gly Ala Gln
            260                 265                 270
Ile Val Asn Ile Val Ser Gly Thr Cys
        275                 280
```

<210> 27188
<211> 63
<212> PRT
<213> A.fumigatus

<400> 27188

```
Val Gly His Val Glu Ile Leu Phe Ala Phe Ser Ser Ser Phe Ser Phe
1               5                   10                  15
Ser Leu Leu Leu Ala Arg Gln Ser Ser Gln Thr Thr Val Ser Leu Thr
            20                  25                  30
Arg His Gln Glu Phe Pro Asp Asp Asp Trp Trp Phe Gly Glu Tyr Lys
        35                  40                  45
Gly Gln Lys Gly Leu Phe Pro Ala Asn Tyr Val Gln Leu Glu Glu
    50                  55                  60
```

<210> 27189
<211> 220
<212> PRT
<213> A.fumigatus

<400> 27189

```
Ser Tyr Glu Pro Gln Ile Ala Ala Val Leu Cys Phe Leu Ala Trp Phe
1               5                   10                  15
Tyr Pro Val Gly Leu Tyr Arg Asn Ala Glu Tyr Thr Asp Ser Val His
            20                  25                  30
Ser Arg Ser Thr Leu Val Phe Leu Ile Ile Trp Ala Thr Phe Leu Phe
        35                  40                  45
Ala Ser Ser Phe Ala His Leu Leu Ile Ala Gly Val Glu Ser Ala Glu
    50                  55                  60
Leu Ala Ser Ala Leu Ala Asn Ile Met Gly Ile Met Met Tyr Ala Phe
65                  70                  75                  80
Cys Gly Ile Leu Ala Gly Pro His Ala Leu Pro Gly Phe Trp Ile Phe
                85                  90                  95
Met Tyr Arg Val Asn Pro Phe Thr Tyr Leu Val Ser Gly Leu Leu Ser
            100                 105                 110
Ala Ser Leu Gly Asp Ala Pro Met His Cys Ala Ala Asn Glu Phe Leu
        115                 120                 125
Ala Phe Ser Pro Pro Ala Asn Arg Thr Cys Gly Glu Tyr Met Glu Asp
    130                 135                 140
Tyr Met Ala Leu Ala Gly Gly Tyr Leu Leu Asp Ser Ala Ala Arg Gly
145                 150                 155                 160
Asp Glu Gln Cys Gln Tyr Cys Arg Val Asp Asn Thr Ser Gln Tyr Leu
```

```
                165                 170                 175
Arg Asn Phe Ser Ile Asp Phe Ala Thr Arg Trp Arg Asp Phe Gly Leu
            180                 185                 190
Leu Trp Val Tyr Val Ala Val Asn Thr Phe Gly Ala Val Phe Leu Tyr
        195                 200                 205
Trp Leu Cys Arg Val Pro Lys Gly Lys Lys Arg Leu
    210                 215                 220
```

<210> 27190
<211> 157
<212> PRT
<213> A.fumigatus

<400> 27190

```
Gln His Arg Pro Gly Thr Thr Glu Pro Gly Val Trp Cys Leu Cys Leu
1               5                   10                  15
Pro Leu Arg Arg His Pro Thr His Leu Pro Asp His Ser Asn Ile Cys
            20                  25                  30
His Pro Ala Asn Phe Ile Arg Val Ser Arg Ala Pro Val Gln Asp Leu
        35                  40                  45
Leu Leu Ala Ser Leu Arg Ser Leu Gln Tyr Arg Arg Gly Val Cys Met
    50                  55                  60
Glu His Gly Lys Ser Leu Glu Gly Arg Tyr Ala Gln Thr Gln Thr Arg
65                  70                  75                  80
Thr Asn His Met Ser Leu Arg Ser Arg Gln Phe Ser Val Ser Trp Pro
                85                  90                  95
Gly Ser Thr Pro Ser Ala Ser Thr Ala Thr Pro Asn Thr Pro Thr Ala
            100                 105                 110
Ser Ile Pro Glu Ala Pro Ser Ser Ser Ser Ser Ser Gly Pro Pro Ser
        115                 120                 125
Ser Ser Pro Ala Pro Leu Arg Ile Ser Ser Ser Pro Ala Ser Arg Ala
    130                 135                 140
Pro Ser Ser Pro Pro Arg Ser Gln Thr Ser Trp Ala Ser
145                 150                 155
```

<210> 27191
<211> 241
<212> PRT
<213> A.fumigatus

<400> 27191

```
Trp Thr Leu Ser Ser Ile Pro Pro Val Lys Thr Asp Arg Leu His Gly
1               5                   10                  15
Arg Asp Tyr Ala Asp Ala Ile Val Gly Val Pro Gly Glu Gly Leu Asn
            20                  25                  30
Val Glu Gln Arg Lys Arg Leu Thr Ile Gly Val Glu Leu Ala Ala Arg
        35                  40                  45
Pro Lys Leu Leu Leu Phe Leu Asp Glu Pro Thr Ser Gly Leu Asp Ser
    50                  55                  60
Gln Thr Ser Trp Ser Ile Cys Asn Leu Met Glu Thr Leu Thr Arg Asn
65                  70                  75                  80
Gly Gln Ala Ile Leu Cys Thr Ile His Gln Pro Ser Ala Met Leu Phe
                85                  90                  95
Gln Arg Phe Asp Arg Leu Leu Leu Leu Ala Lys Gly Gly Lys Thr Val
            100                 105                 110
Tyr Phe Gly Glu Ile Gly Ser Gly Ala Arg Thr Leu Met Asp Tyr Phe
```

```
        115                 120                 125
Val Arg Asn Gly Gly Pro Pro Cys Pro Lys Gly Ala Asn Pro Ala Glu
    130                 135                 140
His Met Leu Glu Val Ile Gly Ala Ala Pro Gly Ala His Thr Asp Ile
145                 150                 155                 160
Asp Trp Pro Ala Val Trp Arg Asn Ser Pro Glu Tyr Gln Gln Val Arg
                165                 170                 175
Gln Glu Leu Ser Arg Val Arg Gln Leu Ala Ser Gln Pro Ser Ser Val
            180                 185                 190
His Ser Asp Asp Pro Ser Ser Tyr Ser Glu Phe Ala Ala Pro Phe Pro
        195                 200                 205
Ala Gln Val Gly Gln Val Gly Arg Arg Val Phe Gln Gln Tyr Trp Arg
    210                 215                 220
Thr Pro Ser Tyr Leu Tyr Ser Lys Ala Ile Leu Thr Val Gly Ser Val
225                 230                 235                 240
Ser
```

<210> 27192
<211> 87
<212> PRT
<213> A.fumigatus

<400> 27192

```
Pro Leu Arg Lys Leu Gln Ser Ile Phe Ile Gly Phe Ser Phe Phe Lys
1               5                   10                  15
Gly Asp Asn Thr Ala Gln Gly Leu Gln Asn Gln Val Phe Gly Val Phe
            20                  25                  30
Val Phe Leu Phe Val Val Ile Gln Leu Ile Phe Gln Ile Ile Pro Thr
        35                  40                  45
Phe Val Thr Gln Arg Thr Leu Tyr Glu Ser Arg Glu Arg Gln Ser Lys
    50                  55                  60
Thr Tyr Ser Trp Gln Ala Phe Val Leu Ser Asn Ile Ala Val Glu Phe
65                  70                  75                  80
Ala Trp Asn Thr Val Ser Arg
                85
```

<210> 27193
<211> 156
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (135)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27193

```
Pro Leu Phe Leu Pro Cys Arg Gly Glu Ser Gly Val Gly Arg Trp Thr
1               5                   10                  15
Val Ile Val Lys Asp Thr Asn Val Asn Glu Phe Thr Gly Glu Phe Ile
            20                  25                  30
Asp Trp Arg Leu Asn Leu Trp Gly Glu Ala Ile Asp Gly Ala Asn Gln
        35                  40                  45
Lys Pro His Pro Phe Pro Asp Glu His Asp Asp Asp His Ser Ile Glu
    50                  55                  60
```

```
Asp Ala Ile Val Ala Thr Thr Ser Val Glu Thr Gly Pro Thr Lys Thr
65                  70                  75                  80
Gly Val Pro Gly Ser Thr Asp Asp Thr Ile Asn Arg Pro Val Asn Ala
                85                  90                  95
Lys Pro Val Glu Thr Gln Thr Pro Ser Pro Ala Glu Thr Thr Ala Thr
            100                 105                 110
Lys Leu Ala Pro Pro Ala Glu Thr Arg Pro Ala Ala Thr Ala Thr Ser
        115                 120                 125
Ser Pro Thr Pro Pro Gly Xaa Val Pro Thr Ser Phe Leu Ala Lys Leu
    130                 135                 140
Pro Cys Pro Pro Ser Gly Ala Ser Gln Lys Lys Pro
145                 150                 155
```

<210> 27194
<211> 239
<212> PRT
<213> A.fumigatus

<400> 27194

```
Arg His Phe Asp Gly Tyr Thr Asn Ser Ile Tyr Ser Ile Thr Val Gly
1               5                   10                  15
Ala Ile Asp Arg Glu Gly Asn His Pro Ser Tyr Ser Glu Ser Cys Ser
            20                  25                  30
Ala Gln Leu Val Val Ala Tyr Ser Ser Gly Ser Gly Asp Ala Ile His
        35                  40                  45
Thr Thr Asp Val Gly Thr Asp Lys Cys Tyr Ser Phe His Gly Gly Thr
    50                  55                  60
Ser Ala Ala Gly Pro Leu Ala Ala Gly Thr Val Ala Leu Ala Leu Ser
65                  70                  75                  80
Ala Arg Pro Glu Leu Thr Trp Arg Asp Ala Gln Tyr Leu Met Val Glu
                85                  90                  95
Thr Ala Val Pro Ile His Glu Asp Asp Gly Ser Trp Gln Val Thr Lys
            100                 105                 110
Ala Gly Arg Lys Phe Ser His Asp Trp Gly Tyr Gly Lys Val Asp Ala
        115                 120                 125
Tyr Ala Leu Val Gln Lys Ala Lys Thr Trp Glu Leu Val Lys Pro Gln
    130                 135                 140
Ala Trp Phe His Ser Pro Trp Leu Arg Val Gln His Lys Val Pro Gln
145                 150                 155                 160
Gly Asp Gln Gly Leu Ala Ser Ser Tyr Glu Val Thr Glu Gln Met Met
                165                 170                 175
Lys Asn Ala Asn Ile Ala Arg Leu Glu His Val Thr Val Thr Met Asn
            180                 185                 190
Val Asn His Thr Arg Arg Gly Asp Leu Ser Val Glu Leu Arg Ser Pro
        195                 200                 205
Glu Gly Ile Val Ser His Leu Ser Thr Thr Arg Lys Ser Asp Asn Glu
    210                 215                 220
Lys Ala Gly Tyr Val Asp Trp Thr Phe Met Thr Val Ala His Trp
225                 230                 235
```

<210> 27195
<211> 228
<212> PRT
<213> A.fumigatus

<400> 27195

```
Arg His Arg Leu Ile Ala Met Leu Asn Gly Thr Ser Val Ala Ala Ala
1               5                  10                  15
Glu Lys Asp Gly Ser Arg Phe Val Asn Phe Ile Leu Pro Ser Tyr Asp
            20                  25                  30
Tyr Tyr Asn Leu Ala Ser Gly His Ala Gly His Leu Pro Glu Phe Val
        35                  40                  45
Glu Asp His Val Asp Ala Gly Phe Val His Leu Val Cys Phe Pro Cys
    50                  55                  60
Ala Pro Gly Gln Pro Cys Glu Tyr Asp Leu Thr Asp Pro His Cys Ala
65                  70                  75                  80
Tyr Thr Glu Pro Tyr Phe Ser Leu Val Pro Glu Met Pro Met Asn Lys
                85                  90                  95
Gln Tyr Asp Tyr Lys Tyr Leu Pro Asp Val Asp Gly Asn Ser Phe Ser
            100                 105                 110
Gly Arg Tyr Arg Gly Phe Leu Leu Ser Thr Ser Leu Pro Ile Lys Ala
        115                 120                 125
Thr Ile Tyr Asp Glu Trp His Asp Ser Arg Leu Ile Pro Trp Ala His
    130                 135                 140
Phe Val Pro Met Asp Ser Thr Phe Leu Asp Ile Tyr Gly Ile Met Glu
145                 150                 155                 160
Tyr Phe Ile Gly Tyr Arg Gly Ser Gly His Asp His Ala Ala Arg Lys
                165                 170                 175
Ile Ala Leu Asn Gly Lys Lys Trp Ala Glu Lys Val Leu Arg Pro Glu
            180                 185                 190
Asp Met Gln Ile Tyr Met Tyr Arg Leu Leu Leu Glu Tyr Ala Arg Ile
        195                 200                 205
Cys Asp Asp Arg Arg Asp Asn Leu Gly Tyr Thr Glu Asp Met Leu Trp
    210                 215                 220
Val Arg Arg Gly
225
```

<210> 27196
<211> 68
<212> PRT
<213> A.fumigatus

```
<400> 27196
Ser Gly Ser Arg Leu Gly Arg Ser Leu Val Ile Leu Arg Leu Gln Cys
1               5                  10                  15
Pro Trp Cys Pro Ser Gln Ile Ile Ile Val Arg Asp Thr Ala Ala His
            20                  25                  30
Ser Ser Ser Leu Asn Tyr Asn Asn Asn Asn Ser Ala Thr Ile Leu Ala
        35                  40                  45
Gly Gln Leu Ala Phe Phe Tyr Leu Ser Val Phe Leu Leu Ser Pro Thr
    50                  55                  60
Leu Leu Gln Asp
65
```

<210> 27197
<211> 89
<212> PRT
<213> A.fumigatus

```
<400> 27197
Arg Leu Ile Thr Thr Arg Phe Cys Ala Asp Thr His Gln Ser Pro Asp
1               5                  10                  15
```

```
Ala Leu Leu Arg Lys Leu Lys Pro Ala Asp Val Lys Ser Trp Phe Asp
            20                  25                  30
Trp Ile Glu Asp Asn Phe Ser Gly Ser Ile Lys Ala His Gly Thr Leu
        35                  40                  45
Ser Asn Tyr Trp Met Thr Leu Lys Arg Leu Tyr Phe Met Lys Asn Lys
    50                  55                  60
Lys Asp Met Ser Arg Ser Met Ile Asn Asp Cys Ile Asn Val Arg Phe
65                  70                  75                  80
Ile Leu Leu Ser Ala Arg Ser Gly Leu
                85
```

<210> 27198
<211> 209
<212> PRT
<213> A.fumigatus

<400> 27198

```
Tyr Met Asn Glu Val Ser Lys Arg Met Arg Leu Arg Lys Leu Pro Leu
1               5                   10                  15
Pro Lys Asp Thr Glu Asn Ser Leu Asp Leu Leu Ser Tyr Gln Thr Ala
            20                  25                  30
His Leu Val His Cys Lys Ala Val Phe Pro Asp Glu Lys Gln Arg Leu
        35                  40                  45
Tyr His Met Ala Thr Leu Asn Leu Ser Ser Val Thr Ala Cys Arg Ala
    50                  55                  60
Val Ser Leu Phe Asp Thr Arg Cys Gln Val Asp Leu His Pro Asp Gly
65                  70                  75                  80
Ser Pro Val Ile Pro Gly Lys Ile Glu Ala Gly Ser Asn Gly Ala Leu
                85                  90                  95
Asn Ser Pro Thr Pro Glu Gln Ser Gly Glu Ala His Cys Asp Ser Gly
            100                 105                 110
Tyr Glu Ser Ser Arg Ser Gly Arg Leu Asn Val Asp Glu Asp Asp Met
        115                 120                 125
Leu Asp Glu Ile Ser Ser Asp Gly Ser Ser Asp Asp Ile Met Ser Asp
    130                 135                 140
Ile Gly Tyr Val Ser Asp Cys Ser Ser Val Val Thr Asp Asp Gly Tyr
145                 150                 155                 160
Leu Ala Gly Asp Asp Gln Thr Gly Thr Ile Leu Trp Arg His Val Glu
                165                 170                 175
Phe Cys Ile Ala Arg Asn Pro Glu Pro Gly Arg Pro Asn Ile Leu Phe
            180                 185                 190
Ala Ile Val Thr Leu Ile His Thr Lys Gly Glu Asp Arg Lys Pro Arg
        195                 200                 205
Met
```

<210> 27199
<211> 84
<212> PRT
<213> A.fumigatus

<400> 27199

```
Ser Asp Ala Ser Gln Leu Tyr Asn Thr Ile Glu Asn Val Lys Leu Thr
1               5                   10                  15
Ala Asn Gly Gln Ser Tyr Ser Thr Gly Pro Ile Glu Ala Val Gln Leu
            20                  25                  30
```

```
Val His Tyr Arg Asn Leu Thr Gly Asp Gly Ala Trp Val Phe Asn Glu
        35                  40                  45
Ser Ala Asp Ala Ile Leu Ala Ala Arg Leu Asp Pro Ile Pro Ile Asp
    50                  55                  60
Ser Thr Glu His Glu Ala Ser Glu Phe Thr Val Thr Gly Glu Leu Pro
65                  70                  75                  80
Gln Leu His Asn
```

<210> 27200
<211> 495
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (14),(34)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27200

```
Asn Leu Gly Lys Leu Glu Ala Leu Thr Pro Arg Ile Asn Xaa Arg Tyr
1               5                   10                  15
Glu His Tyr Val Gln Leu Met Arg Glu Arg Gln Ala Arg Thr Ser His
            20                  25                  30
Gln Xaa Thr Thr Ser Ser Lys Gln Val Gln Pro Tyr Asp Pro Ala Leu
        35                  40                  45
Ala Gly Val Val Glu Pro Leu Glu Ala Gly Lys Asn Arg Asp Leu Ala
    50                  55                  60
Val Gln Leu Ala Arg Thr Glu Ile Ser Arg Arg Ala Thr Val Arg Lys
65                  70                  75                  80
Ala Leu Arg Gln Ala Gly Val Pro Gln Glu Glu Glu Gln Ser Arg Arg
                85                  90                  95
Thr Ala Gly Val Trp Asn Asn Trp Glu Ile Ala Thr Asp Lys Asp Gly
            100                 105                 110
Pro Gly Met Asp Asn Asp Leu Ser Arg Arg Ile Gln Asn Val Arg Leu
        115                 120                 125
Asn Ile Asp Gln Gln Thr His Ala Asn Ala Arg Pro Gln Gln Leu Lys
    130                 135                 140
Pro Ala Glu Pro Ser Thr Ser Thr Tyr Ser Tyr Pro Ser Val Pro Arg
145                 150                 155                 160
Thr Lys Pro Leu Glu Pro Leu Pro Ser Ala Ser Thr Asn Val Ser Arg
                165                 170                 175
Asp Glu Thr Ser Trp Arg Leu Glu Val Pro Leu Pro Pro Pro Lys Glu
            180                 185                 190
Arg Phe Gly Ser Ser Ser Ser Val Ile Tyr Arg Gly Ser Asp Pro Arg
        195                 200                 205
His Tyr Cys Pro Thr Lys Val Ser Ser Thr Pro Ala Pro Ala Val Pro
    210                 215                 220
Glu Lys Gly Gln Pro Leu Ala Ala Gly Gly Asn Ser Arg Pro Asp Leu
225                 230                 235                 240
Asn Pro Ser Ser Phe Thr Phe Lys Pro Ser Ala Tyr Leu Glu Asn Gly
                245                 250                 255
Thr Pro Leu Arg Thr Val Trp Leu Pro Pro Asp Leu Arg Thr His Phe
            260                 265                 270
Leu Ala Ile Ala Gly Pro Asn Thr Arg Arg Asn Leu Glu Thr Cys Gly
        275                 280                 285
```

```
Ile Leu Cys Gly Thr Leu Ile Ser Asn Ala Leu Phe Val Ser Arg Leu
    290                 295                 300
Leu Ile Pro Glu Gln Thr Ala Thr Ser Asp Thr Cys Glu Thr Val Asn
305                 310                 315                 320
Glu Ser Ala Ile Phe Asp Tyr Cys Asp Ser Glu Asp Leu Met Val Leu
                325                 330                 335
Gly Trp Ile His Thr His Pro Thr Gln Thr Cys Phe Met Ser Ser Arg
            340                 345                 350
Asp Leu His Thr His Cys Gly Tyr Gln Val Met Leu Pro Glu Ser Ile
        355                 360                 365
Ala Ile Val Cys Ala Pro Ser Lys Ser Pro Asp Trp Gly Val Phe Arg
    370                 375                 380
Leu Thr Asp Pro Pro Gly Leu Lys Thr Val Leu Asn Cys Thr Gln Ser
385                 390                 395                 400
Gly Leu Phe His Pro His Ala Glu Ala Asn Ile Tyr Thr Asp Ala Leu
                405                 410                 415
Arg Pro Gly His Val Tyr Glu Ala Lys Gly Leu Glu Phe Glu Thr Val
            420                 425                 430
Asp Leu Arg Pro Lys Gly Ser Arg Gly Leu Met Ile Asp Val Gly Cys
        435                 440                 445
Cys Asp Val Leu Cys Met Ile Trp Leu Ala Ile Arg Ile Pro Ser Pro
    450                 455                 460
Ala Met Cys Cys Leu Phe Ser Ala Leu Glu Ser Leu Leu Ser Ser Ala
465                 470                 475                 480
Tyr Ile Thr Tyr Phe Thr Ala Arg Cys His Cys Leu Leu Leu Pro
                485                 490                 495

<210> 27201
<211> 86
<212> PRT
<213> A.fumigatus

<400> 27201
Ser Ser Met Tyr Ala Cys Met Leu Ser His Ser Leu Tyr Thr Lys Ser
1               5                   10                  15
Tyr Ile Thr Tyr Ile Phe His Pro Thr Trp Pro Val Val Ser Thr His
            20                  25                  30
Pro Leu Ile Pro Ala Lys Ser Cys Phe Glu Ile Gly Thr Glu Lys Glu
        35                  40                  45
Arg Gly Ser Ala Ile Glu Ser Ala Ala Ala Arg Gln Asn Met Arg Tyr
    50                  55                  60
Thr Asp Ala Phe Ala Arg Gly Trp Ala Phe Ala Glu Val Ala Ser Pro
65                  70                  75                  80
Tyr Gly Ser Pro Glu Gln
                85

<210> 27202
<211> 440
<212> PRT
<213> A.fumigatus

<400> 27202
Gly Tyr Arg Thr Leu Leu Ser Cys Leu Val Val Pro Glu Ser Ser Ser
1               5                   10                  15
Ala Leu Phe Ser Ser Pro Thr Glu Glu Gly Arg Asn His Ser Arg Val
            20                  25                  30
```

```
Lys Thr Lys Pro Ser Gln Leu Leu Gln Arg Arg Ser Val Gln His Pro
        35                  40                  45
Thr Cys Phe Ser Phe Leu Ile Val Ile Ile Val Ser Met Pro Lys Lys
    50                  55                  60
His His Lys His Ser Phe Val Lys Pro Val Ser Pro Ala His His Thr
65                  70                  75                  80
Leu Leu Pro Ser Gly Pro Arg Asn Gln Asn Glu Arg Tyr His Ala Ser
                85                  90                  95
Gln Pro Ser Ser Ser Ser Thr Ser Thr Pro Ser Val Asn Asp Leu Ile
            100                 105                 110
Asn His Leu Arg Arg Thr Gln Val Ser Arg Ser Pro Glu Asp Gly Ala
        115                 120                 125
Gly Ser Pro Thr Arg Val Val Ala Pro Arg Ser Val His Pro Ser Leu
    130                 135                 140
Arg Asn Leu Leu Glu Leu Pro Glu Thr Pro Pro Pro Arg Pro Arg Pro
145                 150                 155                 160
Glu Ala Arg Arg Val Gly Val Thr Gly Arg Leu Leu Arg Arg Thr Pro
                165                 170                 175
Gly Pro Pro Pro Pro Gln Ser Trp Leu Leu Gly Ser His Asp Lys Asp
            180                 185                 190
Thr Ser Asp Glu Asp Leu Asn Ser Thr Asn Ala Ala Arg Val Glu Arg
        195                 200                 205
Ile Ile Tyr Arg Leu Asp Arg Leu Pro Gly Thr Thr Phe Pro Arg Lys
    210                 215                 220
Ser Asp Leu Leu His Met Val Leu Lys Ser Met Ala Ser Gln Trp Ala
225                 230                 235                 240
Trp His Ile Glu Tyr Asp Gly Gln Phe Leu Ala Val Leu Pro Ser His
                245                 250                 255
Val Lys Ile Leu Leu Leu Ser Tyr Ile Ala Ile Tyr Ala Gly Asp Gln
            260                 265                 270
Pro Leu Lys Gly Leu Met His Gly Leu Lys Pro Leu Phe Glu Lys Phe
        275                 280                 285
Ser Thr Asp Asp His Glu Ser Gly Asp Ala Gly Asp Leu Thr Glu Asp
    290                 295                 300
Gly Asp Ser Glu Ile Leu Arg Leu Asp Leu Ser Ser Ala Leu Gly Arg
305                 310                 315                 320
Trp Met Thr Ile Lys Gln Leu Ser His Glu Leu Leu Val Ser Asn Lys
                325                 330                 335
Ser Gly Ala Asn Leu Val Gln Gly Asn Ala Lys Glu Pro Val Pro Ser
            340                 345                 350
Ser Trp Glu Glu Ile Asp Asp Glu Glu Val Asp Thr Ala Asp Glu Ser
        355                 360                 365
Pro Asn Met Pro Ile Pro Lys Ala Leu Ser Gln Gly Leu Arg Phe Gln
    370                 375                 380
Asn Leu Arg Phe Leu Ser Leu Ala His Pro Lys Pro Ala Ala Ala Asn
385                 390                 395                 400
Trp Asn Ala Leu Val Asp Leu Leu Ser Arg Leu Ser Thr Ile Thr His
                405                 410                 415
Leu Ser Leu Ala His Trp Pro Leu Pro Thr Val Thr Pro Asn Ala Met
            420                 425                 430
Ser Ala Arg Ile Lys His Pro Ala
        435                 440
```

<210> 27203
<211> 72
<212> PRT

<213> A.fumigatus

<400> 27203
Leu Ile Phe His Phe Ala Leu Ser Leu Arg Ala Phe Phe Asn Pro Cys
1 5 10 15
Leu Ser Glu Thr Val Phe Gly Val Phe Ile Gly Glu Ala Ser Ser Pro
20 25 30
Pro Tyr Leu Gln Asp Lys Ile Pro Asp Leu Leu Gly Asn Leu Leu Ser
35 40 45
Gln Phe Asp Arg Leu Phe Val Val Gln Gln Phe Ile Ala Glu His Pro
50 55 60
Glu Gly Lys Val Ala Arg Leu Arg
65 70

<210> 27204
<211> 344
<212> PRT
<213> A.fumigatus

<400> 27204
Tyr Leu Thr Cys Val Thr Leu Trp Gln Phe Leu Asp Phe Val Leu Ser
1 5 10 15
Ser Ile Glu Thr Gly Arg Pro Gly Ser Ile Arg Ser Ser Ser Ser Val
20 25 30
Arg Asn Ala Ala Pro Pro Val Leu Val Ser Asn Val Gly Ser Arg Ala
35 40 45
Tyr Lys Pro Thr Asn Gly Leu Gly Ser Asn Ala Thr Gly Gln Gly Asn
50 55 60
Val Ala Ala Gly Val Lys Arg Lys Ala Glu Asp Gln Leu Arg Arg Pro
65 70 75 80
Gln Lys Pro Glu Ser Glu Ala Ser Ala Lys Pro Ser Ala Gly Lys Pro
85 90 95
Val Asn Ala Ser Ile Thr Ser Lys Ser Arg Pro Val Ala Ala Ser Ser
100 105 110
Ser Ala Lys Ser Thr His Gly Asn Thr Ala Thr Ala Ala Gln Lys Pro
115 120 125
Pro Gln Ile Ser Ser Lys Pro Pro Pro Lys Gly Ser Tyr Ala Asp Leu
130 135 140
Met Met Lys Ala Lys Glu Leu Gln Thr Lys Ala Pro Ala Gln Val Gly
145 150 155 160
Met Phe Lys His Gln Pro Val Ala Lys Glu Lys Leu Ser Lys Ala Glu
165 170 175
Arg Lys Arg Arg Ala Leu Glu Ala Gln Ile Lys Glu Lys Glu Ser Arg
180 185 190
Leu Ala Lys Lys Pro Gly Thr Val Ser Gly Arg Ala Thr Gly Thr Lys
195 200 205
Ser Gly Asp Gly Lys Leu Ala Arg Lys Arg Glu His Glu Glu Leu Thr
210 215 220
Tyr Lys Gly Thr Ala Arg Pro Ser Gln Thr Pro Thr Gln Leu Glu Tyr
225 230 235 240
Arg Gly Thr Ala Gly Leu Pro Ser Arg Arg Ser Ser Gln Glu Pro Lys
245 250 255
Ala Gln Ser Arg Ala Ser Lys Arg Ala Arg Met Asn Glu Tyr Leu Ala
260 265 270
Thr Asp Glu Glu Asp Glu Gly Asp Asp Tyr Asp Glu Tyr Tyr Ser Ala
275 280 285

```
Ser Ser Asp Met Glu Ala Gly Tyr Asp Asp Val Glu Glu Glu Glu Ala
    290                 295                 300
Ala Ala Leu Ala Ala Ala Lys Lys Glu Asp Glu Glu Glu Leu Arg Ala
305                 310                 315                 320
Glu Leu Ala Ala Lys Gln Glu Lys Leu Glu Arg Arg Lys Lys Leu Ala
                325                 330                 335
Ala Leu Ala Ala Lys Ser Arg Ser
            340
```

<210> 27205
<211> 95
<212> PRT
<213> A.fumigatus

<400> 27205
```
Gln Gly Phe His Arg Phe Lys Met Lys His Leu Ala Ala Tyr Leu Leu
1               5                   10                  15
Leu Ala Leu Ala Gly Asn Thr Ser Pro Ser Ser Glu Asp Val Lys Ala
            20                  25                  30
Val Leu Ser Ser Val Gly Ile Asp Ala Asp Glu Glu Arg Leu Asn Lys
        35                  40                  45
Leu Ile Ala Glu Leu Glu Gly Lys Asp Leu Gln Glu Val Ser Asn Tyr
    50                  55                  60
Ser Ser Lys Ile Thr Asp Trp Glu Phe Trp Thr Gly Ala Asp Ile Glu
65                  70                  75                  80
Arg Phe Leu Pro Gln Gly Trp Gln Gly Ser Ala Asn Leu Ala Ser
                85                  90                  95
```

<210> 27206
<211> 91
<212> PRT
<213> A.fumigatus

<400> 27206
```
Glu Asp Leu Gln Lys Ala Ala Ala Leu Leu Arg Glu Arg Asn Asp Glu
1               5                   10                  15
Leu Ala Arg Leu Glu Thr Leu Asp Ser Gly Lys Gly Tyr Ser Glu Thr
            20                  25                  30
Ser Thr Val Asp Ile Val Thr Gly Ala Asp Val Leu Glu Tyr Tyr Ala
        35                  40                  45
Asn Leu Val Gly Gly Gly Gly Leu Asn Gly Glu Thr Thr Gln Leu Arg
    50                  55                  60
Glu Asp Ala Trp Val Phe Thr Lys Lys Ala Pro Leu Gly Val Cys Val
65                  70                  75                  80
Gly Ile Gly Ala Trp Asn Tyr Pro Leu Gln Met
                85                  90
```

<210> 27207
<211> 339
<212> PRT
<213> A.fumigatus

<400> 27207
```
His Ser Ala Leu Trp Lys Ser Ala Pro Cys Leu Ala Ala Gly Asn Thr
1               5                   10                  15
Met Val Tyr Lys Pro Ser Glu Tyr Thr Pro Leu His Ala Gln Met Leu
```

```
            20                  25                  30
Ala Glu Ile Tyr Arg Glu Ala Gly Leu Pro Pro Gly Val Phe Asn Val
        35                  40                  45
Val Tyr Gly Ala Gly Asp Val Gly Ala Tyr Leu Thr Ala His Pro Leu
    50                  55                  60
Val Ala Lys Val Ser Phe Thr Gly Gln Val Ser Thr Gly Met Lys Val
65                  70                  75                  80
Ala Gly Ser Ala Ala Gly Gln Met Lys Tyr Val Thr Met Glu Leu Gly
                85                  90                  95
Gly Lys Ser Pro Leu Leu Ile Leu Pro Asp Ala Asp Leu Glu Asn Ala
            100                 105                 110
Val Asn Gly Ala Met Met Ala Asn Phe Phe Ser Thr Gly Gln Val Cys
        115                 120                 125
Thr Asn Gly Thr Arg Val Phe Val Pro Arg Gly Met Lys Ser Ala Phe
    130                 135                 140
Glu Lys Ala Leu Leu Asp Lys Met Gln Tyr Ile Arg Pro Gly Pro Leu
145                 150                 155                 160
Phe Asp Asn Ala Thr Asn Phe Gly Pro Leu Ser Ser Ala Leu His Leu
                165                 170                 175
Glu Lys Val Thr Ser Tyr Ile Arg His Gly Ile Glu Thr Asp Lys Ala
            180                 185                 190
Thr Leu Leu Tyr Gly Gly Leu Gly Lys Pro Ser Leu Pro Lys Asp Leu
        195                 200                 205
Glu Asn Gly Phe Trp Val Arg Pro Thr Val Phe Thr Asp Cys Thr Asp
    210                 215                 220
Ser Met Arg Ile Val Gln Glu Glu Ile Phe Gly Pro Val Met Ser Ile
225                 230                 235                 240
Leu Tyr Tyr Asp Thr Val Glu Glu Ala Val Arg Arg Ala Asn Asn Thr
                245                 250                 255
Glu Leu Gly Leu Ala Ala Gly Val Phe Thr Arg Asp Leu Asn Met Ala
            260                 265                 270
His Arg Ile Ile Asp Gln Leu Gln Ala Gly Ile Thr Trp Ile Asn Ser
        275                 280                 285
Trp Gly Glu Ser Pro Ala Glu Met Ala Val Gly Gly Trp Lys Lys Ser
    290                 295                 300
Gly Val Gly Val Glu Asn Val Arg Arg Gly Ile Glu Ala Trp Val Arg
305                 310                 315                 320
Asn Lys Ser Thr Leu Val Asp Met Asn Gly Arg Val Ala Thr Val Phe
                325                 330                 335
Ala Lys Leu
```

<210> 27208
<211> 143
<212> PRT
<213> A.fumigatus

<400> 27208

```
His Asp Arg Ala Lys Asn Leu Phe Leu Asp Asn Pro His Gly Val Gly
1               5                   10                  15
Ala Val Arg Glu Asp Ser Arg Pro Tyr Pro Glu Pro Ile Leu Gln Ile
            20                  25                  30
Leu Trp Lys Gly Gly Leu Ser Gln Pro Ala Ile Glu Glu Arg Cys Leu
        35                  40                  45
Val Arg Leu Asn Ala Met Thr Asn Val Arg Gly Tyr Leu Phe Glu Val
    50                  55                  60
```

```
Lys Ser Arg Thr Gln Gly Ser Glu Val Arg Cys Val Val Lys Gln Arg
65                  70                  75                  80
Pro Gly Thr Asp Ile Leu His Leu Val Gln Lys Ser Leu Phe Lys Gly
                85                  90                  95
Arg Leu His Ala Ser Arg Asp Glu His Ser Ser Pro Ile Ser Thr His
            100                 105                 110
Leu Ala Cys Thr Lys Lys Ile Gly His His Gly Pro Ile Tyr Cys Ile
        115                 120                 125
Phe Lys Val Arg Ile Arg Glu Asp Glu Gln Trp Ala Leu Ala Ser
    130                 135                 140
```

<210> 27209
<211> 112
<212> PRT
<213> A.fumigatus

<400> 27209

```
Arg Ala Glu Leu Lys Gly Pro Lys Phe Val Ala Leu Ser Asn Asn Gly
1               5                   10                  15
Pro Gly Arg Ile Tyr Cys Ile Leu Ser Arg Arg Ala Phe Ser Lys Ala
            20                  25                  30
Asp Phe Met Pro Leu Gly Thr Asn Thr Arg Val Pro Leu Val His Thr
        35                  40                  45
Trp Pro Val Leu Lys Lys Leu Ala Ile Met Ala Pro Phe Thr Ala Phe
    50                  55                  60
Ser Arg Ser Ala Ser Gly Arg Met Ser Asn Gly Leu Leu Pro Pro Ser
65                  70                  75                  80
Ser Ile Val Thr Tyr Phe Ile Cys Pro Ala Ala Glu Pro Ala Thr Phe
                85                  90                  95
Ile Pro Val Asp Thr Cys Pro Val Lys Leu Thr Leu Ala Thr Arg Gly
            100                 105                 110
```

<210> 27210
<211> 464
<212> PRT
<213> A.fumigatus

<400> 27210

```
His Cys Gly Lys Thr Ser Asp Ala Tyr Asp Pro Lys Ala Ile Glu Ser
1               5                   10                  15
Gly Arg Tyr Glu Trp Trp Glu Glu Arg Asp Leu Phe Lys Pro Glu Phe
            20                  25                  30
Gly Pro Asp Gly Lys Val Lys Pro Glu Gly Tyr Phe Val Ile Pro Ile
        35                  40                  45
Pro Pro Pro Asn Val Thr Gly Ser Leu His Met Gly His Ala Leu Thr
    50                  55                  60
Asn Ala Leu Gln Asp Thr Met Ile Arg Trp Glu Arg Met Lys Gly Lys
65                  70                  75                  80
Thr Thr Leu Trp Leu Pro Gly Met Asp His Ala Gly Ile Ser Thr Gln
                85                  90                  95
Ser Val Val Glu Lys Met Leu Trp Lys Lys Glu Lys Lys Thr Arg His
            100                 105                 110
Asp Leu Gly Arg Glu Glu Phe Thr Lys Arg Val Trp Ala Trp Lys Asp
        115                 120                 125
Glu Tyr His Ala Asn Ile Lys Asn Ala Leu Arg Arg Val Gly Gly Ser
    130                 135                 140
```

```
Phe Asp Trp Ser Arg Glu Ala Phe Thr Met Asp Pro Asn Leu Ser Ala
145                 150                 155                 160
Ala Val Thr Glu Thr Phe Val Arg Leu His Glu Glu Gly Ile Ile Tyr
                165                 170                 175
Arg Ala Asn Arg Leu Val Asn Trp Cys Val Ala Leu Asn Thr Ser Leu
            180                 185                 190
Ser Asn Leu Glu Val Glu Asn Lys Glu Val Glu Gly Arg Thr Leu Leu
        195                 200                 205
Asp Val Pro Gly Tyr Asp Lys Lys Ile Glu Phe Gly Val Leu Thr His
    210                 215                 220
Phe Cys Tyr Glu Ile Asp Gly Thr Lys Glu Arg Ile Glu Ile Ala Thr
225                 230                 235                 240
Thr Arg Pro Glu Thr Met Ile Gly Asp Thr Gly Ile Ala Val His Pro
                245                 250                 255
Asp Asp Lys Arg Tyr Gln His Leu Ile Gly Lys Phe Ala Arg His Pro
            260                 265                 270
Phe Val Asp Arg Leu Met Pro Ile Val Ala Asp Thr Asp Val Asp Pro
        275                 280                 285
Glu Phe Gly Thr Gly Ala Val Lys Ile Thr Pro Ala His Asp Phe Asn
    290                 295                 300
Asp Phe Asn Arg Gly Lys Ala His Asn Leu Glu Phe Ile Ser Val Leu
305                 310                 315                 320
Asn Asp Asp Gly Thr Phe Asn Lys Asn Gly Gly Pro Phe Val Gly Met
                325                 330                 335
Lys Arg Phe Asp Ala Arg Tyr Lys Val Ile Glu Met Leu Lys Glu Lys
            340                 345                 350
Gly Leu Tyr Val Lys Trp Glu Asn Asn Pro Met Lys Ile Pro Arg Cys
        355                 360                 365
Ala Lys Ser Asn Asp Val Ile Glu Pro Ile Leu Lys Pro Gln Trp Trp
    370                 375                 380
Met Lys Met Gln Asp Leu Ala Glu Pro Ala Ile Lys Ala Val Glu Asn
385                 390                 395                 400
Gly Glu Ile Val Ile Lys Pro Glu Ser Ala Glu Lys Asn Tyr Phe Arg
                405                 410                 415
Trp Met Arg Ser Ile Asn Asp Trp Cys Leu Ser Arg Gln Leu Trp Trp
            420                 425                 430
Gly His Gln Ala Pro Ala Tyr Phe Val Lys Ile Glu Gly Glu Asp Arg
        435                 440                 445
Asp Asp Ser Asp Gly Asn Leu Trp Gly Tyr Arg Ala Phe Arg Lys Asn
    450                 455                 460
```

<210> 27211
<211> 369
<212> PRT
<213> A.fumigatus

<400> 27211

```
Lys Thr Pro Val Ile Asp Thr Ser His Pro Pro Glu Val Val Leu Leu
1               5                   10                  15
Ser Gly Phe Gly Phe Asp Asp Asp Leu Thr Ile Leu Asn Ser Leu Asp
            20                  25                  30
Gly Arg Leu Ser Glu Ile Leu His Leu His Pro Pro Leu Gly Leu Gln
        35                  40                  45
Asn Arg Leu Asn Asn Ile Ile Arg Leu Gly Thr Ala Arg Asn Leu His
    50                  55                  60
Gly Val Ile Leu Pro Phe His Val Gln Ser Leu Leu Leu Gln His Leu
```

65 70 75 80
Asn Asp Leu Val Thr Gly Ile Glu Thr Leu His Ala Asn Glu Trp Ala
85 90 95
Thr Ile Leu Val Lys Gly Thr Ile Ile Val Gln Asn Gly Tyr Glu Leu
100 105 110
Glu Val Val Gly Leu Ser Thr Val Glu Ile Val Glu Ile Val Gly Arg
115 120 125
Gly Asp Leu His Arg Thr Ser Thr Glu Phe Arg Ile Asp Ile Arg Ile
130 135 140
Gly Asn Asp Gly His Gln Ala Val Asp Glu Gly Met Thr Gly Glu Leu
145 150 155 160
Ala Asn Lys Val Leu Val Ala Leu Val Ile Arg Val His Gly Asn Thr
165 170 175
Cys Val Thr Asp His Gly Phe Trp Thr Gly Arg Ser Asp Leu Asp Ser
180 185 190
Leu Leu Gly Ala Ile Asn Leu Ile Thr Glu Val Gly Gln Asp Thr Lys
195 200 205
Phe Asp Leu Leu Val Val Thr Arg Tyr Val Lys Gln Cys Thr Ser Phe
210 215 220
Asn Leu Leu Val Leu Asp Leu Glu Ile Gly Gln Arg Gly Ile Gln Gly
225 230 235 240
His Thr Pro Val Asp Lys Ala Val Gly Ala Val Asp Asp Ala Phe Phe
245 250 255
Val Glu Pro Tyr Glu Ser Leu Gly Asp Gly Ser Arg Gln Val Gly Ile
260 265 270
His Gly Glu Ser Leu Thr Arg Pro Ile Glu Arg Thr Thr Asp Ser Pro
275 280 285
Gln Ser Ile Leu Asp Val Arg Met Val Leu Val Leu Pro Ser Pro His
290 295 300
Ser Leu Arg Glu Leu Leu Thr Ser Lys Ile Val Ala Gly Leu Leu Phe
305 310 315 320
Leu Leu Pro Glu His Leu Leu Asp Asn Thr Leu Ser Gly Asp Thr Gly
325 330 335
Val Ile His Thr Arg Glu Pro Glu Ser Gly Leu Ser Leu His Pro Leu
340 345 350
Pro Thr Asn His Ser Ile Leu Lys Gly Ile Gly Lys Ser Val Ala His
355 360 365
Val

<210> 27212
<211> 92
<212> PRT
<213> A.fumigatus

<400> 27212
His Pro Leu Pro Ser Ser Pro Ala Val Lys Thr Val Leu Ile Glu Asn
1 5 10 15
Met Arg Glu Trp Asn Asn Gln Glu Ile Asp Tyr Gly Tyr Thr Val Thr
20 25 30
Gly Val Asp Val Asp Ser Gln Leu Ala Ala Asp Pro Gln Ala Tyr Pro
35 40 45
Val Lys Val Thr Ala Glu Lys Asn Trp Lys Thr Glu Met Phe Glu Ala
50 55 60
Lys Tyr Ala Leu Val Cys His Ser Gln Ser Leu Ile Leu Val Ile Arg
65 70 75 80

```
Leu Ser Leu Thr Ser Leu Gly Leu Arg Trp Cys Ser
                85                  90

<210> 27213
<211> 68
<212> PRT
<213> A.fumigatus

<400> 27213
Ile Gly Asp Tyr Leu Cys Ser Thr Glu Gly Pro Ile Gln Thr Phe Arg
1               5                   10                  15
Pro Lys Gly Gly Asp Ile Asp Ser Leu Ile Glu Pro Ile Leu Val Ala
            20                  25                  30
His Gly Asn Arg His Ala Val Glu Leu Glu Gln Ile Pro Glu Cys Phe
        35                  40                  45
Tyr Pro Val Thr Gly Lys His Gln Ile Arg Gly Gly Ser Pro Asn Leu
    50                  55                  60
Lys Asn Ser Ser
65

<210> 27214
<211> 308
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (137)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27214
Ala Cys Asp Gly Ala His Ser Thr Val Arg Lys Ala Leu Gly Tyr Asn
1               5                   10                  15
Met Ile Gly Asp Ser Thr Asp Ala Val Trp Gly Val Met Asp Met Ile
            20                  25                  30
Pro Arg Thr Asn Phe Pro Asp Ile Arg Lys Lys Thr Thr Ile Arg Ser
        35                  40                  45
Lys Ala Gly Asn Leu Leu Ile Ile Pro Arg Glu Ser Gly Ser Leu Ala
    50                  55                  60
Arg Phe Tyr Ile Glu Leu Pro Ala Gly Thr Lys Pro Lys Glu Val Lys
65                  70                  75                  80
Leu Glu Asn Leu Gln Gln Thr Ala Lys Ser Ile Leu Ser Gln Tyr Ala
                85                  90                  95
Ile Glu Phe Val Glu Thr Val Trp Trp Ser Ala Tyr Ser Ile Gly Gln
            100                 105                 110
Arg His Ala Asp Phe Phe His Lys Asp Tyr Arg Val Phe Leu Ala Gly
        115                 120                 125
Asp Ala Cys His Thr His Ser Pro Xaa Ala Gly Gln Gly Met Asn Val
    130                 135                 140
Asn Leu Gln Asp Gly Tyr Asn Ile Gly Trp Lys Leu Ala Thr Val Leu
145                 150                 155                 160
Lys Gly Leu Ala Ser Pro Ser Leu Leu Glu Thr Tyr Val Leu Glu Arg
                165                 170                 175
Gln Lys Val Ala Ile Asp Leu Ile Asn Phe Asp Arg Tyr Phe Ser Lys
            180                 185                 190
Leu Phe Ser Ser Gly Gly Gln Thr Ser Pro Ala Glu Phe Gln Glu Gly
```

```
        195                 200                 205
Phe Ile Lys Ala Gly Lys Tyr Thr Ala Gly Met Thr Ala Arg Tyr Asp
    210                 215                 220
Gln Ser Pro Ile Thr Phe His Val Asn Glu Ser Asp Lys Leu Ser Thr
225                 230                 235                 240
Asn Val Val Val Gly Met Arg Leu Pro Ser Ala Gln Val Val Arg Phe
                245                 250                 255
Ser Asp Ser Lys Pro Met Gln Leu Ala Gln Ser Leu Lys Ser Asp Gly
            260                 265                 270
Arg Trp Arg Val Met Val Phe Ile Gly Asp Ile Ser Ser Ala Glu Thr
        275                 280                 285
Lys Thr Lys Leu Lys Ala Val Gly Gly Ala Arg Leu Ser Asp Ala Leu
    290                 295                 300
Asp Glu Ser Cys
305
```

<210> 27215
<211> 238
<212> PRT
<213> A.fumigatus

```
<400> 27215
Ile Trp Ile Gly Ala Ala Pro Ser Ser Pro Val Val Lys Thr Tyr Met
1               5                   10                  15
Leu Leu Gln Ser Asp Lys Thr Leu Pro Pro Pro Leu Ala Asp Arg Pro
            20                  25                  30
Asp Phe Glu Lys Leu Phe His Gln Ala Arg Ala Asn Ala Lys Pro Asn
        35                  40                  45
Glu Trp Phe Ala Ile Pro Glu Gln Thr Leu Ser Ile Gly Phe Asp Asp
    50                  55                  60
Thr Asp Glu Gln Ser Leu Pro Asp Val Ser Phe Gly Trp Asp Asn Glu
65                  70                  75                  80
Lys Pro Gln Arg Thr Ile Thr Val Arg Ala Phe Glu Ala Gln Ala His
                85                  90                  95
Ala Ile Thr Asn Gly Glu Tyr Ala Lys Tyr Leu Gln Ala Thr Arg Gln
            100                 105                 110
Arg Arg Arg Pro Glu Ser Trp Val Leu Thr His Ser Asp Glu Asn Tyr
        115                 120                 125
Pro Ile Ser Lys Gly Val Thr Leu Glu Ser Ser Gln Ala Thr Lys Asp
    130                 135                 140
Phe Met Asp Asn Phe Ala Val Arg Thr Val Phe Gly Pro Val Pro Leu
145                 150                 155                 160
Glu Phe Ala Gln Asp Trp Pro Val Met Ala Ser Tyr Asp Glu Leu Ala
                165                 170                 175
Leu Tyr Ala Glu Trp Val Gly Cys Arg Leu Pro Thr Tyr Glu Glu Val
            180                 185                 190
Lys Ser Ile Tyr Asn Tyr Ser Ala Gln Leu Lys Glu Thr Arg Gln His
        195                 200                 205
Glu Pro Ser Asp His Glu Arg Phe Val Asn Ser Pro Arg Ser Leu Ser
    210                 215                 220
Leu Ala Met Ser Asp Arg Arg Gln Gln Arg Cys Glu Gly His
225                 230                 235
```

<210> 27216
<211> 121
<212> PRT

<213> A.fumigatus

<400> 27216
Leu Cys Leu Thr Glu Gly Ser Asn Gly Val Lys Gly Ile Asn Arg Asp
1 5 10 15
Met Val Thr Asn Gly His Ser Lys Val His Gln Asp Lys Pro Arg Thr
20 25 30
Pro Glu Arg Gln Pro Ile Gln Pro Pro Ser Gln Ser Thr Met Pro Val
35 40 45
Phe Val Asp Leu His Gly Cys Asn Val Gly Phe Lys His Trp His Pro
50 55 60
Thr Pro Val Ile Gln Asn Gly Asp Arg Leu Ala Gly His Gly Glu Leu
65 70 75 80
Gly Gly Val Trp Glu Trp Thr Ser Thr Pro Leu Thr Pro His Asp Gly
85 90 95
Phe Lys Ala Met Asp Ile Tyr Pro Gly Tyr Thr Gly Lys Leu Leu Thr
100 105 110
Tyr Leu Val Asp Phe Tyr Lys Pro Asn
115 120

<210> 27217
<211> 64
<212> PRT
<213> A.fumigatus

<400> 27217
Ser Ser Leu Thr Lys Ser Leu His Pro Phe Ala Ile Val Ser Asn Ser
1 5 10 15
Ser Phe Val Ala Tyr Pro Ser Ser Thr Ala Ile Phe Glu Asn Pro Leu
20 25 30
Asp Leu Ile Leu Ala Ser Ile Asp Pro Pro Gln Tyr Phe Leu Ser Ser
35 40 45
Gly Leu Leu Lys His His Ala Pro Ala Leu Phe Leu Ile Leu Val Pro
50 55 60

<210> 27218
<211> 219
<212> PRT
<213> A.fumigatus

<400> 27218
Leu Arg Ser Glu Ile Ala Arg Val Leu Pro Gln Gly His Val Thr Ala
1 5 10 15
Ile Glu Tyr Val Ala Asp Pro Leu Asp Ala Ala Arg Ser Leu Ala Ser
20 25 30
Ala His Gly Leu Thr Asn Ile Asp Phe Arg Val Gly Asp Ile His Ser
35 40 45
Leu Asp Phe Pro Asp Asp Thr Phe Asp Ile Val His Val His Gln Val
50 55 60
Leu Gln His Ile Ala Asp Pro Val Arg Ala Leu Arg Glu Met Arg Arg
65 70 75 80
Val Ala Lys Ile Asp Gly Gly Ile Val Ala Ala Arg Glu Ser Ala Ser
85 90 95
Met Thr Trp Tyr Pro Asp Asn Ser Gly Ile Ala Gly Trp Lys Glu Val
100 105 110
Thr Asp Arg Met Cys Lys Ala Lys Gly Ser Asn Pro His Pro Gly Arg

```
        115                 120                 125
Tyr Ile His Val Trp Ala Glu Glu Ala Gly Phe Gln Gly Thr Arg Ile
    130                 135                 140
Lys Lys Ser Ala Gly Ala Trp Cys Phe Ser Ser Pro Glu Glu Arg Lys
145                 150                 155                 160
Tyr Trp Gly Gly Ser Met Glu Ala Arg Met Arg Ser Ser Gly Phe Ser
                165                 170                 175
Lys Met Ala Val Glu Glu Gly Tyr Ala Thr Lys Glu Glu Leu Glu Thr
            180                 185                 190
Ile Ala Asn Gly Trp Arg Asp Phe Val Lys Asp Asp Gln Ala Trp Phe
        195                 200                 205
Gly Leu Leu His Gly Glu Ile Leu Cys Trp Lys
    210                 215

<210> 27219
<211> 276
<212> PRT
<213> A.fumigatus

<400> 27219
Thr Cys Asp Ser Ser Gly Phe Cys Leu Arg Ser Asn Arg Ile Arg Gln
1               5                   10                  15
Leu Ser His Ser Phe Lys Met Ile Lys Pro Ser Ile Leu Gly Ala Leu
            20                  25                  30
Ala Leu Leu Ser Cys Ala Leu Pro Ser Asn Ala Thr Gln Ile Phe Arg
        35                  40                  45
Asn Thr Gly Thr Leu Ala Gly Trp Asp Ser Val Asn His Glu His Ser
    50                  55                  60
Gly Thr Val Gln Gln Val Ser Asn Val Val Tyr Glu Gly Ser Thr Ala
65                  70                  75                  80
Leu Lys Met Thr Gln Val Tyr Asp Ala Ser Tyr Thr Gly Arg Tyr His
                85                  90                  95
Ser Glu Val Val Lys Asn Asn Val Tyr Lys Arg Gly Asp Thr Gly Phe
            100                 105                 110
Tyr Gly Phe Ala Phe Arg Leu Gln Glu Asp Trp Gln Phe Ser Pro Ala
        115                 120                 125
Gln Ser Tyr Asn Ile Ala Gln Phe Ile Ala Asp Phe Ser Asp Thr Gly
    130                 135                 140
Cys Asp Asp Tyr Met Pro Ser Ser Met Val Trp Leu Val Gly Asn Gln
145                 150                 155                 160
Leu Tyr Ser Arg Val Lys Gln Gly Ser Val Cys Ala Gln Lys Thr Lys
                165                 170                 175
Thr Phe Ser Asn Leu Ala Thr Val Thr Ala Gly Val Trp His Lys Val
            180                 185                 190
Ile Ile Gln Ala Ser Trp Lys Ser Asp Gly Thr Gly Phe Tyr Lys Met
        195                 200                 205
Trp Phe Asp Gly Val Lys Val Leu Asp Gln His Asp Ile Ala Thr Thr
    210                 215                 220
Val Asp Asp Asn Arg Pro Phe Gln Phe Arg Val Gly Leu Tyr Ala Asn
225                 230                 235                 240
Gly Trp His Asp Asp Lys Gly Met Lys Gly Thr Gln Gly Thr Arg Gln
                245                 250                 255
Ile Trp Tyr Asp Glu Ile Ala Ala Gly Thr Thr Phe Ala Asp Ala Asp
            260                 265                 270
Pro Ala Gln Trp
        275
```

<210> 27220
<211> 104
<212> PRT
<213> A.fumigatus

<400> 27220
Leu Phe Ser Gln Ser Ile Phe Trp Lys Ile Leu Ile Met Val Ser Asn
1 5 10 15
Thr Thr Asp Pro Ser Asp Tyr Cys Thr Leu Asp Thr Cys Pro Leu Ser
20 25 30
Leu Ala Asn Phe Asn Tyr Val Pro Asn Leu Ala Gly Asn Leu Leu Tyr
35 40 45
Leu Ala Leu Phe Gly Thr Met Leu Val Ala Asn Leu Gly Leu Gly Ile
50 55 60
Tyr Tyr Arg Thr Trp Gly Tyr Leu Val Gly Met Ile Gly Gly Leu Ala
65 70 75 80
Leu Glu Val Ile Gly Tyr Val Gly Arg Ile Gln Leu His Tyr Asn Pro
85 90 95
Phe Pro Phe Ser Pro Phe Leu Gln
100

<210> 27221
<211> 384
<212> PRT
<213> A.fumigatus

<400> 27221
Thr Arg Leu Thr Phe Ser Pro Phe Phe Gln Ala Ile His Ala Asp Ile
1 5 10 15
Ala Phe Thr Leu Ala Lys Tyr Leu Tyr Ser Ser Ile Met Pro Asn Ser
20 25 30
Thr Asp Ala Pro Ala Ile Asn Val Lys Asn Met Gln Val Gln His Gly
35 40 45
Leu Val Ala Arg Lys Asp Arg Ser Arg Pro Gln Leu Ile Gln Ile Arg
50 55 60
Gly Ile Ala Asp Val Thr Arg Gly Leu Val Ser Leu Ser Trp His Leu
65 70 75 80
Val Asp Glu Gln Gly Arg Arg Val Glu Glu Ser Phe Ala Thr Ala Val
85 90 95
Ala Glu Phe Gly Asn His Glu Ala Trp Leu Glu Glu Trp Ser Pro Met
100 105 110
Thr His Leu Val Val Ser Arg Ile Asp Val Leu Gln Arg Leu Ala Asp
115 120 125
Glu Gly Thr Ala Asn Arg Leu Ser Arg Asp Met Val Tyr Met Leu Phe
130 135 140
Asn Asn Leu Val Asp Tyr Ala Glu Lys Tyr Arg Gly Met Gln Met Val
145 150 155 160
Val Leu His Gly Leu Glu Ala Met Ala Asn Val Thr Leu Ala Ala Pro
165 170 175
Glu Gln Ser Gly Gly Lys Trp Thr Val Ala Pro His Tyr Ile Asp Ser
180 185 190
Val Val His Leu Ala Gly Phe Ile Leu Asn Gly Gly Asn Gly Leu Asp
195 200 205
Pro Arg Arg Asn Phe Tyr Val Thr Pro Gly Trp Lys Ser Met Arg Phe
210 215 220

```
Ala Arg Pro Leu Val His Gly Val Arg Tyr Gln Ser Tyr Val Lys Met
225                 230                 235                 240
Met Pro Ile Arg Glu Gln Ser Gly Phe Tyr Ala Gly Asp Val Tyr Ile
                245                 250                 255
Leu His Glu Gly Gln Ile Val Gly Leu Val Gly Gly Ile Thr Phe Arg
            260                 265                 270
Thr Phe Pro Arg Ser Leu Ile Asn Thr Phe Phe Ser Pro Pro Asp Thr
        275                 280                 285
Met Thr His Gly Gly Ser Gln Ala Gly Ser Val His Gln Pro Ala Cys
    290                 295                 300
Ser Glu Arg Thr Leu Pro Val Ala Pro Ala Arg Gln Asp Ser Ala Ala
305                 310                 315                 320
Arg Glu Thr Leu Cys Gln Gly His Gly Leu Ser Arg Thr Val Met Asp
                325                 330                 335
Ser Ser Asp Ser Ser Pro Ala Thr Thr Leu Thr Pro Pro Thr Leu Pro
            340                 345                 350
Ser Val Ala Ala Ser Thr Glu Ser Pro Ile Val His Arg Ala Met Ala
        355                 360                 365
Leu Ile Ala Ala Glu Thr Ala Ser Ser Ala Gly Ala Arg Gly Leu Ile
    370                 375                 380
```

<210> 27222
<211> 349
<212> PRT
<213> A.fumigatus

<400> 27222

```
Arg Gln Cys Thr Arg Ala Pro His Ala Met Leu Ala Val Cys Ala Thr
1               5                   10                  15
Val Glu Gln Ile Arg Asn Val Leu Ala Gly Gln Pro Tyr Glu Val Ala
            20                  25                  30
Cys Ile Asn Gly Ser Ser Asp Ile Thr Leu Arg Cys Ser Val Ala Asp
        35                  40                  45
Ile Ile Asn Leu Gln Leu Ala Ile Glu Gln His Gly Tyr Lys Cys Thr
    50                  55                  60
Arg Leu Asp Val Pro Tyr Ala Phe His Ser Ala Gln Met Asp Pro Leu
65                  70                  75                  80
Leu Gly Pro Phe Glu His Ile Ala Arg Gly Val Thr Phe Lys Ala Pro
                85                  90                  95
Asn Ile Pro Val Met Ser Pro Ser Leu Gly Asp Cys Val Phe Asp Gly
            100                 105                 110
Lys Thr Ile Asn Ala Ser Tyr Met Cys Asn Val Thr Arg Asn Pro Val
        115                 120                 125
Lys Phe Val Asp Ala Leu Glu Thr Ala Arg Gly Met Asp Leu Val Asp
    130                 135                 140
Ala Lys Thr Val Trp Val Glu Ile Gly Pro His Ala Ser Tyr Ser Arg
145                 150                 155                 160
Phe Val Gly Ser Ala Met Pro Pro Gly Thr Ala Thr Ile Ala Ser Leu
                165                 170                 175
Asn Arg Asn Glu Asp Asn Trp Ser Thr Phe Ala Arg Ser Met Ala Gln
            180                 185                 190
Leu His Asn Leu Gly Val Asp Leu Asn Trp His Glu Trp His Ala Pro
        195                 200                 205
Phe Glu Ser Glu Leu Arg Leu Leu Thr Asp Leu Pro Ala Tyr Gln Trp
    210                 215                 220
Asn Met Lys Asn Tyr Trp Ile Gln Tyr Asn Gly Asp Trp Met Leu Arg
```

225 230 235 240
Lys Asp Gly Lys Ser Ser Ala Ala Ala Ala Ala Ser His Pro His Gln
245 250 255
Ala Ile Pro Pro Ala Leu Arg Thr Ser Leu Val His Arg Leu Val Cys
260 265 270
Glu Ser Val Gln Glu Thr Arg Val Glu Val Ile Val Glu Ser Asp Ile
275 280 285
Leu His Pro Asp Phe Phe Glu Ala Met Asn Gly His Arg Met Asn Gly
290 295 300
Cys Ala Val Ala Thr Thr Val Ile Gln Thr Glu Ser Pro Phe Leu Asn
305 310 315 320
Pro Thr Asp Phe Phe Ser Val Phe Pro Gly Asp Pro Cys Arg His Cys
325 330 335
Phe Tyr Leu Gly Gln Val Pro Leu Leu Glu His His Ala
340 345

<210> 27223
<211> 446
<212> PRT
<213> A.fumigatus

<400> 27223
Leu Pro Leu Ala Asn Ala Thr Ala Leu Ala Asn Ser Ile Ile Ser Leu
1 5 10 15
Gln Glu Leu Pro Leu Phe Val Pro Pro Gln Val Pro Leu Thr Thr Ser
20 25 30
Thr Ser Ser Ile Ser Pro Gln Arg Arg Ser Val Gly Gln Glu Gly Ala
35 40 45
Ile Ser Pro Phe Ala Arg Pro Asn Gln Arg Pro Tyr Asn Gln Gln Gln
50 55 60
Pro Leu Pro Ser Pro Gln Ser Tyr Gly His Thr Glu Gln Thr Tyr Thr
65 70 75 80
Met Ser Ser Ala Gln Asn Pro Met Tyr Ala Thr Pro Ala Met Pro Asp
85 90 95
His Gly His Arg Leu Arg Asp Arg Ala Thr Ala Gln Ser Ser Gly Gln
100 105 110
His Asn Asn Ala Ala Gly Arg Tyr Asn Gly Pro Gly Val Leu Pro Thr
115 120 125
Pro Asp Pro Thr Ile Ala Ser Cys Ile Ser Asp Glu Asp Val Ala Met
130 135 140
Gln Leu Ile Arg Leu Gly Asp Ala Ser Asn Phe Ser His Gly Arg Thr
145 150 155 160
Ser Ala Ser Thr Leu Asp Asp Ala Phe Ser Gly Ala Ala Asp Ala Ala
165 170 175
Ser Ser Thr Gly Ala Thr Ser Asp Gly Glu Asp Tyr Ser Glu Asp Asp
180 185 190
Asp Asp Leu Pro Ala Arg Ser Arg Gln Lys Leu Asp Ser Ser Pro Met
195 200 205
Leu Pro Pro Gly Thr Thr Lys Arg Thr His Lys Arg Leu Asp Asp Ile
210 215 220
Leu Pro Ser Phe Asp Ser Ser Asp Gly Ser Tyr Asp Gly Met Asp Glu
225 230 235 240
Asp Tyr Gln His Glu Glu Leu Asn Asp Ser Leu Leu Lys Ser Glu Leu
245 250 255
Asp Glu Tyr Ser Leu Tyr Arg Glu Ser Thr Pro Lys Pro Lys Lys Ala
260 265 270

```
Lys Thr Arg Pro Thr Ser Thr Ala Ser Thr Lys Pro Arg Val Ser Lys
        275                 280                 285
Thr Asp Pro Pro Arg Gln Gly Lys Ser Gly Lys Ala Ser Ser Thr Ala
    290                 295                 300
Val Ala Arg Lys Val Lys Ser Thr Thr Thr Val Val Ser Gln Asn Ala
305                 310                 315                 320
Ala Pro Leu Ser Gln Ile Val Thr Pro Thr Pro Ala Arg Lys Ala Ser
                325                 330                 335
Thr Ser Ser Val Asn Gly Gln Thr Gln Leu Ala Ala Asp Glu Glu Asp
            340                 345                 350
Leu Ser Thr Lys Pro Arg Cys Gln Arg Cys Arg Lys Ser Lys Lys Gly
        355                 360                 365
Cys Asp Arg Gln Arg Pro Cys Gly Arg Cys Lys Asp Ala Gly Ile Gly
    370                 375                 380
Leu Glu Gly Cys Ile Ser Glu Asp Glu Gly Asn Gly Arg Lys Gly Arg
385                 390                 395                 400
Tyr Gly Arg His Met Gly Val Pro Val Lys Lys Ala Leu Asp Ala Thr
                405                 410                 415
Ser Pro Ala Ser Asn Glu Ser Gln Leu Ile Ser Thr Met Pro Met Pro
            420                 425                 430
Ser Ser Ser Ala Ile Ala Asp Lys Asn Lys Lys Arg Lys Arg
        435                 440                 445
```

<210> 27224
<211> 385
<212> PRT
<213> A.fumigatus

<400> 27224

```
Asn Gln Gly Gly Pro Gly Ile Leu Gln Arg Ser Arg Ala Arg His Arg
1               5                   10                  15
Tyr Ile Met Gln Leu Cys Arg Ala Leu Met Arg Tyr Gly Ala His Thr
            20                  25                  30
His Arg Leu Glu Glu Tyr Met Thr Met Thr Ala Arg Val Leu Glu Val
        35                  40                  45
Glu Gly Gln Phe Leu Tyr Leu Pro Gly Cys Met Ile Met Ser Phe Asp
    50                  55                  60
Asp Pro Val Thr Arg Thr Ala Glu Val Lys Leu Val Arg Ser Thr Gln
65                  70                  75                  80
Gly Val Asp Leu Gly Arg Leu Ala Glu Thr His Asn Val Tyr Lys Asn
                85                  90                  95
Val Val His Asp Leu Ile Gly Val Glu Glu Ala Ile Gln Glu Leu Asp
            100                 105                 110
Glu Ile Met Lys Arg Lys Pro Arg Phe Asn Lys Trp Ile Leu Val Pro
        115                 120                 125
Val Tyr Gly Leu Ala Gly Ala Ala Val Gly Pro Phe Ala Phe Asp Ala
    130                 135                 140
Arg Pro Ile Asp Met Pro Ile Ile Phe Ile Leu Gly Ser Leu Val Gly
145                 150                 155                 160
Leu Met Gln His Val Ile Ser Pro Arg Ser Thr Leu Tyr Ser Asn Val
                165                 170                 175
Phe Glu Val Thr Ala Ala Val Leu Thr Ser Phe Leu Ala Arg Ala Phe
            180                 185                 190
Gly Ser Ile Arg Ile Thr Val Asp Gly Gln Lys Gln Ser Leu Phe Cys
        195                 200                 205
Phe Ser Ala Leu Ala Gln Ser Ser Ile Ala Leu Ile Leu Pro Gly Phe
```

```
    210                 215                 220
Met Val Leu Cys Ser Ser Leu Glu Leu Gln Ser His Gln Met Ile Ala
225                 230                 235                 240
Gly Ser Ile Arg Met Val Phe Ala Ile Ile Tyr Ser Leu Phe Leu Gly
                245                 250                 255
Tyr Gly Ile Thr Val Gly Thr Thr Val Tyr Gly Leu Ile Asp Gly Asn
            260                 265                 270
Ala Thr Ser Glu Thr Thr Cys Arg Asp Leu Ser Ile Tyr Gly Ser Lys
        275                 280                 285
Tyr Ile Gln His Phe Ile Phe Val Pro Ile Phe Val Ile Cys Leu Ala
    290                 295                 300
Val Ile Asn Gln Ala Lys Trp Lys Gln Val Pro Val Met Ile Phe Ile
305                 310                 315                 320
Ala Thr Cys Gly Tyr Ile Thr Asn Tyr Phe Ser Thr Thr Lys Leu Gly
                325                 330                 335
Ser Arg Ser Glu Val Ala Asn Thr Val Gly Ala Phe Thr Leu Gly Thr
            340                 345                 350
Leu Gly Asn Leu Tyr Ser Arg Leu Trp His Gly His Ala Ala Thr Ala
        355                 360                 365
Ile Arg Pro Gly Thr Ile Gly Pro Gln Phe Pro Gly Pro Lys Gly Pro
    370                 375                 380
Arg
385
```

<210> 27225
<211> 61
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (58)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 27225
Met Ala Val Thr Pro Lys Arg Val His Thr Asn His Thr His Leu Phe
1               5                   10                  15
Ala Asp Val Gly Trp Gly Leu Cys Cys Ile Pro Thr Ile Gln Pro Arg
            20                  25                  30
His Leu Ser Glu Pro Cys Thr Ser Pro Ile Thr Thr Asn Gln Val Phe
        35                  40                  45
Thr Ser Glu Val Pro Glu Thr Ser Asn Xaa Asn His Pro
    50                  55                  60
```

<210> 27226
<211> 79
<212> PRT
<213> A.fumigatus

```
<400> 27226
Arg Ile Asp Ile Leu Leu Ala Thr Gln Phe Ile Ile Leu Ala Asn Leu
1               5                   10                  15
His Pro Thr Phe Asn Val Arg His Asp Val Phe Ile Ser Leu His Met
            20                  25                  30
Glu Ile Thr Phe Phe Leu Leu Glu Gly Met Leu Asn Phe Leu Val Thr
        35                  40                  45
```

```
Phe Arg Cys Phe Leu Gly Leu Ser Arg Phe Glu Leu Gln Pro Thr Gly
    50                  55                  60
Thr Ala Arg Gly Tyr Leu Gln Glu Thr Thr Leu Ser Ser Lys Asn
65                  70                  75
```

<210> 27227
<211> 143
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (131)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27227

```
Pro Arg Met Ala Gln Pro Pro Ser Lys Val Cys Val Asp Asn Leu Arg
1               5                   10                  15
Leu Ala Cys Val Ile Thr Asn Asp Leu Arg Arg Arg Trp Asp Val Pro
            20                  25                  30
Val Asn Tyr Thr Asp Leu Tyr Glu Ile Ala Pro Thr Gln Thr Arg Thr
        35                  40                  45
Ile Val Arg Phe Thr Arg Glu Gly Leu Glu Gly Arg Val Thr Gly Tyr
    50                  55                  60
His Glu Val Thr Val Pro Ala Ala Ala Ala His Ala Lys Asn Ser Thr
65                  70                  75                  80
Ser Leu Leu Arg Arg Pro Ala Gly Arg Ala Asp Phe Val Arg Gly Ala
                85                  90                  95
Ala Gly Phe Phe Pro Phe Ala Pro Gly Gly Leu Asp Gly Val Glu Ala
            100                 105                 110
Ile Ala Glu Met Glu Ser Glu Ala Gln Ala Ala Glu Arg Ser Lys Thr
        115                 120                 125
Gly Gly Xaa Gln Ser Gly Leu Asp Arg Ile Ile Asn Phe Trp Ser
    130                 135                 140
```

<210> 27228
<211> 228
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (38)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27228

```
Glu Ala Arg Gln Asp Ser Ser His Leu Arg Arg Ala Asp Ser Thr Val
1               5                   10                  15
Leu Arg Leu Leu Leu Lys Trp Asn Leu Lys His Arg Leu Arg Asn Ala
            20                  25                  30
Gln Lys Pro Val Ala Xaa Ser Pro Ala Ser Thr Ala Leu Ser Ile Phe
        35                  40                  45
Gly Ala Glu Gly Gly Leu Leu Glu Ile Ala Pro Gly Cys Ser Arg Gly
    50                  55                  60
Leu Gln Phe Glu Ala Thr Lys Thr Lys Glu Thr Ala Glu Gly Asp Glu
65                  70                  75                  80
```

```
Glu Val Glu His Ala Leu Gln Gln Glu Glu Ser Asp Leu His Val Glu
                85                  90                  95
Arg Asp Glu Asp Val Met Ser Asp Val Glu Gly Gly Val Lys Ile Gly
            100                 105                 110
Glu Asp Asp Glu Leu Ser Gly Glu Glu Asp Ile Asp Ser Leu Leu Pro
        115                 120                 125
Val Glu Phe Pro Ala Leu Glu Pro Arg Ala Pro Leu Leu Ser Gly Val
    130                 135                 140
Lys Gln Arg Gln Gly Gly Lys Glu Trp Ala His Val Val Asp Val Asn
145                 150                 155                 160
Lys His Ile Ser Asn Phe His Glu Leu Val Pro Asp Met Ala Arg Glu
                165                 170                 175
Trp Pro Phe Glu Leu Asp Thr Phe Gln Lys Glu Ala Val Tyr His Leu
            180                 185                 190
Glu Asn Gly Asp Ser Val Phe Val Ala Ala Tyr Thr Ser Ala Gly Lys
        195                 200                 205
Thr Val Val Ala Glu Tyr Ala Ile Ala Leu Ala Ser Lys His Leu Thr
    210                 215                 220
Thr Ala Ile Thr
225
```

<210> 27229
<211> 167
<212> PRT
<213> A.fumigatus

```
<400> 27229
Val Gly Gly Leu Ser Gln Ser Thr Ile Tyr Ile Ile Leu Leu Leu Gly
1               5                   10                  15
Gly Gly Ser Asn Gly Cys Thr Lys Thr Ile Trp Ala Gly Val Ser Glu
            20                  25                  30
Leu Leu Glu Glu Gly Ser Gly Tyr Arg Ile Ala Ile Val Ile Arg Asn
        35                  40                  45
Ser Thr Tyr Leu Leu Glu Cys Leu Gly His Lys Leu Glu Glu Pro Ala
    50                  55                  60
Ser Gly Asp Ala Ile Glu Leu Ser Arg Glu Ile Ile Ser Gln Phe Gln
65                  70                  75                  80
Asn Tyr Ser Ala Lys Tyr Asp Glu Lys Phe Ile Gly Ala Gly Leu Pro
                85                  90                  95
Glu Ser Leu Val Leu Lys Cys Pro Gly Leu Cys Ser Gln Leu Trp Phe
            100                 105                 110
Lys Leu Asp Ile Val Pro Leu Val Leu Arg His Val Ala Arg Ala Arg
        115                 120                 125
Thr Ala His Asp Arg Gly Glu Val Ala Thr Phe Arg Gly Trp Glu Arg
    130                 135                 140
Lys Ala Leu Asp Glu Gln Ala Asp Ser Met Ala Arg Lys Cys Ile Arg
145                 150                 155                 160
Tyr Leu Gly Ala Val Gly Gly
                165
```

<210> 27230
<211> 60
<212> PRT
<213> A.fumigatus

<220>

<221> UNSURE
<222> (11),(29),(44)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27230
Ser Trp His Ser Leu Ala Pro Thr Leu Asn Xaa Tyr Phe Phe Val Lys
1 5 10 15
Gly Lys Ile Pro Glu Gly Phe Val Gln Pro Phe Glu Xaa Ile Ser His
20 25 30
Leu Leu Asn Asp Thr Asp Tyr Pro Trp Thr Trp Xaa Cys Asp Ile Pro
35 40 45
Val Arg Leu Ala Thr Cys Pro Lys Leu Ser Tyr Ser
50 55 60

<210> 27231
<211> 169
<212> PRT
<213> A.fumigatus

<400> 27231
His Ile Val Arg Leu Leu Pro Ser Ala Ile Glu Asp Gly Thr Asp Leu
1 5 10 15
Asp Pro Lys Met Lys Arg Asn Ala Arg Glu Val Glu Gly Asp Thr Pro
20 25 30
Lys Ala Lys Ala Lys Asp Gly Ser Asn Glu Thr Gln Pro Lys Pro Asn
35 40 45
Pro Thr Ser Lys Arg Ile Ser Ile Asn Arg Glu Glu Ile Ala Lys Val
50 55 60
Met Met Ala Gln Ser Gln Ala Ala Arg Gln Ala Thr Leu Gly Leu Pro
65 70 75 80
Phe Gln Ala Arg Asn Glu Ile Gly Lys Asn Val Pro Gly Pro Lys Glu
85 90 95
Ser Pro Ser Val Ser Ala Gln Ser His Cys Pro Ser Ser Ile Ala His
100 105 110
Ile Ser Ala Arg Pro Ile Thr Ser Ser Gln Cys Met Thr Glu Pro Gln
115 120 125
Arg Asp Ala Leu Leu Ser Arg Thr Arg Leu Ser Gln Pro Ser Ser Asp
130 135 140
Thr Pro Ser Arg Ser Val Thr Arg Pro Arg Pro Gly Phe Met Pro Met
145 150 155 160
Ile Ser Thr Lys Pro Phe Lys Thr Glu
165

<210> 27232
<211> 113
<212> PRT
<213> A.fumigatus

<400> 27232
His Asn Ala Ile Ile Met Thr Asp Tyr Thr Asp Ala Thr Asp Thr Thr
1 5 10 15
Tyr Gly Thr Thr Gly Tyr Gly Thr Arg Gly Tyr Gly Thr Thr Val Gly
20 25 30
Thr Tyr Gly Thr Thr Tyr Asp Asn Gly Tyr Gly Thr Thr Ala Tyr Asp
35 40 45
Pro Thr Thr Gly Ala Tyr Asp Gln His Met Asp Tyr Arg Thr Asp Gly

```
    50                  55                  60
Thr Thr Arg His His Arg Glu Arg Val Asn Pro Ser Gly Thr Tyr Arg
65                  70                  75                  80
His Arg Asp Val Asp Arg Arg Asp Asp Gly Thr Val Arg Val His Arg
                85                  90                  95
Glu Tyr Asp Asn Pro Asn Thr Gly Thr Ser Tyr His Arg Asp Tyr Glu
            100                 105                 110
Arg
```

<210> 27233
<211> 128
<212> PRT
<213> A.fumigatus

<400> 27233

```
Ala Val Pro Ser Thr Thr Val Thr Ala Ser Cys Asp Leu Thr Ser Pro
1               5                   10                  15
Ala Leu Glu Ile Asp Cys Thr Pro Tyr Leu Leu Gln Leu Gly Leu Thr
            20                  25                  30
Lys Ser Arg Thr Ser Leu Val Trp Ile Ala Gly Pro Leu Ser Gly Leu
        35                  40                  45
Ile Ile Gln Pro Leu Ile Gly Val Ile Ala Asp Arg Ser Arg Ser Lys
    50                  55                  60
Trp Gly Arg Arg Arg Pro Phe Met Val Val Gly Ser Gly Ile Val Ala
65                  70                  75                  80
Val Cys Leu Leu Val Leu Gly Trp Thr Thr Glu Ile Val Ser Leu Phe
                85                  90                  95
Val Lys Asp Ala Glu Lys Val Cys Leu Phe Cys Ser Gly Pro Gly Phe
            100                 105                 110
Gly Ile Cys Asp Ser Ala Ala His Phe Thr Arg Gln Lys Met Ser Pro
        115                 120                 125
```

<210> 27234
<211> 67
<212> PRT
<213> A.fumigatus

<400> 27234

```
Arg Pro Ser Ala Thr Arg Met Ser Ala Ile Gly Gln Leu Ile Ser Tyr
1               5                   10                  15
Val Ile Gly Ser Ile Asp Thr Val Ser Leu Phe Gly Ala Ile Ile Gly
            20                  25                  30
Asp Thr Gln Phe Lys Gln Met Thr Val Ile Ala Ala Leu Ser Leu Ile
        35                  40                  45
Gly Ala Val Ser Val Thr Ser Tyr Ser Val Lys Asp Ile Ile Leu Ile
    50                  55                  60
Thr Ala Arg
65
```

<210> 27235
<211> 295
<212> PRT
<213> A.fumigatus

<400> 27235

```
Leu Asp Leu Gly Trp Phe Pro Phe Leu Phe Tyr Ser Thr Thr Trp Val
1               5                  10                  15
Gly Glu Thr Tyr Phe Arg Tyr Lys Val Pro Lys Asp Ala Pro Gln Ser
            20                  25                  30
Ser Asp Phe Leu Gly Glu Ile Gly Arg Val Gly Ser Leu Ser Leu Val
        35                  40                  45
Val Phe Ser Ser Ile Thr Phe Ile Ser Ser Val Leu Leu Pro Phe Cys
    50                  55                  60
Val Gln Pro Pro Asp Ser Lys Arg Ser Arg Phe Thr Pro Arg Pro Pro
65                  70                  75                  80
Pro Gly Ile Ala Ala Leu Leu Lys Arg Ile Thr Ala Ile Arg Pro Asp
                85                  90                  95
Leu Gln Thr Ser Trp Met Ile Ser His Val Met Phe Ala Ala Thr Met
            100                 105                 110
Ile Phe Ala Pro Leu Ala Arg Ser Arg Ala Phe Ala Thr Cys Leu Val
        115                 120                 125
Ala Leu Cys Gly Ile Pro Trp Ala Ile Ser Ser Trp Ala Pro Phe Ala
    130                 135                 140
Phe Met Gly Val Glu Ile Asn Lys Leu Ala Met Gly Pro Ala Ala Ala
145                 150                 155                 160
Ala Arg Ser Ser Gly Val Thr Met Ile Thr Ser Ser Thr Ile Arg Ser
                165                 170                 175
Ser Asn Phe Asp Thr Asp Thr Glu Met Asp Val Leu Arg Leu Asn His
            180                 185                 190
His Asp Thr Asp Ser Asp Ser Asp Ser Asp Asp Asp Ala Asn Ile Pro
        195                 200                 205
Ser Thr Gly Glu Leu Ala Gly Ile Tyr Leu Gly Val Leu Asn Val Tyr
    210                 215                 220
Thr Thr Leu Pro Gln Phe Val Gly Thr Phe Ile Ser Trp Ile Val Phe
225                 230                 235                 240
Ser Leu Leu Glu Pro Gly Ser Thr Lys Arg Asp Asp Ser Ala Gln Asp
                245                 250                 255
Ser Gln Trp Ile Arg Arg Asp Lys Glu Gly Pro Asn Ala Ile Ser Ile
            260                 265                 270
Cys Leu Phe Val Gly Ala Leu Cys Ala Leu Val Ala Ala Glu Ala Thr
        275                 280                 285
Arg Arg Leu Arg Tyr Ala Arg
    290                 295
```

<210> 27236
<211> 60
<212> PRT
<213> A.fumigatus

```
<400> 27236
Thr Pro Ser Leu Trp Glu Arg Ser His His Tyr Tyr Arg Ser Cys Ser
1               5                  10                  15
Ala Ala Pro His Leu Thr Leu Ala Ala Ala Lys Ser Leu Ser Ser Leu
            20                  25                  30
Ala Asp Cys Asn Gln Lys Ala Leu His Glu Asn Asp Val Ser Ser Ser
        35                  40                  45
Phe Leu Ser Leu Ser Phe His Thr Phe Asn Cys Cys
    50                  55                  60
```

<210> 27237
<211> 102

<212> PRT
<213> A.fumigatus

<400> 27237
Lys Lys Ser Thr Gln Pro Leu Ala Phe Trp Phe Lys Ile Gly Arg Leu
1 5 10 15
Leu Lys Asn Arg Gly Thr Ser Pro Val Asn Lys Ser Pro Pro Ser Ile
20 25 30
Phe Tyr Val Ser Val Cys Gly Lys Tyr Thr Thr Leu Val Leu Pro Asp
35 40 45
Asn Cys Leu Arg Asn Thr Pro Asp Leu Ser Leu Ser Thr Thr His Thr
50 55 60
Arg His Gly Ile Val Ala Arg Ile Trp Val Val Leu Ala Phe Gly Met
65 70 75 80
Lys Ile Ile Gly Ser Arg Asn Asp Met Lys Ile Leu Glu Phe Ile Val
85 90 95
Thr Thr Lys Tyr Arg Arg
100

<210> 27238
<211> 61
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (29)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27238
Ser Leu Pro Arg Ile Ser Pro Leu Leu Gln Asn Arg Ile Ile Gln Leu
1 5 10 15
Gly Tyr Tyr Ile Leu Leu Ser Leu Leu Ala Gln Ile Xaa Asp Phe Val
20 25 30
Glu Gly Gly Ala Pro Thr Leu Val Tyr Tyr Leu Leu Glu Ser Leu Trp
35 40 45
Thr Leu Thr Arg Val Leu Lys Gly Trp Phe Glu Phe Gly
50 55 60

<210> 27239
<211> 275
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (266)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27239
Pro Leu Met Thr Thr Thr Ala Phe Tyr Leu Arg Pro Asn Ser Gln Gln
1 5 10 15
Lys His Leu Trp Thr Ile Tyr Ile Cys Gln His Gly Asp Asp Pro Glu
20 25 30
Pro Ala Tyr Thr Leu Arg Tyr Pro Asp Pro Ala Ser Pro Ser Ser Lys
35 40 45

```
Asn Arg Tyr Ala Val Ala Leu Cys Asp Pro Phe Val Pro Asp Val Val
    50                  55                  60
Tyr Gly Glu Val Leu Ile Ile Pro Glu Trp Thr Gln Pro Ser Leu Ser
65                  70                  75                  80
Ala Glu Ala Ile Arg Leu Asn Gly Gly Val Thr Pro Pro Pro Glu Ala
                85                  90                  95
Ile Leu Pro Ser Gln Phe Ile Val Gln Leu Tyr Asn Pro Asp Gln Gln
            100                 105                 110
Val Thr Ile Arg Tyr Lys His Lys Thr Trp Asn Thr Pro Ala Thr Trp
        115                 120                 125
Glu Phe Glu Met Pro Gln His Thr Phe Arg Gln Pro Ser Ala Ser Thr
    130                 135                 140
Leu Asp Arg Thr Gln Thr Asp Pro Ala Leu Ala Asp Thr Thr Pro Lys
145                 150                 155                 160
Leu Arg Phe Ser Trp Arg Lys Asp Ser Lys Leu Ser Lys Asp Leu Thr
                165                 170                 175
Cys Leu Leu Leu Gly Lys Thr Ser Thr Leu Pro Glu Gly Arg Thr Lys
            180                 185                 190
Ser Lys Glu Pro Asp Ile Thr Val Ser Ile Phe Lys Ala Leu Arg Glu
        195                 200                 205
Leu Thr Leu Tyr Glu Pro Asn Met Tyr Arg Val Glu Met Glu Asp Phe
    210                 215                 220
Lys Gly Leu Glu Ile Val Leu Leu Leu Gly Ala Val Thr Ile Arg Asp
225                 230                 235                 240
Val Tyr Phe Thr Pro Met Lys Asp Ala Phe Arg Ile Val Arg Asp Glu
                245                 250                 255
Val Gly Arg Lys Pro Gly Ala Asp Pro Xaa Ser Ser Gly Arg Ala Gly
            260                 265                 270
Ile Arg Ser
        275
```

<210> 27240
<211> 520
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (31)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 27240
Gln Gly Asp Ser Arg Ile Glu Arg Pro Ala Ser Ser Ser Ala Ser Cys
1               5                   10                  15
Glu Glu Phe Ala His Tyr Pro Val Phe Asn Pro Arg Asn Leu Xaa His
            20                  25                  30
Asn His Ala Ala Ser Ala Ser Leu Cys Leu Gln Ser Asp Tyr Cys Arg
        35                  40                  45
Ser Arg Ala Ser Arg Ala Gln Ser Ser Val Thr Trp Met Gln Asp Leu
    50                  55                  60
Pro Arg Arg Ser Leu Arg Lys Ala Arg Ser Gly Leu Leu Ala Leu Arg
65                  70                  75                  80
Ser Gly Met Gln Arg Arg Pro Ile Pro Gly Gly His Ala Arg Arg Ser
                85                  90                  95
Asp Ile His Ser Ile Trp Ser Ser Arg Asp Ser Arg Glu Gly Ser Ser
            100                 105                 110
```

```
Asp His Phe Pro Ser Ser Val Ser Asp Ala Ser Thr Glu Asp Asp His
        115                 120                 125
Glu Phe Gly Thr Gly Leu Tyr Arg Thr Ala Arg Asn Gln Ser Ser Ser
    130                 135                 140
Ser Glu Ala Leu Lys Asp His Ser His Ser Ser Ile Pro Pro Thr Ser
145                 150                 155                 160
Pro Leu Pro Cys Thr Val Arg Glu Gly Pro Glu Asp Ile Gly Leu Arg
                165                 170                 175
Lys Ser Leu Ala Ala Gln Glu Lys Arg Gly Val Asn Gly Thr Ser Gly
            180                 185                 190
Ala Gly Val Asp Ser Ala Leu Glu Thr Ala Thr Thr Val Gly Ala Pro
        195                 200                 205
Arg Glu His Val Thr Glu Pro Glu His His Cys Tyr Ile Pro Gly Glu
    210                 215                 220
Ser Ser Thr Val Val Gln Thr Ser Thr His Ala Ile Ser Thr Ser Pro
225                 230                 235                 240
Ser Ala Ser Leu Ile Glu Leu Gly Gly Ile Lys Ala Thr Thr Glu Asn
                245                 250                 255
Thr Ala Pro Ser Glu Thr Ser Lys Ala Ala Thr Pro Lys Glu Pro Met
            260                 265                 270
Asn Leu Gln Thr Ser Glu Glu Cys Ile Lys Asp Ile Cys Ser Gln Thr
        275                 280                 285
His Asp Ser Lys Ser Val Ile Thr His Ser Pro Val Ile Asp Pro Glu
    290                 295                 300
Lys Pro Arg Ala Pro Glu Ser Pro Glu Glu Leu Val Asn Pro Asn Val
305                 310                 315                 320
Arg Lys His Asn Glu Ser Ile Arg Gly His Gly Asn Ala Pro Pro Pro
                325                 330                 335
Ile Ala Ser Gly Ser Thr Asp Ser Met Ala Cys Leu Tyr Val Ser Ser
            340                 345                 350
Arg Ser Pro Ser Pro Thr Ser Ser Val Cys Ser Arg Glu Ser Met Phe
        355                 360                 365
Arg Gln Ile Pro Ala Val Gln Leu Met Met Gly Thr Leu Glu Leu Val
    370                 375                 380
Ala Ser Ser Arg Asp Cys Ser Ser Gly Gly Gln Thr Leu Cys Cys Ser
385                 390                 395                 400
Asp Val Ala Glu Asn Asp Leu Val Ser Arg Ala Phe His His Ala Pro
                405                 410                 415
Ala Asp His Thr Glu Asp Gly Ser Ala Pro Thr Glu Thr Glu Pro Gln
            420                 425                 430
Gln Ser Arg Ala Ala Asn Val Gly Glu Thr Gln Ile Thr Gln Ala Gly
        435                 440                 445
Ala Ser Phe Thr Val Ser Ile Asn Phe Asp Asp Thr Leu Arg Ala Leu
    450                 455                 460
Thr Lys Ser Gln Glu Pro Ser Glu Met Arg Ser Ser Glu Gln Glu Glu
465                 470                 475                 480
Glu Ser Ala Ser Cys Leu Leu Pro Gly Leu Asp Asp Thr Asp Ser Phe
                485                 490                 495
Gly Ile Gln Asn Asn Phe Asp Pro Cys Val Ala Arg Arg Pro Pro Ser
            500                 505                 510
Pro Arg Gln Thr Glu Asp Ala Pro
        515                 520
```

<210> 27241
<211> 445
<212> PRT

<213> A.fumigatus

<400> 27241

```
Ile Arg Glu Phe Asn Glu Leu Trp His Leu Phe Glu Arg Arg Ile Asn
1               5                  10                  15
Met Ser Tyr Pro Phe Ala Ser Arg Tyr Val Asp Gln Phe Pro Lys Asp
            20                  25                  30
Lys Thr Val Gln Val Ala Gly Phe Val Ala Phe Val Ser Gly Ala Leu
        35                  40                  45
Ala Ser Val Leu Ala Leu Ala Ser Ile Val Asp Pro Glu Leu Phe Leu
    50                  55                  60
Gly Phe Glu Ile Thr His Asp Arg Thr Val Leu Phe Tyr Leu Gly Val
65                  70                  75                  80
Phe Gly Ser Val Trp Ala Val Ala Arg Gly Leu Val Pro Glu Glu Thr
                85                  90                  95
Thr Val Phe Asp Pro Glu Tyr Ala Leu Leu Glu Val Ile Asn Tyr Thr
            100                 105                 110
His Tyr Ala Pro Ser His Trp Lys Gly Arg Leu His Ser Asp Glu Val
        115                 120                 125
Arg Arg Glu Phe Thr Glu Leu Tyr Gln Met Lys Ile Val Ile Phe Leu
    130                 135                 140
Glu Glu Ile Leu Ser Met Ile Phe Thr Pro Phe Ile Leu Trp Phe Asn
145                 150                 155                 160
Leu Pro Lys Cys Ser Asp Arg Leu Ile Asp Phe Phe Arg Glu Phe Thr
                165                 170                 175
Val His Val Asp Gly Met Gly Tyr Leu Cys Ser Phe Ala Val Phe Asp
            180                 185                 190
Phe Lys Lys Gly Thr Asn Val Ile Asn Gln Gly Asp Arg Arg Asp Pro
        195                 200                 205
Ala Arg Gln Asp Leu Arg Ala Asp Tyr Phe Ser Thr Lys Asp Gly Lys
    210                 215                 220
Met Leu Ala Ser Tyr Tyr Gly Phe Leu Asp Asn Tyr Gly Ala Asn His
225                 230                 235                 240
Arg Gly Ser His Pro Ala Thr Arg Arg Gln Phe Tyr Pro Pro Pro Ala
                245                 250                 255
Phe Pro Thr Leu Gly Ser Pro Pro Ala Gly Glu Met Gly Thr Ile Gly
            260                 265                 270
Asp Arg Leu Asp Gln Thr Gln Thr Arg His Gly Leu Ala Gly Pro Phe
        275                 280                 285
Met Gly Gln Gln Ser Val Phe Gly Pro Ser Arg Tyr Gly Leu Thr Gly
    290                 295                 300
Leu Gly Asp His Ala Ser Pro Ala Pro Ser Ile Leu Leu Asp Pro His
305                 310                 315                 320
His Gln Pro Ser Thr Ser Gly Phe Arg Gly Thr Ser Arg Ala Ala Gly
                325                 330                 335
Val Gln Arg Tyr Arg Ser Ser Arg Ala His Pro Pro Ile Ser Gly Thr
            340                 345                 350
Ile Ala Asp Gly Asp Glu Ser Pro Val Ala Thr Gly Arg Ser Asp Pro
        355                 360                 365
Ser Arg Pro Ala Ala Asn Ala Ala Gly Ala Ser Ser Ala Gly Gly Val
    370                 375                 380
Gly Thr Ser Asp Ser Asn Leu Gly Asp Ser Trp Arg Met Asn Leu Val
385                 390                 395                 400
Glu Asp Gly Asp Asp Asp Asn Thr Glu Gly Gly Glu Asn Val Asp Ala
                405                 410                 415
Ile Ala Gly Gly Ala Gly Val Leu Gly Leu Ile Gln Gln Phe Gln Arg
```

```
            420                 425                 430
Val Asn Lys Asp Ser Arg Gly Arg Thr Ala Val Gly Leu
        435                 440                 445

<210> 27242
<211> 98
<212> PRT
<213> A.fumigatus

<400> 27242
His Val Ser Phe Thr Ala Ala Leu Gln Leu Thr Ala Thr His Arg Tyr
1               5                   10                  15
Gln Val Val Ile Met Ser Asn Gln Lys Arg Ile Ser Leu Gln Lys Asp
            20                  25                  30
Leu Lys Gly Gly Arg Ala Asp Ser Lys Ser Leu Thr Asn Phe Lys Glu
        35                  40                  45
Arg Val Thr Gly Val Met Arg Gln Ile Asp Ile Pro Ile Ser Val Tyr
    50                  55                  60
Ala Ala Thr Ala Asp Asp Glu Asn Arg Lys Pro Arg Thr Gly Met Trp
65                  70                  75                  80
Lys Glu Phe Val Glu Val Phe Thr Thr Gly Val Glu Gly Ser Glu Leu
                85                  90                  95
Ser Val


<210> 27243
<211> 131
<212> PRT
<213> A.fumigatus

<400> 27243
Ala Tyr Arg Lys Pro Gly Leu Val Asn Val Arg Val Gly Ala Ser Gln
1               5                   10                  15
Asp Leu Gln Gly Ala Glu Leu Gln Arg Leu Asn Lys Met Leu Asn Gly
            20                  25                  30
Gly Met Phe Tyr Thr Gln Val Val Gly Pro Val Ser Glu Ala Asp Phe
        35                  40                  45
Gly Ala Pro Ala Ser Pro Val Ala Asp Gln Asp Ala His Met Ser Gly
    50                  55                  60
Thr Asp Glu Lys Ser Ser Val Arg Pro His Tyr Tyr Asp Tyr Glu Asn
65                  70                  75                  80
Gln Pro Trp Lys Leu Glu Phe Arg Asp Ile Pro Glu Ala Ala Thr Arg
                85                  90                  95
Ser Ala Val Thr Thr Arg Leu Met Ala Ser Ala Ser Leu Pro Lys Gly
            100                 105                 110
Asp Val Thr Val Pro Met Asn Ala Trp Gly Tyr Lys Ser Val Val Ile
        115                 120                 125
Ser Leu Phe
    130

<210> 27244
<211> 107
<212> PRT
<213> A.fumigatus

<400> 27244
```

```
Leu Arg Tyr Ser Phe Val Thr Glu Tyr Ala Val Glu Gly Asp Ile Phe
1               5                  10                  15
Ile His Asn Asp Ile Val Ile Phe Leu His Arg Val Leu His Tyr Pro
            20                  25                  30
Thr Glu Ser Gln Glu Pro Arg Arg Gln Leu Pro Ala Leu Asn Glu Met
        35                  40                  45
Thr Pro Leu Asp Arg Ser Gly Gly Tyr Val Leu Gln Ala Ala Ile Thr
    50                  55                  60
Val Gln Asp Gly Ser Asn Gln Glu Thr Met Lys Ile Ala Ser Gln His
65                  70                  75                  80
Leu Phe Gly Leu Arg Glu Gln Leu Lys Ser Ala Val Arg Leu Glu Gln
                85                  90                  95
Ala Asp Arg Leu Ser Leu Asp Thr Arg Ala Lys
            100                 105
```

<210> 27245
<211> 84
<212> PRT
<213> A.fumigatus

<400> 27245

```
Asp Ser Thr Leu Val Val Thr Ala Ser Gly Asn Thr Phe Pro Arg Asp
1               5                  10                  15
Ser Ser Asp Trp Lys Trp Phe Ser Pro Asn Val Pro Thr Lys Leu Gln
            20                  25                  30
Asp Leu Asn Ala Asp Gly Arg Val Ala Cys Leu Phe His Gly Gly Thr
        35                  40                  45
Pro Ala Asn Cys Asn Ser Gln Ile Pro Ser Arg Asp His Val Gln Pro
    50                  55                  60
Glu Glu Asp Gln Pro Ala Glu Arg Ser Glu Gly Arg Pro Ser Arg Phe
65                  70                  75                  80
Glu Glu Leu Asp
```

<210> 27246
<211> 212
<212> PRT
<213> A.fumigatus

<400> 27246

```
Thr Leu Pro Ser Ser Gly Tyr Thr Ser Gln Glu Met Tyr Glu Leu Glu
1               5                  10                  15
Arg Arg Ala Ile Phe Ser Arg Lys Trp Leu Leu Thr Thr His Lys Leu
            20                  25                  30
Arg Leu Pro Asn Pro Gly Asp Trp Leu Arg Tyr Glu Val Ser Gly Phe
        35                  40                  45
Gln Phe Val Leu Val Lys Asp Arg Asp Gly Asn Ile Asn Ala Phe His
    50                  55                  60
Asn Val Cys Arg His Arg Ala Phe Pro Val Val Thr Glu Glu Lys Gly
65                  70                  75                  80
Thr Ser Arg Ile Phe Ala Cys Lys Tyr His Gly Trp Ser Tyr Gly Leu
                85                  90                  95
Asn Gly Lys Leu Ala Lys Ala Pro Gly Tyr Gln Glu Leu Asp Gly Phe
            100                 105                 110
Asp Lys Ser Lys Asn Gly Leu Leu Pro Ile His Val His Ile Asp Ala
        115                 120                 125
```

```
Asn Gly Phe Ile Trp Val Asn Leu Asp Ala Gly Glu Lys Pro Glu Val
    130                 135                 140
Ala Trp Glu Asp Asp Phe Lys Gly Met Asp Arg Leu Pro Arg Tyr Glu
145                 150                 155                 160
His Val Lys Trp Asp Asp Phe Ala Phe Asp His Thr Trp Glu Gln Glu
                165                 170                 175
Gly Glu Tyr Asn Trp Lys Ile Leu Ala Asp Asn Tyr Asn Glu Cys Tyr
            180                 185                 190
His Cys Pro Thr Thr His Pro Asp Ile Pro Ser Ile Ala Asp Leu Ser
        195                 200                 205
Ala Tyr Ser Leu
    210
```

<210> 27247
<211> 143
<212> PRT
<213> A.fumigatus

<400> 27247

```
Ser Pro His Phe Phe Phe Met Gln Arg Phe Val Pro Leu Ser Pro Thr
1               5                   10                  15
Arg Ser Ile Met Lys Tyr Glu Val Tyr Arg Asn Thr Lys Ser Ser Asp
            20                  25                  30
Glu Asp Phe Glu Lys Ile Asn Gln Ile Tyr Lys Arg Ile Met Ser Glu
        35                  40                  45
Asp Lys Tyr Leu Cys Asp Leu Thr Gln Lys Asn Leu Asn Ala Gly Val
    50                  55                  60
Phe Val Asn Gly Glu Leu His Pro Glu Met Glu Lys Gly Pro Leu Tyr
65                  70                  75                  80
Phe Gln Lys Thr Val Arg Asp Leu Val Val Glu His Tyr Glu Arg Glu
                85                  90                  95
Gln Lys Ala Lys Gln Glu Ile Trp Pro Ala Arg Gln Asn Leu Pro Lys
            100                 105                 110
Thr Ala Thr Val Ser Glu Lys Asp Ile Ser Phe Cys Ser Ser Leu Ser
        115                 120                 125
Cys Gln Thr Thr Glu Cys Val Gln Pro Pro Ala Thr Ile Ala Trp
    130                 135                 140
```

<210> 27248
<211> 342
<212> PRT
<213> A.fumigatus

<400> 27248

```
Leu Ile Pro Arg Val Asp Trp Glu Ser Ala Gln Thr Pro Asp Thr Ser
1               5                   10                  15
Ser Leu Val Phe Gly Leu Ala Ala Glu Asn Ile Thr Phe Gln Gln Phe
            20                  25                  30
Gly Ala Arg Asn Glu Leu Val Ile Asp Pro Arg Gly Tyr Ser Ala Ile
        35                  40                  45
Ile Asn Gly Glu Ala Ala Thr Phe Leu Ala Ser Glu Asn Gly Glu Pro
    50                  55                  60
Ser Met Asp Pro Arg Val Arg Leu Gln Thr Gln Val Thr Gln Ile Glu
65                  70                  75                  80
Tyr Ser Asp Lys Gly Ala Thr Ile Arg Asn Arg Asp Gly Ser Cys Val
                85                  90                  95
```

```
Glu Ala Ala Tyr Ala Ile Cys Thr Phe Ser Leu Gly Val Leu Gln Asn
            100                 105                 110
Asp Ala Val Ile Phe Arg Pro Ala Leu Pro Gly Trp Lys Gln Thr Ala
        115                 120                 125
Ile Tyr Lys Tyr Thr Met Gly Thr Tyr Thr Lys Ile Phe Met Gln Phe
    130                 135                 140
Glu Glu Met Phe Trp Pro Asn Asp Thr Gln Phe Phe Leu Tyr Ala Ser
145                 150                 155                 160
Pro Thr Ala Arg Gly Tyr Phe Pro Val Phe Gln Ser Leu Ser Met Glu
                165                 170                 175
Gly Phe Leu Pro Gly Ser Asn Ile Leu Phe Val Thr Val Val Asp Ala
            180                 185                 190
Glu Ala Tyr Arg Val Glu Arg Gln Ser Asp Pro Glu Thr Gln Ala Glu
        195                 200                 205
Ile Leu His Val Leu Arg Gln Met Phe Pro Asp Lys His Ile Pro Glu
    210                 215                 220
Pro Lys Ala Phe Phe Tyr Pro Arg Trp Ser Glu Glu Pro Trp Ala Tyr
225                 230                 235                 240
Gly Ser Tyr Ser Asn Trp Pro Val Gly Thr Thr Leu Glu Thr His Gln
                245                 250                 255
Asn Leu Arg Ala Asn Val Gln Arg Leu Trp Phe Ala Gly Glu Ala Thr
            260                 265                 270
Ser Ser Ala Tyr Phe Gly Phe Ala His Gly Ala Trp Tyr Glu Gly Lys
        275                 280                 285
Glu Val Gly Glu His Val Ala Ala Leu Leu Gln Gly Lys Cys Val Thr
    290                 295                 300
Leu Gln Gly Gln Lys Ala Cys Gly Glu Arg Arg His Tyr Glu Val Leu
305                 310                 315                 320
His Gly Thr Thr Pro Leu Glu Ala Tyr Asn Ala Ile Asn Gly Trp Pro
                325                 330                 335
Met Ser Ser Val Asp Leu
            340
```

<210> 27249
<211> 181
<212> PRT
<213> A.fumigatus

```
<400> 27249
Thr Gly Asn Pro Pro Lys His Pro Ile Pro Ala Arg Ser Ser Ser Ala
1                   5                   10                  15
Ser Pro Pro Arg Ile Ser Pro Ser Asn Ser Ser Gly Arg Ala Thr Ser
            20                  25                  30
Trp Ser Ser Ile Leu Ala Ala Thr Ala Pro Ser Ser Thr Ala Arg Pro
        35                  40                  45
Pro His Ser Ser Leu Ala Arg Met Ala Ser Arg Ala Trp Ile Leu Ala
    50                  55                  60
Ser Gly Cys Arg His Arg Ser Arg Arg Leu Ser Thr Pro Thr Lys Ala
65                  70                  75                  80
Pro Arg Ser Ala Thr Ala Thr Val Ala Ala Trp Lys Pro Arg Thr Arg
                85                  90                  95
Ser Ala His Ser Pro Leu Val Phe Cys Arg Thr Thr Gln Ser Tyr Ser
            100                 105                 110
Val Arg His Ser Pro Gly Gly Asn Lys Pro Pro Ser Thr Ser Thr Pro
        115                 120                 125
Trp Ala His Ile Leu Arg Ser Ser Cys Ser Ser Arg Arg Cys Ser Gly
```

```
    130                 135                 140
Arg Thr Thr Arg Ser Ser Ser Cys Thr Arg Arg Arg Arg Gln Glu Gly
145                 150                 155                 160
Thr Phe Pro Cys Ser Ser Leu Cys Arg Trp Arg Gly Phe Phe Arg Gly
                165                 170                 175
Arg Ile Ser Cys Leu
            180
```

<210> 27250
<211> 410
<212> PRT
<213> A.fumigatus

<400> 27250

```
Arg Arg Leu Ala Gly Lys Pro Gln Pro Leu Tyr Ile Arg Ser Gln Ile
1               5                   10                  15
Leu Met Gly Leu Gln Arg Arg Thr His Arg Pro Val Gly Val Ala Pro
            20                  25                  30
Ile Arg Pro Gly Leu Phe Arg Pro Ala Arg Val Glu Glu Arg Phe Arg
        35                  40                  45
Phe Gly Asn Val Leu Val Arg Glu His Leu Pro Glu Asp Met Glu Asp
    50                  55                  60
Leu Ser Leu Arg Phe Arg Val Gly Leu Pro Leu His Pro Ile Gly Phe
65                  70                  75                  80
Arg Ile His Asp Ser Tyr Lys Gln Asp Ile Arg Pro Arg Lys Lys Pro
                85                  90                  95
Leu His Arg Gln Arg Leu Glu His Gly Lys Val Pro Ser Cys Arg Arg
            100                 105                 110
Arg Arg Val Gln Glu Glu Leu Arg Val Val Arg Pro Glu His Leu Leu
        115                 120                 125
Glu Leu His Glu Asp Leu Ser Ile Cys Ala His Gly Val Leu Val Asp
    130                 135                 140
Gly Gly Leu Phe Pro Pro Gly Glu Cys Arg Thr Glu Tyr Asp Cys Val
145                 150                 155                 160
Val Leu Gln Asn Thr Lys Gly Glu Cys Ala Asp Arg Val Arg Gly Phe
                165                 170                 175
His Ala Ala Thr Val Ala Val Ala Asp Arg Gly Ala Phe Val Gly Val
            180                 185                 190
Leu Asn Leu Arg Asp Leu Cys Leu Gln Pro Asp Ala Arg Ile His Ala
        195                 200                 205
Arg Leu Ala Ile Leu Ala Ser Glu Glu Cys Gly Gly Leu Ala Val Asp
    210                 215                 220
Asp Gly Ala Val Ala Ala Arg Ile Asp Asp Gln Leu Val Ala Arg Pro
225                 230                 235                 240
Glu Leu Leu Glu Gly Asp Ile Leu Gly Gly Glu Ala Glu Asp Glu Arg
                245                 250                 255
Ala Gly Ile Gly Cys Leu Gly Gly Phe Pro Val Tyr Thr Trp Asp Gln
            260                 265                 270
Leu Cys Arg Ser Arg Ser Arg Ser Arg Ser Gly Gly Arg Arg Thr Pro
        275                 280                 285
Ile Pro Pro Phe His Cys Leu Cys Cys Arg Ile Ile Phe Pro Trp Pro
    290                 295                 300
Pro Ala Gly Gln Arg Glu Ala Ser Pro Arg Gly Leu Val Leu Gln Ile
305                 310                 315                 320
Leu Gly His Asp Ala Ser Cys Phe Ser Arg Gly Asp Ala Val Gly Leu
                325                 330                 335
```

```
Gly Ile Leu Ala Leu Glu Met Ser Val Val Gly Val Ser Gly Leu Val
            340                 345                 350
Val Gly Ala Tyr Arg Ala Val Val Gly Thr Cys His Cys Gln Val Val
        355                 360                 365
Phe Ser Cys Leu Gly Leu Val Asn Ile Cys Arg Gly Ser Glu Glu Arg
    370                 375                 380
Arg Thr Ser Cys Gln Ile Gly Phe Ser Val His Val Ser Met Ser Leu
385                 390                 395                 400
His Thr Gly Leu Glu Gly Pro Thr Val Ala
                405                 410
```

<210> 27251
<211> 167
<212> PRT
<213> A.fumigatus

<400> 27251

```
Cys Leu Gly Arg Asn Tyr Asp Ser His Leu Ser Asp Ile Thr Gly Cys
1               5                   10                  15
Phe Tyr Tyr Arg Tyr Arg Lys Leu Val Lys Arg Leu Ser Val Tyr Leu
            20                  25                  30
Thr Asn Ser Ser Tyr Phe Ser Lys Ala Ile Ala Ala Ile Ser Thr His
        35                  40                  45
Phe His Ala Thr Thr Asp Ile Gly Trp Cys Gly Ala Thr Tyr Pro Leu
    50                  55                  60
Thr Met Cys Ala Leu Gln Pro Ile Ser Gly Lys Leu Ser Ser Leu Leu
65                  70                  75                  80
Ser Leu Arg Trp Thr Cys Leu Ala Phe Tyr Cys Val Phe Leu Leu Gly
                85                  90                  95
Ser Leu Ile Cys Gly Val Ala Asn Ser Ser Lys Met Cys Ile Ile Gly
            100                 105                 110
Arg Ala Val Ala Gly Ala Gly Gly Ser Gly Val Val Ser Gly Gly Leu
        115                 120                 125
Ser Val Ile Ala Leu Ile Thr Thr Pro Gln Gln Arg Pro Val Val His
    130                 135                 140
Trp Pro Cys Lys Pro Leu Phe Met Pro Trp Asp Leu Ser Val Ala Pro
145                 150                 155                 160
Asn Tyr Arg Gly Arg Phe Gly
                165
```

<210> 27252
<211> 252
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (38)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27252

```
His Cys Ser Tyr Phe Ser Ile Arg Leu Glu Thr Pro Phe Ala Val Glu
1               5                   10                  15
Ser Trp Leu Leu Pro Ser Val Cys Thr Gln Val Phe Trp Ile Pro Cys
            20                  25                  30
Leu Trp His Pro Arg Xaa Thr Pro Val Leu Ser Ile Tyr Gly Ser Cys
```

```
        35                  40                  45
Phe Trp Arg Cys Ile Ile Ala Lys His Leu Arg Asp Tyr Asn Pro Trp
    50                  55                  60
Leu Phe Leu Gly Ser Ala Phe Leu Cys Ile Ala Asn Gly Leu Asp Thr
65                  70                  75                  80
Thr Phe Thr Val Ser Ser Thr Ser Ala Ser Trp Ile Gly Tyr Gln Ile
                85                  90                  95
Leu Gln Gly Leu Gly Cys Gly Leu Ala Ala Gln Ile Pro Leu Leu Thr
            100                 105                 110
Ile Gln Leu Val Leu Lys Asp Glu Pro Arg Ser Ile Pro Val Gly Ile
        115                 120                 125
Ala Thr Val Leu Phe Thr Gln Tyr Phe Gly Ser Ala Val Met Gln Ser
    130                 135                 140
Ile Gly Gly Ala Ile Phe Gln Asn Ala Leu Arg Arg Gln Leu His Gln
145                 150                 155                 160
Ala Ser Leu Val Asp Lys Gln Ile Glu Met Leu Leu Asn Ala Gly Thr
                165                 170                 175
Ser Arg Val Arg Glu Val Ala Val Gln Ala Phe Pro Asp Arg Leu Ala
            180                 185                 190
Asp Ile Ile Val Ala Tyr Asn Asn Ala Ile Thr Pro Val Phe Met Ser
        195                 200                 205
Gln Ser Phe Gln Ile Ser His Leu His Leu Lys Arg Thr Leu Leu Thr
    210                 215                 220
Leu Leu Val Ser Ser Ser Ser Trp Gln Cys Ser Ser Ile Ser Ser Ile
225                 230                 235                 240
Gly Arg Asn Phe Thr Gly Gln Tyr Asn Pro Gly Arg
                245                 250
```

<210> 27253
<211> 416
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (401)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27253

```
Arg Arg Cys Pro Asp Glu Asn Ala Leu Lys Asp Gln Val Asn Gly Leu
1               5                   10                  15
Pro Asn Leu Ser Gly Pro Asp Gly Ser Ser Lys Gly Ala Gly Pro Met
            20                  25                  30
Ala Arg Met Ala Thr Gly Gly Ala Leu Asn Ser Glu Ser Arg Pro Leu
        35                  40                  45
Pro Leu Asp Leu Arg Gln Ser Arg Ala Ala Gln Lys Pro Pro Leu Arg
    50                  55                  60
Gln Leu Ile Leu Asp Gly Asp Tyr Tyr Leu Ala Thr Val Leu Ser Ser
65                  70                  75                  80
Thr Leu Thr Lys Leu Val Met Arg His Ser Glu Val Ser Gln Asp Val
                85                  90                  95
Ala Arg Thr Asn Ala Leu Arg Ala Glu Ala Met Leu Ile Met Ile Ser
            100                 105                 110
Ile Ile Arg Val Gly Gln Ser Gln Phe Val Lys Ala Pro Ile Asp Glu
        115                 120                 125
Asp Ser Ile Asp Arg Ile Met Cys Cys Val Arg Ser Leu Ser Glu Phe
```

```
    130                 135                 140
Ser Gln Arg Lys Glu Leu Glu Thr Thr Phe Leu Glu Asp Thr Arg Lys
145                 150                 155                 160
Ala Phe Arg Asp Met Val Gln Val Glu Asp Lys Lys Arg Ala Ala Lys
                165                 170                 175
Glu Ala Val Glu Lys Ala Lys Thr Ala Val Gln Val Asp Asp Ala Ile
            180                 185                 190
Pro Ile Arg Gln Phe Thr Lys Lys Ser Gly Leu Glu Gly Ala Glu Glu
        195                 200                 205
Met Glu Leu Asp Leu Ala Lys Ala Thr Gly Gly Asp Ser Thr Val Glu
    210                 215                 220
Thr Val Ala Ser Lys Leu Ser Arg Val Val Gln Leu Thr Gly Phe Ser
225                 230                 235                 240
Asp Pro Val Tyr Ala Glu Ala Tyr Val Thr Val His Gln Phe Asp Ile
                245                 250                 255
Val Leu Asp Val Leu Leu Val Asn Gln Thr Leu Glu Thr Leu Gln Asn
            260                 265                 270
Leu Ser Val Glu Phe Ala Thr Leu Gly Asp Leu Lys Val Val Glu Arg
        275                 280                 285
Pro Thr Thr His Asn Leu Gly Pro Arg Asp Phe Leu Asn Val Gln Ala
    290                 295                 300
Thr Val Lys Val Ser Ser Thr Asp Thr Gly Val Ile Phe Gly Asn Ile
305                 310                 315                 320
Val Tyr Asp Gly Ala Ser Ser Thr Glu Thr His Val Val Ile Leu Asn
                325                 330                 335
Asp Ile His Ala Asp Ile Met Asp Tyr Ile Gln Pro Ala His Cys Thr
            340                 345                 350
Glu Thr Gln Phe Arg Thr Met Trp Thr Glu Phe Glu Trp Glu Asn Lys
        355                 360                 365
Val Asn Ile Asn Ser Asn Ala Lys Ser Leu Arg Glu Phe Leu Lys Gln
    370                 375                 380
Leu Met Glu Ser Thr Asn Met Ala Cys Leu Thr Pro Glu Ala Ser Leu
385                 390                 395                 400
Xaa Gly Arg Leu Pro Val Leu Glu Arg Gln Ser Val Cys Pro Glu Ala
                405                 410                 415
```

<210> 27254
<211> 66
<212> PRT
<213> A.fumigatus

<400> 27254

```
Pro Arg Arg Ser Thr Pro Leu Leu Gln Asp Trp Leu Gly Asp Asp Gln
1               5                   10                  15
Pro Lys Arg His Arg Arg Glu Val His Phe Pro Thr Gly Arg Phe Gly
            20                  25                  30
Glu Ala Ile Glu Gln Ala His Ala Val Val Phe Leu Ala Ser Asp Glu
        35                  40                  45
Ser Ser Phe Val Asn Gly Ser Asp Phe Val Val Asp Gly Gly Met Thr
    50                  55                  60
Lys Val
65
```

<210> 27255
<211> 185
<212> PRT

<213> A.fumigatus

<400> 27255
Trp Ile Ser Arg Ser Gly Ile Gly Leu Glu Thr Ser Ile Leu Phe Ala
1 5 10 15
Arg Glu Gly Ala Asn Val Leu Met Ala Asp Ile Ser Ala Pro Ala Leu
20 25 30
Glu Lys Ala Leu Ala Lys Val Lys Glu Val Val Pro Asn Ala Pro Arg
35 40 45
Val Glu Thr Ile Lys Cys Asp Val Ser Lys Glu Ser Glu Val Gln Ala
50 55 60
Met Val Glu Ser Gln Asp Ser Trp Gly Gly Thr Asp Val Met Phe Asn
65 70 75 80
Asn Ala Gly Ile Met His Ala Asp Asp Ala Asp Ala Val Asp Thr Pro
85 90 95
Glu Lys Ile Trp Asp Leu Thr Gln Asn Ile Asn Val Lys Gly Val Trp
100 105 110
Phe Gly Cys Lys His Ala Val Leu Ser Leu Arg Arg His Lys Lys Thr
115 120 125
Arg Gly Ser Ile Ile Asn Thr Ala Ser Val Val Ala Leu Val Gly Ser
130 135 140
Ala Thr Pro Gln Leu Ala Tyr Thr Ala Ser Lys Gly Ala Val Leu Ala
145 150 155 160
Leu Thr Arg Glu Leu Ala Ile Val His Ala Arg Glu Gly Phe Arg Phe
165 170 175
Asn Ala Leu Cys Pro Ala Pro Leu Lys
180 185

<210> 27256
<211> 106
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (45)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27256
Lys Pro Ala Ala Leu Leu Asp Thr Pro Val Ser Met Asn Ile Trp Ser
1 5 10 15
Asp Val Ser Thr Pro Ala Met Leu Glu Gly Met Pro Val Gly Glu Ile
20 25 30
Asp Ser Asn Ala Ala Phe Glu Gly Val Pro Gly Ile Xaa Ala Ile Met
35 40 45
Thr Ser Asn Ser Met Leu Glu Asn Gln Gln Tyr His Phe Glu Pro Asn
50 55 60
Ala Phe Asp Leu Met Asn Gln Val Gln Asn Asp Tyr Asn Lys Thr Ala
65 70 75 80
Leu Tyr Gln Gln Leu Ser Leu Pro Glu Gly Gln Ile Gly Glu Asn Phe
85 90 95
Glu Phe Thr Asp Phe Ile Ser Asp Cys Phe
100 105

<210> 27257
<211> 155

<212> PRT
<213> A.fumigatus

<400> 27257
Ser Asp Ala Met Arg Gly Val Phe Trp Leu Pro Val Val Lys Thr Gly
1 5 10 15
Ser His Ala Gly Ser Leu Asp Glu Asp Ala Trp Ala Ile Arg His Phe
20 25 30
Met Asn Cys Lys Pro Glu Leu Glu Phe Cys Val Ala Gln Ser Phe Ser
35 40 45
Lys Asn Phe Gly Leu Tyr Gly Gln Arg Thr Gly Ala Leu His Val Val
50 55 60
Thr Ser Ser Ser Ser Gly Thr Leu Pro Gln Val Val Leu Ala Asn Leu
65 70 75 80
Ser His Leu Val Arg Gly Glu Tyr Ser Met Ala Pro Arg Gly Gly Ser
85 90 95
Glu Ile Val Arg Thr Val Leu Ser Asp Glu Gly Leu Arg Gln Gln Trp
100 105 110
Tyr Glu Asp Leu Lys His Met Ser Gly Arg Ile Lys Gln Met Arg Gln
115 120 125
Ala Leu Tyr Asp Glu Leu Ile Arg Leu Gly Thr Pro Gly Thr Trp Asn
130 135 140
His Val Leu Glu Gln Val Gly Leu Ile Ser Ala
145 150 155

<210> 27258
<211> 78
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (11)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27258
Lys Arg Trp Asp Tyr Thr Lys Gly Leu Val Xaa Lys Leu Gln Gly Phe
1 5 10 15
Glu Glu Phe Leu Gln Glu Asn Pro Glu Leu Ala Lys Lys Val Val Leu
20 25 30
Ile Gln Val Ala Val Pro Ser Arg Glu Asp Val Lys Glu Tyr Gln Glu
35 40 45
Leu Glu Thr Glu Ile Ser Thr Leu Val Gly Lys Ile Cys Gly Thr Tyr
50 55 60
Gly Lys Leu Leu Ser Val Cys Leu Val Ala Thr Phe Leu Cys
65 70 75

<210> 27259
<211> 164
<212> PRT
<213> A.fumigatus

<400> 27259
Phe Lys Trp Gln Phe Pro Ala Ala Arg Thr Ser Arg Ser Ile Arg Asn
1 5 10 15
Ser Arg Pro Arg Phe Pro Pro Ser Ser Gly Arg Ser Val Gly Leu Met

```
            20                  25                  30
Val Ser Cys Cys Pro Ser Val Trp Trp Pro Leu Phe Phe Ala Asp Tyr
        35                  40                  45
Pro Ala Thr Pro Glu Gly Val Pro Leu Ile Tyr Ile His Arg Ser Val
    50                  55                  60
Ser Phe Pro Glu Leu Thr Ala Leu Tyr Cys Val Ala Lys Ala Cys Leu
65                  70                  75                  80
Ile Thr Pro Arg Arg Asp Gly Met Asn Leu Val Ala Ser Glu Tyr Val
                85                  90                  95
Ala Cys Gln Glu Asn Arg Tyr Gly Val Leu Val Leu Ser Glu Leu Ala
            100                 105                 110
Gly Ala Ala Ser Phe Leu Gly His Gly Ser Val Thr Phe His Pro Ser
        115                 120                 125
Ser Thr Arg Glu Leu Ala Asn Ala Ile His Gln Ala Val Thr Met Asp
    130                 135                 140
Asp Gly Glu Lys Lys Arg Arg His Gln Glu Leu Arg Glu Phe Val Thr
145                 150                 155                 160
Thr His Thr Arg
```

<210> 27260
<211> 101
<212> PRT
<213> A.fumigatus

<400> 27260

```
Gly Leu Thr Ser Ser Ile Glu Pro Ala Leu Gln Leu Cys Asn Phe Ser
1               5                   10                  15
Phe Arg Arg His Leu Asn Leu Asp Ser Leu Ile Leu Asp Ile Leu His
            20                  25                  30
Ile Leu Leu Arg Leu Phe Phe His Phe Met His Val His Ser Arg Leu
        35                  40                  45
Phe Phe Asp Phe Ile His Thr Phe Ile Gly Arg Ile Ala Tyr Phe Gly
    50                  55                  60
Ile Thr Ile Val Asp Leu Phe Thr Glu Phe Gly Leu Val His Phe Val
65                  70                  75                  80
Leu Val Val Asp Leu Ile Thr Thr Leu Ala Asp Ser Ser Ile Asp Asn
                85                  90                  95
Leu Val Glu Asn Val
            100
```

<210> 27261
<211> 252
<212> PRT
<213> A.fumigatus

<400> 27261

```
Tyr Leu Asp Pro Trp Ser Met Ser Pro Asn Asn Asp Arg Arg Lys Arg
1               5                   10                  15
Leu Leu Leu Pro Ser Pro Gln Leu Ile Gly Ser Pro Thr Glu Glu Asn
            20                  25                  30
Thr Pro Ser Thr Phe Ser Pro Ser Pro Pro Ala Ile Leu Pro Thr Glu
        35                  40                  45
Phe Thr His Ala Ser Ser Ala Gly Arg Thr Glu Arg Asn Arg Leu Arg
    50                  55                  60
Arg Leu Ala Asn Glu Leu Arg Gly Leu Ser Asp Asp Leu Ile Arg Glu
```

```
65                  70                  75                  80
Leu Leu Ile Gln Ser Gly His Gln His Leu Leu Ala Thr Pro Pro Asp
                85                  90                  95
Val Asp Arg Asp Ile Glu Lys Met Arg Phe Ala Glu Ile Glu Thr Ile
            100                 105                 110
Glu Arg Arg Leu Lys His Tyr Val Asp Glu Met Ile Glu Arg Arg Leu
        115                 120                 125
Lys Ser His Val Leu Asn Glu Ile Val Asp Arg Ala Val Ser Glu Cys
    130                 135                 140
Arg Asp Gln Ile Tyr Asp Glu His Lys Met Asn Glu Ala Glu Phe Arg
145                 150                 155                 160
Glu Gln Val Asp Asp Gly Asn Ser Glu Val Arg Asn Thr Ala Asn Glu
                165                 170                 175
Cys Met Asn Glu Ile Lys Glu Gln Ala Arg Met Tyr Met His Glu Met
            180                 185                 190
Glu Glu Gln Ala Gln Gln Tyr Met Lys Asp Ile Glu Asp Gln Gly Ile
        195                 200                 205
Glu Val Glu Met Ser Ala Glu Gly Lys Val Ala Lys Leu Lys Arg Trp
    210                 215                 220
Phe Asn Ala Ala Gly Gln Ser Leu Leu Ser Ser Asn Ser Ser Pro Ser
225                 230                 235                 240
His Glu Pro Gly Ala Asn Ala Arg Arg Arg Ser Val
                245                 250
```

<210> 27262
<211> 61
<212> PRT
<213> A.fumigatus

```
<400> 27262
His Pro Ala Gly Asp Val Ser Ser Gly Thr His Trp His His Pro Pro
1               5                   10                  15
Ile Phe Pro Thr Glu Tyr Leu Phe Ala Ile Ser Ile Phe Phe Pro Ile
            20                  25                  30
Ser Gly Leu His Phe Val Phe Phe Arg Cys Ser Ser Leu Tyr His Asn
        35                  40                  45
Ser Phe Asp Asn Arg Ser Gln Leu Leu Gln Pro Ile Val
    50                  55                  60
```

<210> 27263
<211> 464
<212> PRT
<213> A.fumigatus

```
<400> 27263
Leu Ser Ser Ala Leu Pro Gln Ile Pro Lys Phe Pro Glu Ser Ser Arg
1               5                   10                  15
Ser Ala Met Glu Thr Asn Ala Gln Pro Ser Phe Glu Asp Ser Trp Lys
            20                  25                  30
Pro Arg Ser Phe Tyr Glu Gln Gly Val Gln Asp Asp Ala Leu Ser Pro
        35                  40                  45
Val Ile Asp Leu Asp Ala Ala Leu Gly Pro Phe Asn Thr Pro Asp Met
    50                  55                  60
Arg Ala Asp Arg Val Val Gly Ser Gly Phe Ser Ala Val Ser Arg Arg
65                  70                  75                  80
Met Tyr Ser Gly Gly Arg Arg Gly Glu Phe Val Gly Pro Glu Met Arg
```

```
                85                  90                  95
Tyr His Arg Arg Ala Glu Ser Ala Pro Glu Met Pro Pro Phe Asp Arg
            100                 105                 110
Ser Phe Leu Asn Asn Arg Leu Ile Asn Ser Ser Ser Leu Glu Asn Pro
        115                 120                 125
Asp Val Phe Tyr Glu Glu Glu Glu Asp Ala Phe Leu Ala Ala Thr Ser
    130                 135                 140
Glu Ser Pro Lys Asp Asn Gln Thr Ala Ser Glu Ser Asn Val Val Pro
145                 150                 155                 160
Gln Pro Asp Thr Ser Asp Gln Ile Thr Val His Ser Lys Ala Thr Ser
                165                 170                 175
Asp Thr Leu Thr Arg Arg Ser Ala Asp Ala Ala Ser Ser Thr Glu Arg
            180                 185                 190
Ala Gly Leu Gly Ile Gln Asn Asn Glu Gly Thr Asp Pro Glu Ala Pro
        195                 200                 205
Ala Pro Ala Pro Ala Ser Gln Glu Thr Phe Gly Asp Ser Gly Leu Ser
    210                 215                 220
Ala His Glu Arg Ala Val Asp Arg Leu His Asn Ala Arg Asn Pro Phe
225                 230                 235                 240
Thr Ser His Pro Asn Ser Pro Val Glu Ile Ile Lys His Glu Asn Trp
                245                 250                 255
Gln Pro Asn Lys Pro Pro Val Pro Pro Ser Pro Glu Ile Ser Pro Arg
            260                 265                 270
Phe Leu Pro Ala Asp Thr Arg Pro Ala Thr Ser Pro Leu Glu Leu Thr
        275                 280                 285
Gly Thr Ile Pro Gln Phe Ser Leu Gln Ser Thr Cys Ser Leu Ser Gln
    290                 295                 300
Ser Ser Phe Pro Ser Pro Asp Phe Thr Leu Ser Ser Ser Asp Ala Pro
305                 310                 315                 320
Arg Ser Ile Thr Thr Ala Ser Thr Thr Asp His Asn Phe Ser Asn Pro
                325                 330                 335
Ser Tyr Asn Pro Ser Val Asp Tyr His Gln Ser Ser Val Asp Asp Val
            340                 345                 350
Pro Ser Leu Thr Ser Ser Val Ser Thr Thr Thr Asn Pro Leu Asn Arg
        355                 360                 365
Val Ser Gly Thr Phe Phe His Gly Cys Arg Ile Ser Thr Asp Arg Ser
    370                 375                 380
Val Ser Ile Ser Ala Pro Gly Thr Arg Arg Ser Ser Gln Ala His Ser
385                 390                 395                 400
Gln Lys Arg Ser Ser Leu Ala Ser Leu Ser Lys Leu Val Gly Gly Pro
                405                 410                 415
His Gly Glu Arg Ser Lys Leu Ser Tyr Glu Glu Lys Pro Pro Ser Asp
            420                 425                 430
Val Ser Glu Lys Ser Lys Lys Lys Ser Arg Arg Ile Ser Arg Leu Val
        435                 440                 445
His Phe Trp Arg Thr Lys Asp Lys Asp Lys Leu Asn Arg Glu Ala Val
    450                 455                 460
```

<210> 27264
<211> 137
<212> PRT
<213> A.fumigatus

<400> 27264

```
Leu Thr His Val Ala Arg Ser Cys Leu Gln Glu Leu Gln Thr Ser Lys
1               5                   10                  15
```

```
Ser His Leu Asp Ala Leu Leu Ser Asp Thr Ser Ser Thr Leu Asp Leu
            20                  25                  30
Leu Arg Ser Leu Ser Glu Ser Phe Lys Ala Val Glu Ala Gln Thr Ser
        35                  40                  45
Asn Phe Arg Lys Gln Cys Glu Gly Ile Leu Ser Ala Gln Lys Arg Asp
    50                  55                  60
Thr Glu Leu Ala Glu Lys Ile Gln Glu Asn Ile Gln Tyr Tyr Glu Phe
65                  70                  75                  80
Leu Asp Pro Ala Ser Arg Arg Leu Asn Ala Pro Gly Ala Gly Asn Ala
                85                  90                  95
Val Arg Ser Gln Asp Phe Ser Asp Met Leu Arg Arg Leu Asp Glu Cys
            100                 105                 110
Leu Asp Tyr Met Glu Thr His Val Ser Ile Ala Val Val Pro Trp Ile
        115                 120                 125
Asp Glu Ser Thr Asn Ser Phe Pro Ala
    130                 135
```

<210> 27265
<211> 216
<212> PRT
<213> A.fumigatus

```
<400> 27265
Trp Ala Asp Phe Ser Pro Ser Val Trp Leu Leu Leu Gln Leu Leu Gly
1               5                   10                  15
Arg Phe Ser Leu Val Arg Ser Ala Leu Ile Leu Val Lys Ala Phe Leu
            20                  25                  30
Cys Glu Ile Pro Gly Phe Arg Arg Leu Arg Leu Phe Ser Val Val Lys
        35                  40                  45
Asn Asn Thr Leu Ser Tyr Pro Pro Pro Leu Lys Phe Trp Leu Ser Arg
    50                  55                  60
Leu Phe Lys Gly Tyr Asp Ser Gly Val Met Thr Asp Val Ile Ala Ser
65                  70                  75                  80
Pro Asn Phe Leu Ala Phe Phe Asn Thr Asn Lys Thr Ser Ala Ile Ile
                85                  90                  95
Gly Ala Ile Asn Ser Thr Phe Asn Gly Gly Gly Met Tyr Ser Leu Ser
            100                 105                 110
Tyr Cys Asn Ser Ala His Ser Leu Thr Lys Thr Ala Ile Ala Ala Ile
        115                 120                 125
Gly Ala Leu Gln Gly Gly Leu Thr Met Asp Arg Phe Gly Arg Lys Phe
    130                 135                 140
Thr Ile Gln Met Gly Ala Leu Ile Cys Leu Val Gly Ala Ile Leu Gln
145                 150                 155                 160
Ala Ser Ala Met Asn Leu Ala Met Ile Leu Val Gly Arg Ile Leu Ala
                165                 170                 175
Gly Trp Ala Val Gly Leu Met Ser Met Ser Val Pro Val Tyr Gln Ala
            180                 185                 190
Glu Cys Ala His Pro Arg Ser Arg Gly Leu Ile Val Gly Leu Val Phe
        195                 200                 205
Thr Thr Gly Trp Lys Lys Ala Ser
    210                 215
```

<210> 27266
<211> 459
<212> PRT
<213> A.fumigatus

<400> 27266

```
Leu Cys Leu Ala Arg Ser Arg Arg Ser Pro Val Val Glu Asp Ala Gln
1               5                  10                  15
Ile Phe Val Tyr Asn Asn Ile Phe Tyr Ser Phe Gly Ala Asp Gly Val
            20                  25                  30
Gly Thr Phe Val Ser Glu Gly Gly Asp Glu Ala Ala Arg Val Ala Val
        35                  40                  45
Gly Lys Asp Val Leu Gly Ile Met Ala Val Asn Gln Leu Asp Ile Asn
    50                  55                  60
Gly Leu Phe Thr Pro Gly Thr Val Val Val Asp Tyr Leu Gly Lys Arg
65                  70                  75                  80
Ile Val Gly His Ser Ile Val Pro Gly Ile Phe Lys Gln Arg Glu Pro
                85                  90                  95
Gly Glu His Gln Ile Asp Tyr Gly Gly Val Glu Gly Lys Asp Val Val
            100                 105                 110
Ala Thr His Pro Asp Phe Val Ser Val Phe Glu Lys Met Ser Lys Ala
        115                 120                 125
Leu Arg Ile Lys Lys His Pro Val Trp Asp Lys Glu Gly Lys Arg His
    130                 135                 140
Asp Leu Glu Gly Ser Val Glu Thr Lys Gly Leu Leu Gly Thr Asp Gly
145                 150                 155                 160
Arg Lys Tyr Val Leu Asp Leu Tyr Arg Val Thr Pro Leu Asp Val Val
                165                 170                 175
Trp Gln Glu Glu Pro Gly Ser Glu Asp Tyr Pro His Arg Met Ser Val
            180                 185                 190
Leu Arg Leu Glu Leu Val Glu Ala Tyr Trp Arg Ser Lys Met Ser Gln
        195                 200                 205
Tyr Val Lys Ala Glu Val Glu Arg Arg Arg Ala Ala Lys Ala Gln Glu
    210                 215                 220
Asp Ala Ala Asn Lys Glu Gln Pro Ser Glu Thr Thr Glu Ser Lys Glu
225                 230                 235                 240
Gly Glu Ser Glu Glu Lys Ala Glu Glu Ala Leu Asp Gln Glu Arg Val
                245                 250                 255
Asp Ile Ser Gly Phe Gln Leu Ala Leu Asn Pro Asp Val Cys Ser Gly
            260                 265                 270
Gln Val Pro Gln Thr Glu Glu Glu Lys Lys Gln Trp Ala Glu Asp Glu
        275                 280                 285
Lys Glu Val Arg Asp Ala Cys Glu Phe Leu Arg Ser Lys Val Ile Pro
    290                 295                 300
Glu Leu Ile Gln Asp Leu His Asp Gly Asp Val Gly Phe Pro Met Asp
305                 310                 315                 320
Gly Arg Ser Leu Ser Gln Leu Leu His Lys Arg Gly Ile Asn Ile Arg
                325                 330                 335
Tyr Leu Gly Lys Leu Ala Gln Leu Ser Lys Glu Lys Gly Ser Arg Leu
            340                 345                 350
Glu Ala Leu Thr Thr Leu Leu Val Gln Glu Met Ile Ala Arg Ala Phe
        355                 360                 365
Lys His Ile Ala Asn Arg Tyr Leu Arg Asn Val Pro Ala Pro Phe Val
    370                 375                 380
Ala Ser Cys Val Ala His Leu Leu Asn Cys Leu Leu Gly Ala Asp Val
385                 390                 395                 400
Asn Pro Lys Pro Ser Ala Glu Ile Asp Ala Ser Leu Arg Glu Ile Tyr
                405                 410                 415
Pro Glu Gly Asp Phe Ser Phe Glu Lys Val Thr Pro Glu Thr Leu Arg
            420                 425                 430
```

```
Ala Glu Val Glu Lys Gln Val Thr Val Arg Tyr Arg Tyr Thr Leu Glu
        435                 440                 445
Thr Glu Cys Ser Leu Pro Ser Ser Pro Arg Gly
    450                 455
```

<210> 27267
<211> 157
<212> PRT
<213> A.fumigatus

<400> 27267

```
Lys Thr Leu Arg Ser Ser Cys Thr Thr Ile Ser Ser Thr Leu Leu Ala
1               5                   10                  15
Leu Met Glu Trp Glu Pro Ser Cys Gln Arg Val Glu Thr Lys Pro Pro
            20                  25                  30
Ala Trp Pro Leu Ala Arg Thr Ser Trp Glu Ser Trp Gln Ser Thr Ser
        35                  40                  45
Leu Thr Ser Thr Ala Phe Ser Arg Gln Glu Pro Leu Ser Leu Thr Thr
    50                  55                  60
Ser Ala Ser Ala Ser Ser Ala Ile Ala Leu Cys Arg Gly Ser Ser Ser
65                  70                  75                  80
Ser Ala Ser Pro Val Ser Thr Lys Leu Ile Thr Val Val Leu Arg Ala
                85                  90                  95
Lys Thr Ser Ser Arg His Ile Pro Thr Ser Ser Pro Ser Leu Lys Arg
            100                 105                 110
Cys Pro Lys Arg Ser Ala Ser Arg Ser Thr Leu Tyr Gly Thr Arg Lys
        115                 120                 125
Ala Ser Ala Thr Ile Leu Lys Ala Ala Ser Lys Pro Arg Val Phe Trp
    130                 135                 140
Ala Pro Met Ala Ala Asn Met Ser Leu Ile Ser Thr Val
145                 150                 155
```

<210> 27268
<211> 269
<212> PRT
<213> A.fumigatus

<400> 27268

```
Ala Ala Thr Arg Leu Thr Gly Val Ala Ile Gln Ala Leu Val Val Tyr
1               5                   10                  15
Thr Gly Arg Met Lys Phe Phe Pro Asn Gly Thr Leu Ser His Gly Ala
            20                  25                  30
Leu Gly Tyr Leu Ile Pro Pro Trp Lys Met His Pro Trp Phe Lys Trp
        35                  40                  45
Leu Ile Trp Ile Asn Pro Val Gln Tyr Ala Phe Glu Ala Ile Met Ala
    50                  55                  60
Asn Glu Phe Tyr Asn Leu Asp Ile Gln Cys Val Arg Pro Asn Ile Val
65                  70                  75                  80
Pro Asp Gly Pro Asn Ala Gln Pro Gly His Gln Ser Cys Ala Val Gln
                85                  90                  95
Gly Ser Thr Pro Asn Gln Leu Val Val Gln Gly Ser Ser Tyr Ile Lys
            100                 105                 110
Thr Ala Phe Thr Tyr Ser Arg Ser His Leu Trp Arg Asn Phe Gly Ile
        115                 120                 125
Ile Ile Ala Trp Phe Ile Phe Phe Val Ala Leu Thr Met Leu Gly Thr
    130                 135                 140
```

```
Glu Leu Gln Gln Pro Asn Lys Gly Gly Ser Ser Val Thr Thr Phe Lys
145                 150                 155                 160
Arg Asn Glu Ala Pro Lys Asn Val Glu Glu Ala Val Lys Asn Lys Glu
                165                 170                 175
Leu Pro Glu Asp Val Glu Ser Gly Gln Lys Glu Asn Ala Val Asn Ala
            180                 185                 190
Asp Ser Glu Lys Thr Gln Pro Gly Glu Thr Gly Asp Glu Val Lys Asp
        195                 200                 205
Ile Ala Gln Ser Thr Ser Ile Phe Thr Trp Gln Asp Val Asn Tyr Thr
    210                 215                 220
Ile Pro Tyr Glu Gly Gly Gln Arg Lys Leu Leu Gln Asp Val His Gly
225                 230                 235                 240
Tyr Val Lys Pro Arg Arg Leu Thr Ala Leu Met Gly Ala Ser Gly Ala
                245                 250                 255
Gly Ser Val Met Pro Thr Ile Ile Leu Lys Pro Ser Ser
            260                 265
```

<210> 27269
<211> 154
<212> PRT
<213> A.fumigatus

<400> 27269

```
Pro Val Gln Arg Asn Glu Val Lys Arg Ser Thr Thr Arg Ile Glu Asn
1               5                   10                  15
Thr Val His Gln His Gln Gln Gln Gln Gln Gln Arg Ser Ser Ser Ser
            20                  25                  30
Pro Pro Pro His Asp Gly Ala Pro Pro Ser Ser Pro Val Gln Pro Ala
        35                  40                  45
Ala Pro Pro Ser Ser Pro Pro Lys Pro Ser Pro Pro Val Ala Ala Ala
    50                  55                  60
Pro Asp Asp Glu Trp Gln Asn Asn Asp Ala Gln Pro Pro Thr Gln Glu
65                  70                  75                  80
Ser Gln Gly Gly Ala Glu Gly Gln Tyr Asp Pro Trp Ala Ala Ser Asp
                85                  90                  95
Ala Ala Gln Ala Gln Asn Ser Gln Gly Pro Thr Glu Gly Gly Trp Lys
            100                 105                 110
Ala Asn Asp Ala Phe Ala Pro Thr Gln His Thr Gln Gly Gln Ser Pro
        115                 120                 125
Gly Asn Arg Lys Val Gly Asp Gly Thr Thr Thr Lys Thr Thr Glu Glu
    130                 135                 140
Ala Lys Pro Ala Glu Pro Glu Val Thr Trp
145                 150
```

<210> 27270
<211> 91
<212> PRT
<213> A.fumigatus

<400> 27270

```
Asp Leu Glu Val Arg Arg Arg Tyr Ser Glu Phe Ala Ser Leu Arg Gln
1               5                   10                  15
Thr Leu Val Asn Leu His Pro Thr Leu Val Ile Pro Pro Ile Pro Glu
            20                  25                  30
Lys His Thr Met Ala Asp Tyr Ala Ala Lys Pro Thr Lys Ala Lys Glu
        35                  40                  45
```

```
Asp Ser Ala Ile Ile Asp Leu Arg Lys Arg Met Leu Ala Val Phe Leu
    50                  55                  60
Asn Arg Cys Arg Arg Met Lys Glu Val Arg Glu Asp Gly Val Trp Trp
65                  70                  75                  80
Arg Phe Leu Asp Pro Asn Val Ser Trp Val Cys
                85                  90
```

<210> 27271
<211> 68
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (68)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27271

```
Asn Glu Val Leu His Ser His Pro Ala Ser Ser Val Pro Lys Asn Asn
1               5                   10                  15
Leu Lys Ala Pro Pro Leu Asp Pro Ala Asn Pro Thr Ala Ala His Ser
            20                  25                  30
Trp Leu Pro Val Pro Ser Ser Ser Ala Lys Leu Lys Ser Ala Ser Ser
        35                  40                  45
Gly Ala Thr Ser Gly Thr Thr Asp Ala Ala Gly His Arg Ala Leu Asp
    50                  55                  60
Leu Met Cys Xaa
65
```

<210> 27272
<211> 102
<212> PRT
<213> A.fumigatus

<400> 27272

```
Ser Ser His Ser Leu Ser Cys Leu Val Trp Thr Arg Ser Leu Gln Val
1               5                   10                  15
Trp Pro His Cys Ala Tyr Trp Trp His Pro Lys Met Thr Ala His Ile
            20                  25                  30
Lys Leu Thr Val Leu His Arg Ser Trp Met Thr Tyr Phe Phe Lys Arg
        35                  40                  45
Lys Phe Ser Leu Pro Asp Gly Glu Leu Gly Ser Ile Phe Phe Thr Thr
    50                  55                  60
Ser Leu Ile Ser Ala Ala Ser Met Leu Val Ala Ser Ser Ile Ala Lys
65                  70                  75                  80
Arg Ile Gly Asn Val Lys Val Arg Ser Ser Pro Ser Ile Ala Phe Phe
                85                  90                  95
Arg Arg Arg Val Gly Phe
            100
```

<210> 27273
<211> 161
<212> PRT
<213> A.fumigatus

<400> 27273

```
Val Glu Glu Ser Thr Leu Ala His Leu Thr Ala Lys Glu His Arg Ser
1               5                  10                  15
Asp Ile Phe Val Trp Tyr Ser Trp Ile Gly Thr Ala Gly Thr Ala Leu
            20                  25                  30
Gly Met Met Val Cys Gly Trp Ser Ile Asn Leu Leu Lys Thr Thr Arg
        35                  40                  45
Asp Trp Gln Tyr Leu Asn Ala Cys Arg Ile Val Phe Phe Ala Tyr Ala
    50                  55                  60
Gly Ile Gly Ala Val Lys Phe Leu Leu Ser Ile Cys Leu Ser His Glu
65                  70                  75                  80
Val Glu Ala Ala Lys Lys Asp Lys Asn Gly Ala Thr Ala Ser Arg Gln
                85                  90                  95
Pro Arg Ala Ala Asp Gly Pro Glu Thr Gln Pro Leu Leu Gly Glu Arg
            100                 105                 110
Ala Asn Asn Glu Asp Asn Gln Lys Lys Ser Leu Phe Ser Phe Leu Gly
        115                 120                 125
Ser Ser Asp Leu Val Ser Leu Val Val Thr Leu Phe Val Leu Phe Gly
    130                 135                 140
Leu Asp Ser Phe Ala Ser Gly Leu Ala Ser Leu Cys Val Leu Val Ala
145                 150                 155                 160
Pro
```

<210> 27274
<211> 150
<212> PRT
<213> A.fumigatus

<400> 27274

```
Cys Gln Gly Ser Leu Phe Ala Phe Asn Cys Ile Leu Pro Ser Pro Cys
1               5                  10                  15
Gly Phe Leu Thr Met Arg Gln Thr Met Val Phe Thr His Leu Pro Ser
            20                  25                  30
Ala Ile Cys Leu Ala Leu Ile Pro Val Pro Ser Ala Leu Pro Ala Ala
        35                  40                  45
Leu Thr Phe Leu Ile Leu Arg Ala Cys Ser Gln Ser Met Asp Val Ala
    50                  55                  60
Pro Arg Ser Ala Phe Leu Ala Ala Ala Leu Pro Pro Glu Lys Arg Thr
65                  70                  75                  80
Ala Ile Met Gly Ala Ile Asn Val Val Lys Thr Cys Ser Gln Ser Leu
                85                  90                  95
Gly Pro Phe Ile Thr Gly Val Leu Ala Asp His Asn Phe Phe Gly Ala
            100                 105                 110
Ser Phe Thr Leu Ala Gly Val Leu Lys Ala Ile Tyr Asp Ile Gly Met
        115                 120                 125
Leu Ile Asn Phe Ala Gly Arg Glu Cys Ala Gln Arg Met Ala Ser Asp
    130                 135                 140
Arg Pro Gly Glu Ser Ala
145                 150
```

<210> 27275
<211> 175
<212> PRT
<213> A.fumigatus

<400> 27275

```
Asn Ser Ile Ser Leu Ser Tyr Thr Ser Lys Val Leu Glu Arg Met Lys
1               5                  10                  15
Phe Thr Phe Ser Phe Ile Ala Leu Gly Phe Ala Ser Phe Ala Gln Ser
            20                  25                  30
Thr Ser Val Ser Gly Ser Ser Ser Leu Leu Pro Gly Asn Thr Asn Thr
        35                  40                  45
Ala Ser Ala Ala Trp Leu Thr His Phe Asp Gln Phe Arg Gln Gln His
    50                  55                  60
Glu Pro Leu Asn Pro Ala Gln Ser Ala Val Ile Asp Thr Ala Thr Asp
65                  70                  75                  80
Leu Ala Lys Gln Gly Gln Asp Phe Asp Pro Lys Ala Met Asp Asp Leu
                85                  90                  95
Lys Asn Asp Ala Ile Ser Ala Phe Gly Phe Lys Asp Ala Lys Ser Leu
            100                 105                 110
Leu Ala Thr Met Gly Asn Lys Ser Leu Gln Thr Arg Asp Asp Ala Lys
        115                 120                 125
Glu Asp Ile Glu Cys Gly Cys Ser Thr Gln Ser Asp Trp Cys Asp Ser
    130                 135                 140
Gly Tyr His Cys Ala Gly Gly Gly Cys Thr Gln Thr Gly Ser Gly Cys
145                 150                 155                 160
Gly Thr Leu Tyr Lys Tyr Ala Cys Asp Gly Leu Cys Arg Leu Ser
                165                 170                 175

<210> 27276
<211> 72
<212> PRT
<213> A.fumigatus

<400> 27276
Arg Lys Ala Pro Gly Leu Arg Lys Arg Lys Arg Ser Ala Thr Lys Lys
1               5                  10                  15
Asp Lys Ala Arg Leu Leu Phe Phe Pro Arg Gly Leu Arg Val Pro Pro
            20                  25                  30
Arg Arg Asn Pro Ser Ser Arg Ser Val Ser Gly Val Val Lys Val Asn
        35                  40                  45
Leu Asp Pro Asp Met Gln Tyr Ala Thr Cys Ser Gly Ala Arg Asp Tyr
    50                  55                  60
Ile Leu Thr Arg Lys Ala Thr Ser
65                  70

<210> 27277
<211> 81
<212> PRT
<213> A.fumigatus

<400> 27277
Ser Asp Asn Thr Cys Val Ser Ser Asn Glu Cys Ile Gln Lys Glu Met
1               5                  10                  15
Glu Val Ser Thr Glu Glu Phe Lys Pro Ser Gly Phe Ser Leu Arg Cys
            20                  25                  30
Leu Leu Pro Thr Ala Glu Tyr Glu Asn Asp Gly Leu Lys Ala Asp Arg
        35                  40                  45
Gln Ile Asp Gly Ser Ser Ala Leu Val Thr Cys Gln Gly Arg Phe Thr
    50                  55                  60
Thr Ser Val Ala Ser Gln Glu Leu Ala Ile Gln Arg Pro Cys Gly Ser
65                  70                  75                  80
```

Pro

<210> 27278
<211> 62
<212> PRT
<213> A.fumigatus

<400> 27278
Phe Gly Phe Gly Val Val Lys Arg Thr Asp Phe Ser Pro Leu Arg Phe
1 5 10 15
Lys Phe Ser His Lys Ile Met Met Tyr Ile Ser Val Phe Pro His Gly
20 25 30
His Phe His Ala Lys Thr Asn Val Tyr Glu Glu Arg Asn Leu Gly Ile
35 40 45
Tyr Ala Gly Gly Glu Asp Glu Asp Glu Pro Gln Asp Pro Ser
50 55 60

<210> 27279
<211> 223
<212> PRT
<213> A.fumigatus

<400> 27279
Cys Ile Phe Arg Phe Ser Pro Met Ala Ile Ser Met Arg Arg Pro Met
1 5 10 15
Ser Thr Arg Arg Gly Thr Ser Ala Phe Met Arg Val Gly Arg Thr Lys
20 25 30
Thr Asn Arg Arg Thr Pro Pro Ser Tyr Ile Gly Phe His Leu Arg Arg
35 40 45
Gln Leu Ser Phe Asp Leu Trp Tyr Val Phe Leu Gly Leu Phe Ile Ile
50 55 60
Ala Ile Val Glu Gly Asn Arg Leu Gln Ser Glu Asp Glu Tyr Ala Phe
65 70 75 80
Gln Met Trp Ala Val Leu Phe Glu Ile Val Ser Ala Tyr Gly Thr Val
85 90 95
Gly Leu Ser Phe Gly Tyr Pro Gly Val Asn Thr Ser Phe Ser Gly Gln
100 105 110
Phe Lys Val Leu Ser Lys Leu Ile Ile Ile Ala Met Gln Ile Arg Gly
115 120 125
Arg His Arg Gly Leu Pro Tyr Ala Leu Asp Arg Ala Ile Leu Leu Pro
130 135 140
Ser Glu Ser Leu Lys Asp Lys Asp Leu Gln Asp Ala Glu Arg Arg Met
145 150 155 160
Arg Arg Arg Val Ser Asn Leu Ser Thr Met Ser Gly Met Gly Arg Thr
165 170 175
Tyr Ser Gln Ala Arg Thr Glu Asn Gly Val Ala Thr Gly Ala Glu Asp
180 185 190
Lys Asp Arg Gly Ala Thr Ala Trp Thr Asn Gly Asp Asn Val Ile Arg
195 200 205
Arg His Ser Thr Met Arg Ser Gln Gln Ser Gln Lys Ser Gln Arg
210 215 220

<210> 27280
<211> 64
<212> PRT

<213> A.fumigatus

<400> 27280
Ile Asp Pro Asn Ile Lys Pro Arg Asn Ile Ala Ile Ile Thr Arg Val
1 5 10 15
Val Leu Gly Trp Val Trp Val Asn Pro Trp His Lys Lys Pro Ala Leu
20 25 30
Gln Pro Met Trp Val Ser Gln Ser Asn Asn His Trp Leu Ser Pro Thr
35 40 45
Gly Arg Ile Ile Ser Gly Ile Asp Ile Asn Gln Glu Leu Arg Gly Val
50 55 60

<210> 27281
<211> 84
<212> PRT
<213> A.fumigatus

<400> 27281
Pro Ser Asp Thr Pro Arg Cys Gln Lys Asp His Gln Ile Pro Leu Ser
1 5 10 15
Ser Lys Met Gly Ser Ile Gly Thr His Glu Lys Leu Ser Gly Phe Asp
20 25 30
Leu Ile Gln Thr His Tyr Lys Gln Ile Arg Asp His Ala Ile Arg Ala
35 40 45
Asp Phe Ile Ile Pro Lys Ser Thr Phe Thr Gly Lys Arg Pro Val Ile
50 55 60
Val Arg Phe His Gly Gly Gly Leu Val Gly Ser Thr Ser Arg Pro Phe
65 70 75 80
Met Asp Ser His

<210> 27282
<211> 372
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (197)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27282
Arg Leu Gln Gly Phe Asn His Arg Ala Lys Ile Lys Leu Arg Thr Gly
1 5 10 15
Gly Ser Ser Gly Lys Ile Pro Arg Gly Trp Cys His Ile Glu Gly Asn
20 25 30
Asn Ser Tyr Tyr Asp Leu Thr Asn Glu Asp Phe Arg Arg Ser Ile Arg
35 40 45
Leu Pro Val Lys His Arg Tyr Arg Ser Pro Val Val Phe Glu Leu His
50 55 60
Thr Gln Gly Lys His Gly Ala Ala Gly Tyr Ser Ile Leu Trp Leu Gln
65 70 75 80
His Leu Val Asp Asn Glu Glu Thr Glu Ile Asp Leu Pro Ile Trp Ser
85 90 95
Thr Lys Asn Gly Ser Arg Leu Thr Gln Asn Tyr Ile Thr Glu Glu Asn
100 105 110

```
Trp Lys Ala Lys Glu Val Pro Gly Leu Glu Asp Leu His Glu Ile Gly
        115                 120                 125
Arg Leu Gln Leu Arg Gly Leu Phe Thr Pro Gly Ile Asp Asp Ser His
    130                 135                 140
Glu Gln Tyr Val Val Asp Ser Asn Ser Arg Glu Thr Phe Glu Thr Trp
145                 150                 155                 160
Glu Ala Cys Met Ala Glu Gly Val Arg Pro His Arg Val Thr Ala Glu
                165                 170                 175
Ile Pro Ala Asn Ile Glu Lys Leu His Glu Gln Ser Leu Arg Ala Val
            180                 185                 190
Arg Asp Val Leu Xaa Gln Ser His Pro Arg Glu Arg Lys Arg Trp Ile
        195                 200                 205
Asp Lys Gln Gly Asn Asn Trp Ser Gly Ala Phe Gly Asp Asp Pro Ala
    210                 215                 220
Ala Tyr Phe Asp Ser Lys Gly Arg Lys Ile Ala Glu Pro Gly Arg Asp
225                 230                 235                 240
Gln Pro Pro Gln Asp Pro Val Asn Pro Pro Pro Lys Glu Ile Glu Pro
                245                 250                 255
Thr Gly Ala Ala His Pro Ser Asp Tyr Glu Glu Asp Ser Ser Glu Ser
            260                 265                 270
Ser Ser Glu Glu Asp Ala Gln Gln Glu Gln Gln Glu Gln Gln Gln Gln
        275                 280                 285
Gln Gln Arg Gln Pro Ser Glu Pro Gln Thr Ile Thr Thr Lys Pro Ser
    290                 295                 300
Glu Ala Ser Ser Ser Asn Gly Pro Ser Lys Arg Ala Ala Lys Arg Ser
305                 310                 315                 320
Glu Gln Arg Gln Gln Arg Gly Leu Met Gln Trp Lys Pro Ala Arg Asn
                325                 330                 335
Ala Val Phe Ala Arg Asp Glu Ala Lys Tyr Ala Met Arg Lys Val Lys
            340                 345                 350
His Lys Phe Thr Gly Asn Leu Ser Gly Arg Glu Pro Asp Ile Glu Thr
        355                 360                 365
Glu Thr Gly Gln
    370
```

<210> 27283
<211> 240
<212> PRT
<213> A.fumigatus

<400> 27283

```
Gly Ser Gly Pro Glu Ala Glu Leu Glu Asp Tyr Asp Val Thr Asp Asp
1               5                   10                  15
Leu Arg Glu Met Cys Ile Gln Phe Gly Tyr Leu Ala Leu Phe Ser Pro
            20                  25                  30
Val Trp Pro Leu Val Pro Val Ser Phe Leu Ile Asn Asn Trp Val Glu
        35                  40                  45
Leu Arg Ser Asp Phe Phe Lys Ile Cys Val Glu Cys Lys Arg Pro Trp
    50                  55                  60
Pro Gln Arg Ala Asp Thr Ile Gly Pro Trp Met Asp Ser Leu Gly Phe
65                  70                  75                  80
Leu Ser Trp Val Gly Ser Ile Thr Ser Ser Ala Leu Val Tyr Met Phe
                85                  90                  95
Ser Asn Gly His Glu Gly Pro Asn Gly Glu Pro Thr Thr Ile Arg Cys
            100                 105                 110
Trp Ala Leu Leu Leu Thr Ile Phe Phe Ser Glu His Leu Tyr Leu Ile
```

```
        115                 120                 125
Val Arg Tyr Ala Val Arg Ser Ala Leu Ala Lys Leu Glu Pro Pro Asn
    130                 135                 140
Thr Arg Arg Glu Arg Ile Glu Arg Phe Met Met Arg Lys Arg Tyr Leu
145                 150                 155                 160
Asp Thr Val Leu Ser Ala Glu Ser Asp Asp Asp Ala Asp Glu Val Lys
                165                 170                 175
Gly Val Val Ser Ser Ile Pro Pro Ser Glu Ile Thr Arg Glu Ser Leu
            180                 185                 190
Glu Gln Asp Ala Arg Asp Trp Ser Lys Gln Gly Thr Asp Pro Thr Glu
        195                 200                 205
Arg Phe Trp Ile Arg Gln Arg Gly Trp Lys Glu Ser Ala Glu Val Gly
    210                 215                 220
Leu Ser Leu Ile Thr Lys Ala Lys Gly Asp Glu Thr Lys Lys Gln Gln
225                 230                 235                 240
```

<210> 27284
<211> 104
<212> PRT
<213> A.fumigatus

<400> 27284

```
Leu Phe Leu Gly Ala Leu Ile Leu Met Tyr Thr Ala Phe Glu Leu Ala
1               5                   10                  15
Tyr Arg Asp Ile Ile Tyr Phe Val Leu Ser Ile Ile Glu Tyr Cys Leu
            20                  25                  30
Phe Ile Lys Val Leu Ala Ile His Pro Leu Gln Trp Asp Ser Phe Cys
        35                  40                  45
Gly Arg Ile Leu Arg Ser Ala Glu Val Met Ala Val Leu Asn Phe Glu
    50                  55                  60
Phe Glu Ser Val Pro His Val Ser Ser Ser Val Asn His Asp Ser Glu
65                  70                  75                  80
Val Arg Thr His Ala Arg Thr His Pro Ile Cys Leu Val Val Phe Met
                85                  90                  95
Gly Asp Tyr Tyr Arg Ser Thr Ala
            100
```

<210> 27285
<211> 79
<212> PRT
<213> A.fumigatus

<400> 27285

```
Ser Lys Leu His Ser Ala Ile His Tyr Leu Ile Arg Pro Ile Ile Met
1               5                   10                  15
Ser Ala Thr Ser Pro Thr Leu Ser Thr Asn Gln Pro Ile Lys Thr Ser
            20                  25                  30
Thr Ala Pro Pro Pro Pro Pro Pro Pro Leu Ser Thr Asn Arg Ala Ser
        35                  40                  45
Thr Leu Ala Thr Val Pro His Pro Leu Thr Val Thr Ser His Gly Pro
    50                  55                  60
Pro Arg Ala Phe Leu Val Lys Leu Leu Ile Tyr Asn Ser His Pro
65                  70                  75
```

<210> 27286
<211> 174

<212> PRT
<213> A.fumigatus

<400> 27286
Val Ser Pro Phe Pro Ser Leu His Leu His Tyr Ser His Lys Tyr Arg
1 5 10 15
Ser Gly Asn His Pro Pro Pro Cys Arg Arg Asn Gln Ala His Lys Asp
20 25 30
Leu Asp Pro Leu Leu Thr Ala Gln Pro Ser Asn Phe Ser Asn Ile Ala
35 40 45
Ser Leu Leu Trp His Ala Tyr Ala Ala Leu Pro Ser Pro Ser Ser Ser
50 55 60
Val Asn Trp Ala Gly Phe Tyr Ile Arg Gln Asp Lys Phe Pro Ala Leu
65 70 75 80
Gly Ser Gln Asn Thr Arg Ser Asn Ser Thr Asn Asn Leu Leu Leu Leu
85 90 95
Gly Pro Phe Gln Gly Arg Pro Ala Cys Gln Glu Ile Arg Phe Gly Arg
100 105 110
Gly Val Cys Gly Thr Ala Ala Glu Lys Arg Glu Thr Val Ile Val Pro
115 120 125
Asp Val Leu Ser Phe Pro Gly His Ile Ala Cys Asp Ala Ser Ser Arg
130 135 140
Ser Glu Ile Val Val Pro Ile Leu Val Gly Gly Glu Val Ser Leu Leu
145 150 155 160
Ser Leu Val Glu Ala Val Leu Arg Cys Val Ala Asp Ala Arg
165 170

<210> 27287
<211> 186
<212> PRT
<213> A.fumigatus

<400> 27287
Thr Ile Ser Leu His Thr Leu Thr Met Ser Cys Ala Thr Gln Phe Pro
1 5 10 15
Ile Phe Gln Ser Asp Val Glu His Ile Cys Ile Arg Tyr Thr Gly Arg
20 25 30
Leu Thr Lys His His Thr Ile Ile Leu Tyr Ile His Thr Tyr Gln Ser
35 40 45
Gln His Ser Ala Lys Ser Asp Ala Ser Ser Ser Asn His Phe Leu Ser
50 55 60
Ser Ser Ser Asn Pro Ala Gly Ser Val Gln Ser Thr Ser Met Ile Ala
65 70 75 80
Thr Val Tyr Arg Ala Ser Ala Thr Gln Arg Asn Thr Ala Ser Thr Lys
85 90 95
Glu Ser Lys Leu Thr Ser Pro Pro Thr Arg Ile Gly Thr Thr Ile Ser
100 105 110
Leu Arg Leu Leu Ala Ser Gln Ala Ile Cys Pro Gly Lys Leu Asn Thr
115 120 125
Ser Gly Thr Ile Thr Val Ser Arg Phe Ser Ala Ala Val Pro His Thr
130 135 140
Pro Arg Pro Lys Arg Ile Ser Trp Gln Ala Gly Arg Pro Trp Asn Gly
145 150 155 160
Pro Ser Ser Arg Arg Leu Leu Val Leu Leu Leu Arg Val Phe Trp Glu
165 170 175
Pro Ser Ala Gly Asn Leu Ser Trp Arg Met

180 185

<210> 27288
<211> 205
<212> PRT
<213> A.fumigatus

<400> 27288
Gln Gln Leu His Met Ala Ser Ala Arg Ser Asp Thr Gln Ser Asp Gln
1 5 10 15
Ser Gln Met Asn Ile Thr Phe Asp Arg Phe Asn Pro Gln Pro Tyr Leu
20 25 30
Thr Tyr Thr Pro Ala Pro Arg Pro Pro Asp Met Ser Gly Ser Ala Gln
35 40 45
Phe Gly Ile Thr Arg Asp Leu Pro Phe Gln Gln Leu His Met Thr Ser
50 55 60
Ala Ser Ser Asp Thr Gln Ser Asp Gln Ser Gln Met Asn Val Thr Phe
65 70 75 80
Asp Arg Phe Asn Pro Gln Pro Tyr Leu Thr Tyr Thr Pro Ala Ser Arg
85 90 95
Pro Pro Asp Val Ser Asp Pro Thr His Phe Gly Ile Thr Arg Asp Leu
100 105 110
Pro Phe Gln Gln Leu His Met Thr Ser Ala Ser Ser Asp Thr Gln Cys
115 120 125
Gly Gln Ser Gln Met Asn Ile Thr Phe Asp Arg Phe Asn Pro Gln Pro
130 135 140
Tyr Leu Thr Tyr Ile Pro Ala Ala Gln Pro Ser Ala Leu Ser Asn His
145 150 155 160
Gln Lys Pro Ala Gly Glu Ser Gly Ala Tyr Met Val Leu His Arg Gln
165 170 175
Leu Glu Asp Ile His Asp Gly Gln Ala Glu Arg Asn Gly Tyr Gln Asn
180 185 190
Glu Val Gln His Cys Pro Glu Asp Gln Ile Arg Val Trp
195 200 205

<210> 27289
<211> 168
<212> PRT
<213> A.fumigatus

<400> 27289
Cys Ala Leu Ser Phe Asp Met Ser Leu Leu Ser Tyr Ile Ala Ser Gly
1 5 10 15
Ile Ser Ser Phe Val Val Val Thr Leu Ser Leu Phe Ala Leu Gly Gln
20 25 30
Lys Val Pro Arg Ala Ala Phe Phe Ala Arg Cys Leu Ala Ala Tyr Gly
35 40 45
Ser Leu Leu Leu Cys Ala Cys Tyr Gly Val Ile Ala Ser Ile Leu Leu
50 55 60
Arg Leu Val Gly Tyr Gly Arg Val Ser Gln Trp Ala Thr Ala Arg Ser
65 70 75 80
Phe Lys Trp Val Met Arg Tyr Thr Thr Gly Val Gln Phe Asp Ile Ile
85 90 95
Gln Gly Ala Glu His Leu Ser Thr Arg Pro Ala Val Phe Ile Gly Asn
100 105 110
His Gln Ser Glu Leu Asp Val Leu Met Leu Gly His Ile Phe Pro Pro

```
        115                 120                 125
Tyr Cys Ser Val Pro Ala Lys Lys Ser Trp Lys His Ile Pro Leu Pro
    130                 135                 140
Gly Leu Val His Gly Ala Val Pro Gly Arg Ser Ser Leu Asn Gly Pro
145                 150                 155                 160
Thr Arg Lys Thr Thr Met Lys Gly
                165
```

<210> 27290
<211> 65
<212> PRT
<213> A.fumigatus

<400> 27290

```
Pro Leu Ala Asn Ser Thr Ala Ala Ser Pro Thr Phe Cys Ser Lys Arg
1               5                   10                  15
Arg Gly Leu Leu Thr Val Pro Pro Thr Ala Ile Asn Ile Val Thr Asp
            20                  25                  30
Phe Val Phe Ala Thr Leu Pro Val Phe Met Phe His Asn Ile Gln Val
        35                  40                  45
Asn Lys Arg Thr Arg Ala Ser Leu Met Gly Ile Leu Ser Leu Gly Tyr
    50                  55                  60
Leu
65
```

<210> 27291
<211> 89
<212> PRT
<213> A.fumigatus

<400> 27291

```
Leu Ser Gln Val Phe Leu Ile Leu Phe Thr Ile Ala Cys Ile Leu Thr
1               5                   10                  15
Leu Ile Leu Gln Cys Ile Pro Val Ser Ala Val Trp Asp Tyr Thr Leu
            20                  25                  30
Lys Ala Thr Ala Thr Cys Tyr Ser Ser Gln Thr Tyr Leu Ala Ile Gly
        35                  40                  45
Glu Phe Asn Ser Gly Lys Ser His Val Leu Phe Gln Lys Lys Arg Phe
    50                  55                  60
Thr Asp Ser Ala Ser Asn Ser His Gln Tyr Cys His Gly Leu Cys Phe
65                  70                  75                  80
Arg His Ser Ala Gly Phe His Val Pro
                85
```

<210> 27292
<211> 61
<212> PRT
<213> A.fumigatus

<400> 27292

```
Ser Asn Pro Phe Tyr Pro Gly Pro Gly Arg Gly Tyr Arg Asp Phe Gly
1               5                   10                  15
Gly Gly His Gly Glu Asn Val Thr Ile Pro Lys Arg His Lys Leu Tyr
            20                  25                  30
Ser Ala Val Leu Asp Ile Leu Ser Gly Leu Gly Ile Ser Asn Tyr Arg
        35                  40                  45
```

Ser Pro Asp Tyr Asn Ile Val Gln Pro Pro Trp Cys Gly
50 55 60

<210> 27293
<211> 72
<212> PRT
<213> A.fumigatus

<400> 27293
Ala Ala Val Gly Ala Ser Val Pro Ile Ala Ser Leu Ala Pro Pro Ser
1 5 10 15
Thr Asn Ser Leu Tyr Ala Lys Ala Leu Trp Gln Arg Ser Pro Ile Asn
20 25 30
Ser Gly His Ala Arg Asn Lys Thr Gly Ser Glu Trp Thr Gly Cys Thr
35 40 45
Asp Ala Ile Ile Pro Asn Ser Pro Asn Arg Leu Ala Ser Ser Gly Ala
50 55 60
Val Ser Ser Arg Cys Ser Met Arg
65 70

<210> 27294
<211> 316
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (20)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27294
Thr Gly Leu Val Asp Met Ala Met Asp Glu Thr Thr Trp Asp Val Leu
1 5 10 15
Gln Phe Tyr Xaa Gln Arg His Asp Pro Pro Leu His Ile Ala Ala Tyr
20 25 30
Trp Leu Val Pro Phe Ser Gln Asn Glu Glu Thr Asn Phe Ser His Val
35 40 45
Asp Arg Ala Ile Gln Ile His Ala Glu Phe His Pro Thr Lys Ser Pro
50 55 60
Asn Leu Cys Ile Met Gly Ile Lys Leu Ile Cys Asp Gly Val Val Asp
65 70 75 80
Gly Cys Thr Ala Ala Leu Ser Gln Pro Tyr Gly Ser Leu Thr Asp Pro
85 90 95
Val Glu Pro Ile Trp Pro Ala Glu Met Leu Lys Ala Val Val Gln Arg
100 105 110
Ala Asp Gln Ala Gly Leu Gln Cys Ala Ile His Ala Ile Gly Asp Lys
115 120 125
Ala Val Thr Gln Ala Ile Asp Val Leu Ala Glu Val Gly Thr Pro Gly
130 135 140
Arg Arg His Arg Ile Glu His Leu Glu Leu Thr Ala Pro Glu Asp Ala
145 150 155 160
Arg Arg Leu Gly Glu Leu Gly Ile Ile Ala Ser Val Gln Pro Val His
165 170 175
Ser Asp Pro Val Leu Phe Arg Ala Trp Pro Glu Leu Ile Gly Glu Arg
180 185 190
Cys Gln Arg Ala Phe Ala Tyr Ser Glu Phe Val Asp Gly Gly Ala Arg

```
        195                 200                 205
Leu Ala Met Gly Thr Asp Ala Pro Thr Ala Ala His Leu Pro Leu Pro
    210                 215                 220
Asn Leu Tyr Asn Ala Thr Thr Arg Arg Ser Ala Leu Glu Pro Gly Glu
225                 230                 235                 240
Pro Ala Ala Thr Asn Pro Arg Phe Gly Leu Gly Leu Ala Glu Ala Val
                245                 250                 255
Thr Ala Ala Thr Glu Gly Ala Ala Tyr Ala Arg Phe Ala Glu Gly Trp
            260                 265                 270
Thr Gly Cys Leu Arg Glu Gly Arg Ser Ala Asp Phe Val Val Leu Asp
        275                 280                 285
Met Gln Trp Glu Ala Glu Glu Leu Leu Glu Gly Lys Val Cys Glu Thr
    290                 295                 300
Trp Phe Gly Gly Lys Arg Val Tyr Ser Val Glu Arg
305                 310                 315
```

<210> 27295
<211> 459
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (349),(402)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27295

```
Met Phe Leu Ala Asp Leu Ile Pro Arg Glu Gln Asp Gln Asp Gly Pro
1               5                   10                  15
Pro Arg Asp Asp Asp Ala Leu Ala Glu Asp Leu Ala Ala Glu Ala Pro
            20                  25                  30
Phe Val Pro Ile Arg Asn Asn Arg Arg Pro Gly Asn Asp Val Gln Gln
        35                  40                  45
Asn Gln Gly Ile Gly Ala Asp Ala Gly Ile Asp Pro Asn Asp Leu Asp
    50                  55                  60
Ala Val Glu Glu Gly Asp Asp Leu Glu Gly Ile Leu Glu Leu Ile Gly
65                  70                  75                  80
Met Gln Gly Pro Ile Phe Gly Leu Leu Gln Asn Gly Val Phe Ser Ala
                85                  90                  95
Leu Leu Ile Ser Phe Thr Val Ala Ile Gly Val Trp Leu Pro Tyr Leu
            100                 105                 110
Trp Gly Lys Ile Ala Leu Val Leu Leu Ala Asn Pro Ile Gln Leu Ile
        115                 120                 125
Phe Gly Val Pro Val Thr Ala Val Ser Val Ile Ala Asp Val Thr Leu
    130                 135                 140
Asp Thr Leu Ile Gly Ser Leu Gly Tyr Leu Met Tyr Ala Val Ser Leu
145                 150                 155                 160
Val Cys Lys Val Leu Leu Gly Pro Leu Ser Ala Phe Val Pro Leu Gly
                165                 170                 175
Asp Trp Ile Pro Gln Thr Lys Phe Ile Thr Asn Ala Ser Leu Ser Leu
            180                 185                 190
Ile Asp Ala Ser Ser His Arg Leu Lys Thr Val Val Ser Ala Phe Phe
        195                 200                 205
Val Phe His Glu Ser Asp Val Pro Val Phe Ser Val Leu Ser His Gln
    210                 215                 220
Ala Leu Lys Ile His Gln Ala Arg Ile Ser Gly Leu Cys Gln Ser Ile
```

225 230 235 240
Ala Thr Phe Val Lys Phe Ile Val Gln Asp Leu Pro Leu Gln Ile Thr
245 250 255
Thr Asn Gly Leu Gln Gly Ala Leu Ser Phe Gly Arg Gln Gly Ile Asp
260 265 270
Leu Ser Ser Leu Leu Ala Gln Ala Arg Gln Gln Leu Tyr Ser Phe Ala
275 280 285
Glu Arg Pro Phe Phe Pro Gly Lys Gly Val Lys Trp Leu Asp Ala Thr
290 295 300
Val Lys Gly Thr Ala Ser Thr Ser Leu Ala Ile Asp Pro Glu Leu Ala
305 310 315 320
Val Trp Asp Thr Lys Asp Arg Ile Ile Ala Ile Ile Met Gly Tyr Val
325 330 335
Leu Ala Ser Ile Leu Gly Leu Leu Tyr Leu Arg Ile Xaa Ser Leu Phe
340 345 350
Thr Gly Ala Thr Arg Gly Gln Arg Val Glu Gly Leu Val Ala Asp Ile
355 360 365
Leu His Gln Ala Gly Gly Val Met Lys Val Ile Leu Ile Ile Gly Ile
370 375 380
Glu Met Ile Val Phe Pro Leu Tyr Cys Gly Thr Leu Leu Asp Leu Ala
385 390 395 400
Leu Xaa Pro Leu Phe Glu Asn Ala Thr Ile Ala Ser Arg Leu Glu Phe
405 410 415
Thr Ser Ser Ser Pro Leu Thr Ser Leu Phe Val His Trp Phe Ile Gly
420 425 430
Thr Cys Tyr Met Phe His Phe Ala Leu Phe Val Ser Met Cys Arg Lys
435 440 445
Ile Met Arg Ser Gly Val Leu Cys Lys Cys Ser
450 455

<210> 27296
<211> 326
<212> PRT
<213> A.fumigatus

<400> 27296
Glu Leu Val Ala Arg Met Ala Phe Ala Thr Leu Arg Ser Ile Pro Ser
1 5 10 15
Pro Thr Arg Leu Met Arg Pro Thr Met Ala Ile Ser Gln His Gln Ser
20 25 30
Arg Gln Ile Ser Phe Ser Ser Tyr Leu Val Ser Pro Arg Glu Leu His
35 40 45
Glu Ala Leu Lys Lys Asn Pro Thr Thr Lys Ile Ser Thr Ser Pro Arg
50 55 60
Val Ile Pro Leu Cys Ala Ala Trp Phe Met Pro Asn Asp Pro Glu Gly
65 70 75 80
Arg Lys Gly Ile Asp Ala Phe Arg Lys His Arg Ile Pro Gln Ala Arg
85 90 95
Phe Phe Asp Leu Asp Ala Ile Lys Asp Ser Glu Ser Pro Tyr Pro His
100 105 110
Met Leu Pro Thr Val Glu Thr Phe Ala Glu Ala Met Ser Glu Leu Gly
115 120 125
Ile Arg Arg Asp Asp Glu Val Val Val Tyr Asp Thr Glu Glu Leu Gly
130 135 140
Ile Phe Ser Ala Pro Arg Val Gly Trp Thr Leu Arg Val Phe Gly His
145 150 155 160

```
Pro Arg Val His Val Leu Asn Asn Tyr Arg Leu Trp Val Arg Asp Gly
                165                 170                 175
Tyr Pro Thr Glu Thr Gly Glu Pro Ala Pro Val Glu Lys Thr Ser Tyr
            180                 185                 190
Pro Leu Pro Gln Phe Asp Ser Lys Leu Val Ile Pro Tyr Arg Glu Leu
        195                 200                 205
Lys Glu Ile Ala Lys Glu His Arg Lys Glu Gly Ser Lys Glu Val Glu
    210                 215                 220
Ile Leu Asp Ala Arg Ser Tyr Gly Arg Trp Ala Gly Thr Asp Pro Glu
225                 230                 235                 240
Pro Arg Pro Gly Leu Ser Ser Gly His Ile Pro Gly Ser Lys Ser Leu
                245                 250                 255
Pro Phe Gln Glu Leu Leu Asp Pro Glu Thr Lys Thr Tyr Leu Ala Pro
            260                 265                 270
Glu Glu Leu Arg Lys Val Phe Gln Lys His Glu Val Asp Glu Thr Lys
        275                 280                 285
Ser Ile Ile Ser Thr Cys Gly Thr Gly Val Thr Ala Ser Val Ile Glu
    290                 295                 300
Thr Ala Leu Asn Val Ala Asp Tyr Gly Asn Pro Ser Leu Arg Arg Val
305                 310                 315                 320
Tyr Asp Gly Ser Trp Thr
                325
```

<210> 27297
<211> 144
<212> PRT
<213> A.fumigatus

<400> 27297

```
Arg Gln His Ile His Asn His Asn Arg Leu Arg Gln Arg Gln Pro Arg
1               5                   10                  15
Pro Pro Leu Leu Arg Lys Thr Pro Pro Arg Pro Pro Arg Arg Pro Ala
            20                  25                  30
Lys Glu Thr Pro Tyr Gly Gln Lys His Gly Met Pro Ser Pro Leu Pro
        35                  40                  45
Leu Tyr Pro Phe Pro Val Arg His Asn Leu Ala Thr Asn His Ser Gly
    50                  55                  60
Gln Ala Gln Leu Glu Asp Gln Ile Tyr Arg Phe Glu Gln Ser Tyr Leu
65                  70                  75                  80
Glu Glu Thr Thr Ala Gly Asn Ile Ile Lys Gly Phe Asp Asn Tyr Ile
                85                  90                  95
Lys Gly Ser Gly Ser Ser Thr Gly Leu Gly Ala Ser Gly Ile Ala Leu
            100                 105                 110
Ala Gly Gly Met Gly Gly Ala Ala Arg Arg Lys Ser Gln Val Thr Asp
        115                 120                 125
Ala Asp Arg Val Phe Ser Arg Ser Ser Ala Ser Phe Met Arg Val Arg
    130                 135                 140
```

<210> 27298
<211> 80
<212> PRT
<213> A.fumigatus

<400> 27298

```
Gln Asn Arg Asp Arg Leu Thr Leu Lys Val Asp Ala Phe Ile Lys Asp
1               5                   10                  15
```

```
Glu Thr Tyr Ala Tyr Ala Tyr Lys Thr Asn Arg Ile Tyr Lys Ile Leu
            20                  25                  30
Pro Leu Ala Ser His Leu Leu Asn Thr Gly Val Gln Ser Ser Asn Arg
        35                  40                  45
Ser Gln Thr Asp Arg Pro Ala Ser Asp Asp Ser Pro Ser Ile Thr Asn
    50                  55                  60
Asn Ala Ser Pro Leu Asn Leu Leu Ser Arg Asn Thr Gln His Ile Asn
65                  70                  75                  80
```

<210> 27299
<211> 189
<212> PRT
<213> A.fumigatus

<400> 27299

```
Ala Ile Gln Pro Leu Ser Ala Leu Ala Ala Gln His Lys Met Ala Asp
1               5                   10                  15
Thr Val Pro Ala Gln Ala Pro Ala Ala Thr Gly Arg Pro Thr Gly Ala
            20                  25                  30
Ala Thr Ala Thr Ala Pro Ala Thr Ala Gly Ala Ser Gly Thr Thr Thr
        35                  40                  45
Gly Thr Gln Pro Ser Gly Thr Asn Asn Pro Thr Thr Gly Asn Ala Asn
    50                  55                  60
Ala Asn Thr Ser Thr Thr Thr Thr Asp Ser Asp Ser Gly Asn Arg Gly
65                  70                  75                  80
Leu Pro Tyr Tyr Glu Lys Leu Arg Arg Asp Leu Arg Asp Ala Leu Gln
                85                  90                  95
Lys Lys Arg Leu Met Asp Lys Ser Met Val Cys Leu Arg Leu Ser Pro
            100                 105                 110
Tyr Ile Pro Ser Gln Ser Ala Ile Thr Trp Gln Leu Thr Thr Ala Asp
        115                 120                 125
Arg Pro Asn Ser Lys Thr Lys Ser Thr Val Leu Ser Asn Pro Thr Ser
    130                 135                 140
Lys Lys Pro Pro Pro Glu Thr Ser Ser Arg Val Ser Thr Thr Ile Ser
145                 150                 155                 160
Arg Gly Pro Gly Gln Ala Arg Gly Leu Ala Gln Ala Gly Ser Arg Trp
                165                 170                 175
Gln Gly Ala Trp Ala Ala Arg His Val Ala Ser Arg Arg
            180                 185
```

<210> 27300
<211> 161
<212> PRT
<213> A.fumigatus

<400> 27300

```
Ile Arg Glu Ser Ser Pro Pro Thr Gly Leu Lys Leu Thr Ala Leu Pro
1               5                   10                  15
Gln Thr Ile Val Gln Ala Ser Arg Thr Thr Arg Pro Leu Ser Thr Cys
            20                  25                  30
Tyr Gln Gly Ile Leu Ser Ile Leu Ile Glu Gln Phe Asn Leu Cys Gln
        35                  40                  45
Pro Leu Leu His Ser Thr Arg Trp Gln Thr Pro Ser Gln Leu Arg Leu
    50                  55                  60
Gln Pro Gln Gln Ala Asp Gln Gln Val Gln Gln Pro Gln Gln His Gln
65                  70                  75                  80
```

```
Gln Gln Gln Ala His Gln Ala Gln Gln Gln Ala His Asn Pro Pro Ala
                85                  90                  95
Pro Thr Thr Gln Pro Pro Ala Thr Leu Thr Pro Thr His Pro Gln Pro
            100                 105                 110
Gln Gln Thr Gln Thr Ala Ala Thr Glu Ala Ser Pro Thr Thr Lys Asn
        115                 120                 125
Ser Ala Ala Thr Ser Ala Thr Pro Cys Lys Arg Asn Ala Leu Trp Thr
    130                 135                 140
Lys Ala Trp Tyr Ala Phe Ala Ser Pro Pro Ile Ser Leu Pro Ser Pro
145                 150                 155                 160
Pro
```

<210> 27301
<211> 77
<212> PRT
<213> A.fumigatus

<400> 27301

```
His Asn Gln Met Leu Phe Thr Trp Ser Thr Lys Asp Leu Cys Ile Val
1               5                   10                  15
Phe Ser Gln Trp His Ile Thr Gly Pro Phe Ser Leu Leu Met Ser Leu
            20                  25                  30
Ile Val Ile Val Leu Leu Thr Ala Gly Tyr Glu Gly Val Arg Gln Ala
        35                  40                  45
Thr Arg Lys Tyr Glu Ala Ala Gln Ala Gln Arg Leu Asn Val Phe Ser
    50                  55                  60
Thr Thr Thr Ala Thr Ile Gly Lys Tyr Phe Gly Leu Phe
65                  70                  75
```

<210> 27302
<211> 105
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (4),(22)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27302

```
Ser Ser Ser Xaa Asn Pro Ser His Lys Tyr Ser Pro Thr Val Arg Arg
1               5                   10                  15
Arg Leu Ile Pro Ser Xaa Val Ala Leu Ile Ile Leu Ile Leu Val Leu
            20                  25                  30
Val Thr Gly Pro Arg Ser Ala Phe Phe Leu Phe Phe Asp Asp Glu Asp
        35                  40                  45
Glu Asp Pro Phe Thr Leu Ala Ala Ala Glu Asp Val Pro Ser Pro Phe
    50                  55                  60
Gly Phe Pro Phe Asp Pro Leu Tyr Val Asp Val Gly Val Gly Ala Cys
65                  70                  75                  80
Glu Gly Val Val Cys Thr Asp Asp Gly Ala Gly Glu Ser Tyr Asp Trp
                85                  90                  95
Leu Asp His Arg Leu Tyr Ser Glu Leu
            100                 105
```

<210> 27303
<211> 98
<212> PRT
<213> A.fumigatus

<400> 27303
Asn Val Leu Pro Leu Ser Met Ser Ala Leu Ala Ile Ala Arg Leu Lys
1 5 10 15
Pro Ser Leu Thr Asn Gly Val Gln Gly Asn Glu Phe Ala Asp Glu Ser
20 25 30
Ala Thr Thr Asn Val Pro Ser Ser Gln Thr Pro Asn Glu Ser Ser Pro
35 40 45
Leu Val Ala Gly Arg Asp Asn Arg Arg Ala Val Glu Gln Arg Arg Lys
50 55 60
Ile Ile Leu Ala Ala Leu Tyr Ala Val Gln Val Phe Tyr Ser Phe Phe
65 70 75 80
Ile Lys Leu Ile Ile Ser Pro Ile Leu Pro Val Phe Ser Ile Asn Ser
85 90 95
Asp Ala

<210> 27304
<211> 298
<212> PRT
<213> A.fumigatus

<400> 27304
Thr Leu Ala Arg Ser Phe Ala Ala Val Val Lys Thr Val Leu Glu Ala
1 5 10 15
Phe Asp Thr Asn Ile Gln Tyr Arg Gly Ala Asn Ser Lys Met Asn Leu
20 25 30
Val Phe Gly Gly Ser Glu Pro Ala Val Ala Leu Ala Ser Leu Met Gln
35 40 45
Leu Ala Ser Ser Ser Gln Glu Asn Phe Tyr Ser Arg Pro Asp Leu Gly
50 55 60
Ala Ser Leu Ile Phe Glu Leu Phe Ser Leu Glu Ala Gly Ala Ala Pro
65 70 75 80
Thr Tyr Pro Asp Gln Ser Gln Leu Tyr Val Arg Phe Leu Leu Arg Asn
85 90 95
Gly Thr Gly Thr Ser Ala Glu Phe Arg Ser Tyr Pro Phe Phe Gly His
100 105 110
Gly Pro Ser Asn Asp Ala Ile Pro Tyr Ser Glu Phe Arg Ala Gln Met
115 120 125
Glu Lys Phe Ala Leu Gly Ser Thr Gln Gln Trp Cys Leu Glu Cys Gly
130 135 140
Ser Ser Ala Val Phe Cys Ser Gly Ala Met Gly Lys Ala Lys Lys Thr
145 150 155 160
Ser Thr Ser Gly Asn Arg Leu Ser Pro Ala Ile Ala Gly Val Ile Gly
165 170 175
Ala Val Val Thr Ile Val Ala Leu Ala Leu Ala Ala Ile Leu Ile Phe
180 185 190
Leu Val Arg Gly Phe Arg Met Arg Arg Met Arg Arg Ser Ser Ala Gly
195 200 205
Gly Phe Lys Gly Asn Ser Lys Met Ala Ser Asp Ala Asp Leu Thr Ala
210 215 220
Lys Asp Ser Thr Arg Glu Asp Val Lys Pro Ala Glu Ser Pro Asp Ser

```
225                 230                 235                 240
Glu Pro Phe Arg Ala Gly Gly Ala Val Val Cys Gly His Glu Arg Thr
                245                 250                 255
Gly Ser Trp Glu Met Arg Pro Thr Pro Ala Gln Asn Arg Thr Thr Ala
            260                 265                 270
Ser Pro Phe Glu Val Glu His Asp Asp Thr Trp Asn Thr His Ser Ala
        275                 280                 285
Leu Lys Pro Val Gln Ala Arg Glu His Val
    290                 295
```

<210> 27305
<211> 70
<212> PRT
<213> A.fumigatus

<400> 27305

```
Leu Leu His Cys Gly Ser Phe Gln Pro Arg Gly Glu Asp Arg Gln Ser
1               5                   10                  15
Phe Ser Glu Pro His Pro Ala Thr Pro Asp Thr Ile Ala Pro Gln Thr
            20                  25                  30
His Thr Lys Leu Asn Arg Asn Met Ser Glu Leu Asp Tyr Ala Thr Asp
        35                  40                  45
Glu Asp Val Glu Asp Gly Asn Ala Phe Ser Phe Arg Pro Pro Val Ser
    50                  55                  60
His Tyr Ser Thr Phe His
65                  70
```

<210> 27306
<211> 83
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (4),(12),(18),(21),(33),(34)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27306

```
Leu Gly Glu Xaa Arg Ser Gly Val Ile Gly Glu Xaa Lys Gly Lys Ser
1               5                   10                  15
Met Xaa Pro Cys Xaa Cys Asn Ala Lys Ser Ile Thr Asn Pro Ala Thr
            20                  25                  30
Xaa Xaa Arg Leu His Leu Phe His Ser Arg Arg Arg Gly Lys Thr Thr
        35                  40                  45
Asn Pro Leu Phe Thr Phe Ala Ile Lys Pro Asp Phe Asp Thr Arg Pro
    50                  55                  60
Leu Gln Gly Val Asn His Leu Ser Pro Phe Ile Ser Cys Tyr Val Pro
65                  70                  75                  80
Gln Ile Ile
```

<210> 27307
<211> 82
<212> PRT
<213> A.fumigatus

<400> 27307
His Ala Pro His Phe Asp Glu Arg His Thr Ala Tyr Gly Gly Pro Gln
1 5 10 15
Trp Pro Val Cys Pro Gly Leu Ser Leu Pro Phe Ala His Arg His Ala
20 25 30
Val Ile Pro Met Leu Pro Glu Asp Val Thr Gln Asn Thr Gly Ser Ala
35 40 45
Ser Gln His Ile Asn His Thr His Pro Phe Lys Ala Ile Ala Ser Ser
50 55 60
Ser Asp Lys Leu Tyr Val Pro Val Ser His Phe Pro Gln Asn Cys Phe
65 70 75 80
Ser Pro

<210> 27308
<211> 111
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (20)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27308
Phe Asp Arg Arg Lys Arg Ile Pro Arg Arg Ser Pro Pro Asn Trp Ile
1 5 10 15
Glu Ile His Xaa Phe Lys Leu Arg Ala Ser Arg Arg Arg Tyr Thr Leu
20 25 30
Ala Phe Val Asp Asn Cys Leu Asp Gly Gln Tyr Asn Tyr Arg Ser Thr
35 40 45
Asn Ser Phe Arg Ser Lys Ile Ser Ser Pro Ser Gly Ala Gln Val Met
50 55 60
Gly Leu Asp Pro Phe Val Val Leu Gly Leu Ala Thr Ala Thr Cys Gly
65 70 75 80
Ala Val Gly Trp Leu Ala Gly Pro Phe Leu Gly Asn Ala Ile Trp Arg
85 90 95
Leu Val Tyr Arg Lys Tyr Lys Pro Ala Phe Leu Met Val Ser Ser
100 105 110

<210> 27309
<211> 71
<212> PRT
<213> A.fumigatus

<400> 27309
Asp Ser Cys Arg Phe Cys Ser Val Leu Thr Asn Gly Gln Arg Glu Lys
1 5 10 15
Glu Phe Tyr Asp Arg Ile Lys Arg Phe Arg Val Asp Pro Ser Ser Asn
20 25 30
Ser Ile Ala Asn Pro Val Pro Asp Tyr Tyr Gly Glu Lys Ile Gly Ser
35 40 45
Val Gln Gly Tyr Arg Gln Trp Leu Lys Asp Gln Arg Ala Tyr Asn Arg
50 55 60
Lys Arg Arg Ser Phe Ile Ile
65 70

<210> 27310
<211> 337
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (300)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27310

```
Ala Trp Asn His Ser Thr Ser Pro Leu Pro Phe Pro Ser Leu Leu Phe
1               5                  10                  15
Ser Leu Ser Leu Ser Tyr Ser Pro His Pro Ser Ala Pro Phe Cys Pro
            20                  25                  30
Ile Pro Ser Ser Ser Val Asp Leu Arg Asn Leu Ser Val Val Ser Arg
        35                  40                  45
Leu Lys Ser Ile Ser Ile Tyr His Leu Gly Thr Phe Arg His Leu Ser
    50                  55                  60
Pro Thr His Ala Ser Arg Pro Ser Ser Leu Ser Cys Ser Arg Val His
65                  70                  75                  80
Val Pro Leu Lys Arg Val Phe Trp Ala Ser Ser Thr Asn Gln Gln Leu
                85                  90                  95
Cys Thr Ala Asn Val Val Pro Ala Val Ser Ser Pro Leu Gln Ala Ala
            100                 105                 110
Leu Ala Leu Pro His Gly Ser Pro Phe Val Tyr Pro Pro Val Pro His
        115                 120                 125
Phe Ile Phe Leu Ala Tyr Ser Asp Lys Ser Leu Asp Leu Leu Ala Phe
    130                 135                 140
Ser Ile Val Arg Tyr Ser Arg Arg Ser Val Val Ser Ser Ile Ser Leu
145                 150                 155                 160
Ser Thr Gly Met Thr Gln Leu Phe Ala Ser Ser Pro Ser Gly Val Thr
                165                 170                 175
Asn Glu Lys Arg Gly Asn Phe Pro Gly Leu Ser Leu Ala Ser Lys Lys
            180                 185                 190
His Asn Glu Ser Ser His Leu Pro Thr Arg Ile Lys Asn Phe Phe Arg
        195                 200                 205
Ile Asn Ser Ser Ser Ser Asn Val Thr Pro His Thr Gly Ser Asp Arg
    210                 215                 220
Glu Arg Asp Arg Asp Ala Ser Pro Ser Thr Gly Ala Lys Ala Glu Ala
225                 230                 235                 240
Lys Ser Thr Phe Arg Gln Ser Arg Phe Ile Pro Thr Ile Gly Arg Asn
                245                 250                 255
Arg Ser Thr Thr Val Ala Ser Glu Gly Asn Pro Leu Asp Glu Gly Val
            260                 265                 270
Ser Pro Thr Ala Thr Ala Asn Pro Tyr Phe Val His Gln Gly Gln Pro
        275                 280                 285
Ser Leu Gln His Arg Asn Asp Gly Ser Phe Pro Xaa Ser Pro Pro Asp
    290                 295                 300
Thr Pro Glu Leu Gln Val Asp Gly Val Ser Ala Ala Glu Gln Ala Thr
305                 310                 315                 320
Thr Ala Asn Arg Glu Glu Ser Ser Pro Arg Gly Trp Lys Asp Thr Arg
                325                 330                 335
Ser
```

<210> 27311
<211> 65
<212> PRT
<213> A.fumigatus

<400> 27311
Leu Ala Gln Ser Ile Asn Val Ala Gly Gly Glu Glu Tyr Ser His Arg
1 5 10 15
Phe Lys Ile Pro Glu Met Asp Ser Leu Tyr Arg Tyr Trp His Met Phe
20 25 30
Phe Glu Ile Pro His Lys Asn Leu Pro Phe Ala His Pro Lys Ser Glu
35 40 45
Ile Tyr Gln Ile Pro Gly Thr Asn Ile Ser Pro Leu Ser Ser Val Ser
50 55 60
Asn
65

<210> 27312
<211> 83
<212> PRT
<213> A.fumigatus

<400> 27312
Leu Asn Thr Leu Tyr Thr Arg Glu Asn Asn Thr Ile Pro Ile Trp Ile
1 5 10 15
Phe Thr Thr Leu Leu Leu Asn Cys Val Phe Gly Leu Pro Gly Gly Lys
20 25 30
Ser Ser Glu Ser Asp Ile Thr Leu Gly Ser Leu Asp Ser Leu Ile Asn
35 40 45
Leu Ala Arg Val Ile Glu Ser Gly Pro Ala Met Asp Leu Val Asp Gln
50 55 60
Ala Ser Thr Val Glu Glu Lys Trp Lys Ser Tyr Ile Glu Gly Glu Ser
65 70 75 80
His Arg Arg

<210> 27313
<211> 75
<212> PRT
<213> A.fumigatus

<400> 27313
Lys Ile Gly Ser Glu Lys Pro Tyr Tyr Ser Ile Ser Val Ser Asn Ser
1 5 10 15
Ser Arg Lys Thr Gln Asp Arg His Asn Val Gln Gly Tyr Asp Thr Gly
20 25 30
His Leu Pro Pro Ser Ala Val Ser Ile Ile Val Ala Leu Ile Thr Gln
35 40 45
Val Thr Thr Ile Ile Leu Phe Gly Phe Ser Leu Phe Leu Leu Phe Ala
50 55 60
Val Phe His His Arg Gly Ser Ala Asp Pro Arg
65 70 75

<210> 27314
<211> 597

<212> PRT
<213> A.fumigatus

<400> 27314

```
Cys Cys Ser Arg Ala Ser Gln Ile Gln Phe Ser Lys Met Pro Ile Arg
1               5                  10                  15
Thr Arg Ala Gly Ser Ser Pro Ile Arg Ser Ser Asp Arg His Glu Gly
            20                  25                  30
Pro Glu Val Met Val Thr Ser Pro Ser His Pro Ala Thr Gly Ala His
        35                  40                  45
Phe Arg Thr Gly Ser Leu Gly Thr Ala Val Asn Val Asn Glu Gly Arg
    50                  55                  60
Pro Arg Arg Asp Thr Thr Thr Ser Ser Asp Leu Ser Thr Asp Asn Glu
65                  70                  75                  80
Thr Asn Glu Met Asp Pro Ser Phe Lys Arg Arg Gln Ile Gln Phe Ser
                85                  90                  95
Thr Thr Asp Lys Ile Ile Glu Tyr Gln Asp Pro Pro Arg Ser Thr Ser
            100                 105                 110
Asn Arg Asn Val Asp Thr Met Thr Leu Gly Gly Leu Ser Glu Ala Ala
        115                 120                 125
Glu Asp Ser Gly Ala Glu Ser Val Gly Ser Val Leu Ser Ser Glu Phe
    130                 135                 140
Asp Ala Thr Ala Gly Ser Gly Ser Leu Leu Glu Asp Val Gly Ile Thr
145                 150                 155                 160
Gly Gly Leu Asp Ser Ser Ser Pro Val Ala Leu Met His Lys Leu Gln
                165                 170                 175
Asn Gly Ala Gly Ser Gln Thr Ala Ser Pro Arg Lys Pro Arg Thr Pro
            180                 185                 190
Ala Pro Glu Leu Gln Asn Leu Pro Pro Pro Arg Pro Ile Ser Arg Leu
        195                 200                 205
Gln Pro Thr Ser Leu Leu Thr Gln Ala Leu Lys Ala Arg Met Lys Ala
    210                 215                 220
Pro Thr Asn Pro Val Glu Lys Phe Ala Val Leu Ser Gly Lys Gly Leu
225                 230                 235                 240
Ala Asp Ala Leu Asn Ile Lys Leu Tyr Leu Pro Phe Ser Ser Asp Pro
                245                 250                 255
Glu Glu Pro Leu Asp Leu Gln Leu Ala Arg Glu Ser Lys Leu Ala Asp
            260                 265                 270
Gln Pro Ala Pro Val Thr Val Ala Glu Ala Ile Gly Leu Ala Leu Trp
        275                 280                 285
Arg Tyr Ser Glu Glu Gly Arg Glu Pro Ala Ile Glu Arg Asn Lys Leu
    290                 295                 300
Asn Val Asn Arg Trp Thr Leu Arg Met Val Glu Asp Gly Glu Val Glu
305                 310                 315                 320
Tyr Asp Phe Pro Pro Leu Ser Arg Ala Ser His Ile Ala Asp Phe Thr
                325                 330                 335
Ser Asn Asn Asn Asn Arg Ala Thr Gly Val Arg Gly Arg Ser Arg Gly
            340                 345                 350
Lys Gln Tyr Asp Glu Phe Ala Leu Val Glu Ala Ser Glu Glu Glu Phe
        355                 360                 365
Glu Glu Asn Glu Arg Leu Phe Pro Gln Tyr Ser Gln Glu Ala Thr Ser
    370                 375                 380
Glu Glu Asn Val Met Thr Pro Thr Ala Pro Thr Val Pro Leu Leu Gln
385                 390                 395                 400
Pro Thr Pro Gln Ser Lys Ala Pro Ala Ala Arg Val Asn Pro Ile Leu
                405                 410                 415
```

```
Gly Gln Pro Phe Ser Ser Ala Leu Asn Asp Asn Thr Leu Thr Pro Ala
            420                 425                 430
Asp Arg Pro Ala Val Pro Thr Ser His Ala Thr Pro Arg Met Gly Val
        435                 440                 445
Ser Lys Thr Leu Lys Ile Arg Phe Met Asn Leu Asp Ala Ala Thr His
    450                 455                 460
Val Thr Thr Leu Asn Thr Ser Thr Asp Ser Tyr Ile Ala Glu Ile Leu
465                 470                 475                 480
Asp Ser Val Cys Lys Arg Trp Ala Leu Asp Lys Gly Asn Tyr Ile Leu
                485                 490                 495
Lys Val Ala Gly Ser Asn Thr Ile Ala Pro Leu Asp Arg Thr Val Glu
            500                 505                 510
Ala Leu Gly Asn Ile Thr Asp Leu Asp Leu Val Arg Arg Arg Phe Gly
        515                 520                 525
Ala Gly Pro Leu Ser Leu Thr Gly Ser Pro Gly Ser Ser Ser Pro Asn
    530                 535                 540
Ala Pro Leu Leu Ile Asp Asn Lys Gln Asn Thr Thr Ser Lys Lys Asn
545                 550                 555                 560
Lys Lys Ser Gly Pro Ser Met Leu His Pro Leu Thr Gln Thr Gln Glu
                565                 570                 575
Leu Met Gly Gly Tyr Tyr Arg Arg Tyr His Val Phe Asn His Gly Gly
            580                 585                 590
Trp Lys Glu Pro Arg
        595
```

Sequence Listing

<210> 27315
<211> 197
<212> PRT
<213> A.fumigatus

<400> 27315

```
Pro Ser Ala Thr Cys Ala Pro Leu Thr Ala Gly His Asn Pro Ser Ile
1               5                   10                  15
Pro Thr Asn Thr Thr Ala Ser Arg Pro Pro Thr Thr Thr Pro Pro Val
            20                  25                  30
Pro Ser Ser Pro Ser Ala Ser Ser Thr Ala Pro Ala Thr Met Thr Val
        35                  40                  45
Pro Asp Gly Tyr Ser Pro Leu Gly Pro Met Gly Phe Asp Glu Arg Ala
    50                  55                  60
Leu Phe Gly Leu Thr Ser Ala Gly Gly Ala Ile Tyr Thr Ile Ala Asp
65                  70                  75                  80
Ile Thr Gln Glu Lys Thr Ala Glu Leu Ser Gln Arg Gln Ile Ala Glu
                85                  90                  95
Glu Val Gln Gln Arg Lys Thr Gln Gln Glu Arg Phe Ile Asp Met Ile
            100                 105                 110
Ser His Glu Val Arg Asn Pro Leu Ser Ala Ile Leu His Cys Thr Glu
        115                 120                 125
Asp Ile Leu Asn Ala Val His Arg Ile Arg Asp Gly Ala Glu His Ala
    130                 135                 140
Gly Gly Asp Ala Cys Asp Asp Cys Gln Ser Ala Ala Val Ser Ser Ala
145                 150                 155                 160
Arg Gly Arg Asp Arg Asp Glu Phe Gln Gly Arg Arg Gly Gln His Val
                165                 170                 175
Trp Val Arg Leu Cys Arg Pro Glu Lys Arg Arg Arg Gly Glu Ala Ser
            180                 185                 190
Tyr Gln Pro Asp Gly
```

195

<210> 27316
<211> 79
<212> PRT
<213> A.fumigatus

<400> 27316
Gln Val Ala Asp Met Leu Pro Thr Gly Val Ala Ile Arg Asn His Arg
1 5 10 15
Asp Glu Ala Ile Phe Ala Asn His Arg Phe Arg Asn Leu Met Thr Lys
20 25 30
Arg Asp Leu Arg Ser Phe Asp Cys Trp Pro Gln Ser Val His Pro Asp
35 40 45
Glu Tyr Asp Arg Leu Ala Thr Ala Tyr His Asp Ala Ser Arg Ala Gln
50 55 60
Gln Pro Leu Cys Ile Gln Tyr Arg Thr Arg Asp Asp Asp Cys Pro
65 70 75

<210> 27317
<211> 71
<212> PRT
<213> A.fumigatus

<400> 27317
Lys Gly Val Gln Ser Ile Met Cys Asp Ala Leu Gln Glu Thr Glu Leu
1 5 10 15
Tyr Asp Gly Cys Glu Ile Met Tyr Tyr Ala Leu Ala Gly Lys Ser Arg
20 25 30
Ile Tyr Leu Thr Cys Ala Ser Ser Glu Ser Ile Ser Glu Glu Pro Met
35 40 45
Phe Ile Phe Leu Gln Ala Tyr Asp Tyr Lys Ile Phe Tyr Glu Ala Thr
50 55 60
Cys Thr Ile Met Asn Met Leu
65 70

<210> 27318
<211> 460
<212> PRT
<213> A.fumigatus

<400> 27318
Cys Asn Ala Thr Ala Asp Pro Ser Ser Pro Val Val Lys Thr Asn Thr
1 5 10 15
Ala Thr Gln Leu Val Asp Phe Pro Pro Glu Val Ile Leu Asp Ile Gly
20 25 30
Asp His Leu Gly Leu Lys Asp Leu Asn Ser Phe Val Gln Thr Ala Lys
35 40 45
Leu Phe Asn Thr Leu Leu Ser Ser Arg Leu Tyr Ala Leu Gly Ala Lys
50 55 60
His Val Gly Glu Thr Thr Ser Pro Leu Ile His Ala Val Gln Tyr Cys
65 70 75 80
Pro Ile Ser Ala Val Arg Lys Leu Leu Asp Asn Gly Ala Asp Pro Ser
85 90 95
Val Phe Ala Gly Lys Thr Asn Ala Phe Leu Ala Ala Ile Thr Arg Tyr
100 105 110

```
Arg Pro Lys Val Leu Lys Ile Leu Val Glu Pro Gly Val Ser Ala Ser
        115                 120                 125
Thr Pro Ile Thr Lys Leu Lys Ser Pro Leu Ser Ile Ala Ala Thr Arg
    130                 135                 140
Trp Arg Leu Ala Pro Leu Arg Ile Leu Leu Asn Ala Ala Pro Gly His
145                 150                 155                 160
Tyr Pro Asp Glu Asp Gly Ala Trp Met Gly Ala Leu Gly Arg Ala Leu
                165                 170                 175
Val Lys Asn Arg Val Arg Ala Ala Arg Leu Leu Leu Ala Ala Ala Ala
            180                 185                 190
Lys Thr Ile Ser Ser Pro Leu Gln Gly Leu Ser Val Asp Lys Ile Tyr
        195                 200                 205
Ser Val Leu Tyr Arg Ala Asn Cys Glu Ile Ile Arg Leu Leu Val Glu
    210                 215                 220
Phe Gly Trp Asp Pro Leu Ala Gln Leu Gly Met Gly Gly Leu Pro Leu
225                 230                 235                 240
His Ile Ala Ala Gln Thr Gly Arg Ala Asp Leu Val Arg Leu Leu Leu
                245                 250                 255
Ser Tyr Gly Ala Asp Val Asn Ala Arg Asn Gly Gln His Ala Thr Pro
            260                 265                 270
Leu His Leu Ala Cys Ala Asn Gly Gln Leu Gly Ala Val Glu Leu Leu
        275                 280                 285
Leu Asn Arg Gly Ala Asp Ala Asn Ala Ala Thr Leu Phe Arg Glu Thr
    290                 295                 300
Pro Leu His Gln Cys Met Arg Phe Gly Ser Leu Pro Leu Leu Glu Leu
305                 310                 315                 320
Leu Leu Thr Ala Gly Ala Asn Thr Ser Ala Arg Asp Glu Thr Gly Val
                325                 330                 335
Ser Pro Leu His Ile Gly Ile Ser Leu Arg Lys Pro Leu Glu Met Ile
            340                 345                 350
Val Arg Leu Ile Gln Ala Gly Ala Asp Ile Asn Ala Leu Asp Leu His
        355                 360                 365
Ser Arg Thr Ser Leu Phe Leu Ala Ala Lys Tyr Gly Asn Ala Arg Leu
    370                 375                 380
Val Gln Ala Leu Val Asp Ala Gly Val Asp Met Ala Ile Asp Glu Arg
385                 390                 395                 400
Ala Gly Ser Thr Gly Pro Leu His Val Ala Ala Thr Glu Asp Asn Phe
                405                 410                 415
Arg Val Ile Gln Pro Leu Ile Asp Ala Gly Leu Asp Ile Glu Ala Pro
            420                 425                 430
Asp Ser Leu Gly Arg Thr Pro Leu His Leu Ala Thr Ile His Asn Cys
        435                 440                 445
Leu Ile Phe His Glu Gly Ala His Ser Ser Arg Ser
    450                 455                 460
```

<210> 27319
<211> 178
<212> PRT
<213> A.fumigatus

```
<400> 27319
Gln Gln Phe Ile Thr Ala Leu Tyr Ser Met Arg Glu Leu Ile Arg Gln
1               5                   10                  15
Gly Ala Asp Pro Asn Arg Val Asn His Pro Gly Lys Ser Ala Ala Tyr
            20                  25                  30
Gly Ala Ile Ala Tyr Asn Arg Thr Glu Ala Leu Lys Phe Leu Leu Glu
```

```
        35                  40                  45
Ser Gly Ala Asp Val Ser Arg Leu Arg Gln Asp Gly Ile Ser Leu Leu
    50                  55                  60
His Asp Ala Ala Thr His Ser Ala Met Pro Arg Leu Ile Thr Cys Leu
65                  70                  75                  80
Leu Asp Tyr Gly Ala Asp Pro Leu Ala Ile Thr Ser Asp Gly Lys Thr
                85                  90                  95
Ala Leu His Tyr Ala Ala Thr Asn Asp Arg Tyr Lys Ser Ile Pro Pro
            100                 105                 110
Leu Leu Glu Ala Gly Thr Pro Ile Glu Ala Arg Asp Asn His Gly Asp
        115                 120                 125
Thr Ala Leu Leu Ile Ala Ala Arg Ser Ser Cys Glu Gly Thr Arg Asp
    130                 135                 140
Leu Leu Lys Arg Gly Ala Asn Leu Asn Ala Cys Asp Arg Arg Gly Arg
145                 150                 155                 160
Thr Pro Leu His His Cys Ser Ser His Thr Asp Ser Glu Ile Cys Thr
                165                 170                 175
Met Leu
```

<210> 27320
<211> 552
<212> PRT
<213> A.fumigatus

<400> 27320

```
Gln Ser Phe Lys Val Leu Ala Glu Cys Pro Ile Ile Val Val Ser Ile
1               5                   10                  15
Phe Gln Thr His Arg Asn Ser Val Ser Ala Asn Val Lys Leu Phe Val
            20                  25                  30
Pro Leu Ile Lys Ser Ile Leu Leu Leu Gln Ala Lys Pro Gln Glu Arg
        35                  40                  45
Ala His Ala Glu Ala Ala Ala Gln Gly Thr Ile Phe Thr Gly Val Cys
    50                  55                  60
Arg Glu Ile Lys Asn Arg Ala Ala Phe Gly Glu Phe Ile Thr Ala Gln
65                  70                  75                  80
Val Lys Thr Met Ser Phe Leu Ala Tyr Leu Leu Arg Met Tyr Ala His
                85                  90                  95
Gln Leu Gln Asp Phe Leu Pro Thr Leu Pro Ser Val Val Val Arg Leu
            100                 105                 110
Leu Gln Asp Cys Pro Arg Glu Lys Ser Ser Ala Arg Lys Glu Leu Leu
        115                 120                 125
Val Ala Ile Arg His Ile Ile Asn Phe Asn Tyr Arg Lys Ile Phe Leu
    130                 135                 140
Glu Lys Ile Asp Glu Leu Leu Asp Glu Arg Thr Leu Ile Gly Asp Gly
145                 150                 155                 160
Leu Thr Val Tyr Glu Thr Met Arg Pro Leu Ala Tyr Ser Met Leu Ala
                165                 170                 175
Asp Leu Ile His His Val Arg Asp His Leu Thr Arg Asp Gln Ile Arg
            180                 185                 190
Arg Thr Val Glu Val Tyr Thr Lys Asn Leu His Asp Asp Phe Pro Gly
        195                 200                 205
Thr Ser Phe Gln Thr Met Ser Ala Lys Leu Leu Leu Asn Met Ala Glu
    210                 215                 220
Arg Ile Ala Lys Leu Asp Asp Lys Arg Glu Ala Arg Tyr Phe Leu Ile
225                 230                 235                 240
```

```
Met Ile Leu Asp Ala Ile Gly Asp Lys Phe Ala Trp Ile Asn His Gln
                245                 250                 255
Phe Asp Asn Ala Val Lys Val Ser Lys Ala Tyr Lys Ala Gly Lys Lys
            260                 265                 270
Asp Ile Glu Leu Ser Ser Glu Arg Tyr Leu Ala Asp Lys Glu Asn Pro
        275                 280                 285
Pro Asp Trp Asp Glu Ile Asp Ile Phe Ser Ala Ser Pro Ile Lys Thr
    290                 295                 300
Ser Asn Leu Arg Asp Arg Gly Gly Asp Pro Val Ser Asp Asn Ile Phe
305                 310                 315                 320
Leu Phe Lys Asn Leu Ile Asn Gly Leu Lys Asn Ile Phe His Gln Leu
                325                 330                 335
Lys Asn Cys Asn Pro Glu His Ile Gln Ile Asp Pro Asn Asn Val Pro
            340                 345                 350
Ile Asn Trp Pro Glu Val Ser Tyr Gly Tyr Asn Ala Glu Glu Val Arg
        355                 360                 365
Val Ile Lys Lys Leu Phe His Glu Gly Ala Arg Val Phe Lys Tyr Tyr
    370                 375                 380
Gly Val Asp Gln Pro Ala Pro Glu Val Thr Tyr Ser Ser Pro Phe Asp
385                 390                 395                 400
Phe Leu Ala Ser Gln Tyr Thr Ala Pro Met Ser Arg Glu Glu Lys Glu
                405                 410                 415
Leu Leu Glu Ser Phe Gly Thr Val Phe His Cys Ile Asp Thr Ala Thr
            420                 425                 430
Phe His Glu Val Phe His Ser Glu Ile Pro Tyr Leu His Glu Leu Met
        435                 440                 445
Phe Glu His Gly Ala Leu Leu His Leu Pro Gln Phe Phe Leu Ala Ser
    450                 455                 460
Glu Ala Thr Ser Pro Ala Phe Ser Gly Met Val Leu Gln Tyr Leu Met
465                 470                 475                 480
Asp Arg Ile His Glu Val Gly Thr Ala Asp Met Thr Lys Ala Lys Ile
                485                 490                 495
Leu Leu Arg Met Phe Lys Leu Ser Phe Met Ala Val Thr Leu Phe Ser
            500                 505                 510
Val Gln Asn Glu Gln Val Leu His Pro His Val Thr Lys Ile Val Thr
        515                 520                 525
Lys Cys Ile Glu Leu Ser Val Thr Ala Glu Glu Pro Ser Leu His Arg
    530                 535                 540
Gly Arg Lys Arg Gly Thr Asp Trp
545                 550
```

<210> 27321
<211> 338
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (32),(43)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27321

```
Pro Ile Glu Leu Phe Leu Val Ala Asn Thr Asn Ser Ile Cys Asn Met
1               5                   10                  15
Ala Ser Thr Leu Arg Ser Ser Gly Cys His Arg His Arg Arg Asp Xaa
            20                  25                  30
```

```
Lys Arg Glu Asp Ile Gly Phe Ser Met Pro Xaa Ile Lys Lys Asn Leu
        35                  40                  45
Asp Ser Gly Lys Val Lys Arg Asn Met Gln Asp Cys Arg Ser His Ile
    50                  55                  60
Leu Ala Thr Arg Glu Leu Ala Met Gln Ile Tyr Asp Gln Leu Ser Lys
65                  70                  75                  80
Phe Gly Ala Ser Val Asp Ile Arg Val Thr Cys Ile Tyr Gly Gly Val
                85                  90                  95
Lys Lys Asp Glu Gln Arg Glu Ala Leu Lys Thr Ala Ala Ile Val Val
            100                 105                 110
Ala Thr Pro Gly Arg Leu Lys Asp Leu Lys Asp Asp Gly Ser Val Asp
        115                 120                 125
Leu Gly Lys Val Lys Tyr Leu Val Leu Asp Glu Ala Asp Arg Met Leu
    130                 135                 140
Asp Lys Gly Phe Glu Gln Asp Ile Lys Asp Ile Ile Arg Ser Thr Pro
145                 150                 155                 160
Asp Ser Thr Arg Gln Thr Val Met Phe Thr Ala Thr Trp Pro Pro Ser
                165                 170                 175
Val Arg Asp Leu Ala Ala Ser Phe Met Thr Ser Ala Val Thr Val Thr
            180                 185                 190
Ile Gly Gly Asp Pro Ser Ala Asp Pro Arg Ala Asn Thr Arg Ile Lys
        195                 200                 205
Gln Val Val Glu Val Val Lys Pro Gln Glu Lys Glu Ala Arg Leu Val
    210                 215                 220
Gln Leu Leu Ser Arg Ser Gln Arg Gly Ala Ala Val Gly Asp Lys Val
225                 230                 235                 240
Leu Val Phe Cys Leu Tyr Lys Lys Glu Ala Val Arg Val Glu Arg Leu
                245                 250                 255
Leu Arg Ser Lys Asn Phe Lys Val Ala Gly Ile His Gly Asp Leu Asn
            260                 265                 270
Gln His Glu Arg Phe Lys Ser Leu Glu Ala Phe Lys Thr Gly Ser Ala
        275                 280                 285
Thr Val Leu Val Ala Thr Asp Val Ala Ala Arg Gly Leu Asp Ile Pro
    290                 295                 300
Ser Val Lys Leu Val Ile Asn Val Thr Phe Pro Leu Thr Ala Glu Asp
305                 310                 315                 320
Tyr Val His Arg Ile Gly Arg Leu Val Thr Met Leu Ser Leu Gly Trp
                325                 330                 335
Lys Tyr
```

<210> 27322
<211> 63
<212> PRT
<213> A.fumigatus

```
<400> 27322
Ser Ala Asn Val Ala Ile Phe Leu Ile Cys His Arg Leu Ile Asn Val
1               5                   10                  15
Leu Arg Ala Ala Lys Gln Asp Val Pro Asp Ala Leu Leu Lys Phe Gly
            20                  25                  30
Thr Thr Val Lys Lys Lys Gln His Gly Ala Tyr Gly Ala Phe Phe Lys
        35                  40                  45
Asp Val Asp Thr Ser Lys Ser Ala Thr Lys Ile Val Phe Asp Glu
    50                  55                  60
```

<210> 27323
<211> 117
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (17),(61),(71)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27323
Ser Asp Pro Ile Leu Arg Glu Ala Pro Pro Leu Arg Pro Ile Met Ser
1 5 10 15
Xaa Ser His Leu Pro Ser Ser Phe Ser Lys Ile Tyr Asp Pro Leu Ser
20 25 30
Ser Phe Ser Ser Pro Thr Pro Ile Gln Ser Ala Thr Trp Pro Leu Leu
35 40 45
Phe Ala Arg Arg Asp Val Ile Gly Ile Ala Glu Thr Xaa Ser Gly Lys
50 55 60
Thr Leu Ala Phe Arg Cys Xaa Val Leu Arg Lys Ile Leu Ile Gln Gly
65 70 75 80
Arg Leu Ser Glu Thr Cys Lys Thr Ala Gly Val Ile Phe Trp Gln Pro
85 90 95
Gly Asn Leu Gln Cys Arg Tyr Met Ile Ser Tyr Arg Ser Leu Gly Pro
100 105 110
Leu Trp Thr Ser Glu
115

<210> 27324
<211> 69
<212> PRT
<213> A.fumigatus

<400> 27324
Lys Ser Leu Asp Thr Asn Arg Phe Phe Phe Val Gln Ala Lys Asp Lys
1 5 10 15
Asn Leu Ile Ala Asn Cys Cys Ala Ser Leu Arg Ala Thr Glu Gln Leu
20 25 30
Asn Lys Pro Ser Leu Leu Phe Leu Arg Leu Asn Asn Leu Asp His Leu
35 40 45
Phe Asn Pro Gly Ile Ser Thr Arg Ile Gly Gly Arg Ile Thr Thr Asp
50 55 60
Gly Asp Ser His Ser
65

<210> 27325
<211> 144
<212> PRT
<213> A.fumigatus

<400> 27325
Leu Met Lys Leu Glu Phe Val Glu Glu Gln Ala Ile Asp Arg Val His
1 5 10 15
Arg Leu Asn Gln Thr Val Asp Val Lys Ile Tyr Lys Met Ile Ile Lys
20 25 30
Glu Thr Val Glu Glu Arg Ile Leu Glu Leu Gln Asp Arg Lys Arg Glu

```
        35                  40                  45
Leu Ala Asn Leu Thr Ile Glu Gly Lys Ser Ala Ala Gly Lys Leu Thr
    50                  55                  60
Met Asn Asp Met Met Ala Leu Phe Gly Arg Asp Ala Glu Ala Arg Phe
65                  70                  75                  80
Ser Gly Asp Arg Gly Asn Ile Asp Val Ile Lys Ser Gly Ala Ser Leu
                85                  90                  95
Thr Glu Ala Ser Ala Ser Ser Ser Lys Asn Asn Gly Asn Glu Gly Ser
            100                 105                 110
Thr Arg Pro Trp Gly Arg Pro Ser Ser Gln Gly Arg Asn Arg His Ala
        115                 120                 125
Glu Lys Arg Ala Pro Arg Thr Glu Asp Ser Val Tyr Gly Arg Arg Trp
    130                 135                 140
```

<210> 27326
<211> 273
<212> PRT
<213> A.fumigatus

<400> 27326

```
Ala Lys Glu Glu Val Lys Asn Ser Ser Ser Arg Cys Gly Glu Cys Glu
1               5                   10                  15
Pro Asp Leu Lys Ala Thr Leu Gly Gly Phe Asp Ser Gly Lys Lys Lys
            20                  25                  30
Ser Ser His Lys Pro Arg Val Glu Met Asp Leu Thr Asp Ser Pro Ser
        35                  40                  45
Asn Lys Phe Ser Glu Met Gln Lys Ala Arg Ala Arg Arg Asn Arg Lys
    50                  55                  60
Ile Val Ile Asp Ser Asp Asp Glu Asp Glu Asp Asp Gly Glu Trp Ile
65                  70                  75                  80
Val Pro Glu Gly Gln Arg Gly Leu Pro Asn Leu Gly Lys Ala Gly Gly
                85                  90                  95
Thr Asp Asp Glu Asn Ala Glu Gly Gly Gly Glu Trp Leu Ser Ser Glu
            100                 105                 110
Asp Ser Glu Thr Asp Glu Asp Gly Pro Glu Ser Pro Thr Arg Lys Pro
        115                 120                 125
Ala Ile Val Ser Asn Leu Arg Arg Ser Gln Gly Ser Glu Ser Asp Thr
    130                 135                 140
Asp Glu Asp Ile Tyr Leu Asn Pro Gly Asp Asn Glu Thr Gln Val Leu
145                 150                 155                 160
Pro Ser Thr Lys Ile Arg His Leu Met Lys Ile Leu Arg Arg Glu Ala
                165                 170                 175
Ala Asp Tyr Lys Phe Ile Val Phe Ser Val Phe Thr Ser Met Leu Asp
            180                 185                 190
Lys Ile Glu Pro Phe Leu Lys His Ala Gly Ile Gly Phe Ala Arg Tyr
        195                 200                 205
Asp Gly Ser Met Arg Asn Asp Leu Arg Glu Ala Ser Leu Asp Lys Leu
    210                 215                 220
Arg His Asn Ser Ala Thr Arg Val Leu Leu Cys Ser Leu Arg Ala Gly
225                 230                 235                 240
Ala Leu Gly Leu Asn Leu Thr Ala Ala Ser Arg Val Val Ile Leu Glu
                245                 250                 255
Pro Phe Trp Asn Pro Val Ser Asp His Gly Glu Leu Val Ile Thr Val
            260                 265                 270
Asp
```

<210> 27327
<211> 481
<212> PRT
<213> A.fumigatus

<400> 27327
Phe Leu Cys Gly Phe Pro Leu Thr Glu Gly Cys Leu Thr Ser Val Ala
1 5 10 15
Leu Thr Arg Phe Arg Arg Thr Leu Ile Tyr Ala Arg Leu Glu Val Arg
20 25 30
Arg Leu Thr His Thr Leu His Met Pro Pro Ala Leu Ser Glu Ile Tyr
35 40 45
Gly Gly Pro Arg Pro Glu Trp Leu Arg Asp Ile Leu Glu Phe Leu Pro
50 55 60
Cys Leu Gln Ser Leu Ile Val Ser Arg Leu Pro Phe Phe Asp His Asn
65 70 75 80
Ala Met Met Ala Leu Lys Gly Pro Ala Lys Tyr Glu Pro Pro Asp Ala
85 90 95
Ala Ala Phe Lys Thr Tyr Ser Val Arg Leu Leu Met Ala Glu Arg Glu
100 105 110
Pro Asn Ala Thr Ser Gln Gly Leu Ala Glu Thr Leu Leu Arg Phe Gln
115 120 125
Glu Leu Val Tyr Leu Asp Leu Ser Tyr Thr Thr Pro Ala Arg Asp Leu
130 135 140
Met Val Phe Ser Ser Leu Ser Gln Leu Asn Arg Leu Gln Val Leu Lys
145 150 155 160
Leu Arg Gly Ile Gly Leu Arg Asp Arg Glu Ala Glu Phe Leu Ala Asn
165 170 175
Ala Ile Gly Ile Arg Val Arg Phe Leu Asp Leu Arg Asn Asn Leu Leu
180 185 190
Thr Asp Met Ala Val Arg Ser Leu Leu Gln Ala Ser Phe Val Pro Asn
195 200 205
Gly Pro Pro Thr Asn Glu Ala Glu Trp Arg Gly Gly Ser Phe Ile Phe
210 215 220
His Asp Arg Leu Leu Arg Arg Ala Ser Leu Asp Ala Leu Phe Val Lys
225 230 235 240
Ala Leu Thr Gln Pro Leu Thr Gly Arg Ser Trp Val Glu Asp Leu Ser
245 250 255
His Val Gly Ile Thr His Leu Tyr Ile Ala Asp Asn Gln Leu Thr Val
260 265 270
Glu Gly Val Ala Ser Leu Leu Ala Ser Ser Arg Leu His Val Leu Asp
275 280 285
Val Gly Thr Val Asp Thr Val Gln Ser Leu Gly Arg Ala Arg Gln Pro
290 295 300
Leu Ile Ser Ser Pro Met Thr Glu Lys Pro Ala Arg Phe Pro Gly Ala
305 310 315 320
Glu Lys Leu Val Pro Val Leu Gly Ser Ile Ala Lys Glu Ser Leu Thr
325 330 335
Tyr Leu Arg Ala His His Ala Leu Cys Thr Thr Asp Thr Ser Phe Lys
340 345 350
Ala Pro Asp Ser Thr Arg Asp Leu Leu Pro Glu Leu Pro Asp Glu Ala
355 360 365
Ser Ser Ser Leu Gln Gly Arg Ala Glu Met Asp Ala Ala Asp Glu Ile
370 375 380
His Glu Leu Ser Ala Glu Ala His Pro Val Phe Glu Leu Glu Ala Thr

385 390 395 400
Glu Ile Ala Gly Ile Ser Ser Pro Ala Gly Asp Val Asp Glu Thr Arg
405 410 415
Leu Gln Ser Arg Thr His Arg Asp Asp Pro Val Pro Lys Val Arg Arg
420 425 430
Gly Ser Ile Phe Ala Pro Glu Val Val Glu Pro Asn Gln Arg Val Gly
435 440 445
Ser Asn Gly Asn Met Ala Ala Asp Arg Ser Glu Thr Val Asn Tyr Asn
450 455 460
Val Phe Thr Ala Ser Ile Arg Ser Ser Pro Pro Gly Trp Lys Glu Lys
465 470 475 480
Lys

<210> 27328
<211> 92
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (3),(4),(5),(6),(7),(9),(10),(11),(12),(13),(14),(15),(16)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27328
Ala Leu Xaa Xaa Xaa Xaa Xaa Trp Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15
Val Leu Cys Gly Val Gly Ala Val Gly Asn Ile Leu Met Met Met Ile
20 25 30
Ala Asn Leu Val Gly Phe Ala Leu Gly Leu Asp Gly Leu Lys Gly Leu
35 40 45
Leu Thr Glu Ile Leu Gly Ser Tyr Ser Gly Ile Gly Phe Leu Ile Ala
50 55 60
Ala Cys Gly Ala Leu Phe Val Gly Ala Gln Val Met Phe Glu Ile Arg
65 70 75 80
Glu Glu Glu Leu Arg Ala Gly Ile Lys Met Lys Cys
85 90

<210> 27329
<211> 173
<212> PRT
<213> A.fumigatus

<400> 27329
Ser Ser Gly Asp Leu Val Leu Pro Val Gly Gly Val Arg Leu Gln Arg
1 5 10 15
Ala Ser Leu Ser Lys Val Thr Lys Pro Ser Arg Arg Ser Leu Thr Pro
20 25 30
Ala Ala Thr Pro Leu Asp Ser Ser Lys Arg Lys Gln Ser Thr Val Pro
35 40 45
Pro Ser Arg Ala Ser Thr Ile Pro Pro Glu Thr Ser Thr Asn Ala Ser
50 55 60
Pro Asp Thr Asp Glu Asp Lys Lys Gln Pro Glu Pro Glu Ala Glu Asn
65 70 75 80
Pro Asn Arg Leu Ile Lys Ser Glu Tyr Asp Asn Asp Pro Leu Leu Arg
85 90 95

```
Ser Tyr Ile Pro Ser Ala Pro Ser Glu Arg Ile Met Gln Ala Leu Leu
            100                 105                 110
Ala Glu Pro Pro Leu Thr Tyr Asn Ala Ala Arg Ala Gly Pro Pro Leu
        115                 120                 125
Thr Ala Lys Ala Pro Arg His Phe Cys Cys Met Cys Gly Tyr Trp Gly
    130                 135                 140
Lys Ile Arg Cys Lys Asn Cys His Val Arg Thr Cys Gly Leu Ala Cys
145                 150                 155                 160
Tyr Lys Val His Glu Asp Ser Arg Cys Gly Ala Phe Phe
                165                 170
```

<210> 27330
<211> 109
<212> PRT
<213> A.fumigatus

<400> 27330

```
Tyr Val Glu His Arg Leu Arg Gly Lys Lys Ser Leu Leu Asp Asn His
1               5                   10                  15
Gly His Ser Thr Phe His Asp Asp Trp Thr Asn Tyr Arg Ala Trp Pro
            20                  25                  30
Met Gly Arg Ala Arg Gln Ala Leu Ser Asp Pro Arg Ala Gly Thr Lys
        35                  40                  45
Gly Ala Ser Val Ala Ile Gly Arg Lys Lys Gln Lys Ile Leu Gln Leu
    50                  55                  60
Pro Ser Met Trp Lys Phe Phe Asn Gly Leu Ile Cys Met Ile His Lys
65                  70                  75                  80
Gly Tyr Ser Ala Lys Phe Asp Asp Ala Pro Gln Glu Lys Leu Glu Lys
                85                  90                  95
Ile Pro His Val Ser Gly Gln Cys Glu His Asp Gly Leu
            100                 105
```

<210> 27331
<211> 60
<212> PRT
<213> A.fumigatus

<400> 27331

```
Thr Ile Met Ala Thr Gln His Phe Met Thr Thr Gly Gln Thr Thr Val
1               5                   10                  15
Pro Gly Gln Trp Val Val Arg Val Lys Pro Tyr Leu Thr Pro Glu Leu
            20                  25                  30
Val Gln Lys Glu His Leu Ser Leu Leu Glu Glu Arg Asn Arg Arg Ser
        35                  40                  45
Cys Asn Ser Leu Gln Cys Gly Asn Ser Ser Thr Val
    50                  55                  60
```

<210> 27332
<211> 214
<212> PRT
<213> A.fumigatus

<400> 27332

```
Ala Gly Asn Val Asn Met Met Asp Cys Glu Thr Leu Pro Leu Thr Ile
1               5                   10                  15
Ser Gln Val Val Ser Ile Glu Pro Glu Gln Leu Tyr Arg His Cys Asn
```

```
            20                  25                  30
Ile Gln Pro Asn Ser Pro Trp Gly Ile Ser Arg Val Ser Thr Arg Thr
        35                  40                  45
Lys Leu Gly Ala Pro Pro Tyr Ser Tyr Thr Tyr Arg Asp Asp Val Ala
    50                  55                  60
Gly Ser Gly Thr Val Ala Tyr Val Ile Asp Thr Gly Ile Asn Asn Lys
65                  70                  75                  80
His Val Glu Phe Glu Gly Arg Ala Gln Lys Gly Pro Lys Phe Val Ser
                85                  90                  95
Asp Asn Val Ser Asn Asp Glu Asp Val His Gly His Gly Thr His Cys
            100                 105                 110
Ala Gly Thr Ile Ala Ser Arg Ala Tyr Gly Val Ala Lys Lys Ala Asn
        115                 120                 125
Val Val Gly Val Lys Val Phe Gly Asp Arg Thr Gly Thr Ala Gln Thr
    130                 135                 140
Ser Asp Ile Ile Lys Ala Leu Glu Trp Val Ile Ser Asp Ile Ser Ala
145                 150                 155                 160
Lys Gly Met Gly Gly Arg Ala Val Val Asn Leu Ser Leu Gly Gly Pro
                165                 170                 175
Pro Ser Asp Ala Leu Asp Ala Ala Val Ala Ser Thr Val His Lys Gly
            180                 185                 190
Val Val Val Cys Val Ala Ala Gly Asn Glu Pro Glu Ala Ser Thr Phe
        195                 200                 205
Ala Thr Thr Asn Tyr Asn
    210
```

<210> 27333
<211> 110
<212> PRT
<213> A.fumigatus

```
<400> 27333
Arg Lys Leu Asp Pro Ile Lys Asp Ser Gly Tyr Thr Arg Thr Arg Ala
1               5                   10                  15
Phe Gly Arg Leu Val Asp Arg Leu Ser Ser Lys His Arg Glu Asn Ile
            20                  25                  30
Met Phe Ser Thr Thr Ser Tyr Ser Ser Leu Ala Pro Ala Leu Ala Ser
        35                  40                  45
Ala Thr Arg Ile Arg Arg Asn Ile Ala Thr Ala Gln Ser His Asn Phe
    50                  55                  60
Arg Val Ile Thr Asn Lys Gly Thr Ser Gly Ser Phe Ser Arg Val Lys
65                  70                  75                  80
Cys Asn Cys Arg Arg Ser Glu Asp Ile Leu Thr Lys Leu Ala Thr Asp
                85                  90                  95
Thr Thr Asn Asn Asp Ala Val Val Ser Arg Leu Ile Val Ala
            100                 105                 110
```

<210> 27334
<211> 61
<212> PRT
<213> A.fumigatus

```
<400> 27334
Arg Ala Lys Gly Leu Ser Met Gly Arg Glu Asn His Leu His Ser Thr
1               5                   10                  15
Tyr Pro His Asn Ser Gln Cys His Leu Arg His Ser Lys Ser Pro Leu
```

```
            20                  25                  30
Tyr Ile Pro Ile Leu Pro Asn Thr Pro Asp Asn Cys Cys Arg Pro Ala
        35                  40                  45
Phe Pro Ser His Pro Arg Pro Tyr Val Lys Lys Leu Ser
    50                  55                  60
```

<210> 27335
<211> 192
<212> PRT
<213> A.fumigatus

<400> 27335

```
Thr Gln Glu Tyr Asn Thr Met Tyr Gly Ala Ser Thr Gly Pro Gln Thr
1               5                   10                  15
Gly Ile Asn Thr Pro Arg Ser Ser Gln Ser Leu Arg Pro Leu Ile Leu
            20                  25                  30
Thr His Gly Ser Leu Glu Phe Ser Phe Leu Val Pro Thr Ser Leu His
        35                  40                  45
Phe Tyr Ala Ser Gln Leu Lys Glu Thr Phe Thr Ala Ser Leu Pro Gln
    50                  55                  60
Pro Thr Asp Glu Leu Ala Gln Asp Asp Glu Pro Ser Ser Val Ala Glu
65                  70                  75                  80
Leu Val Ala Arg Tyr Ile Gly His Val Ala Arg Glu Val Glu Glu Gly
                85                  90                  95
Glu Asp Asp Ala Gln Gly Thr Cys Leu Glu Val Leu Lys Leu Ala Leu
            100                 105                 110
Asn Glu Phe Glu Arg Ala Phe Met Arg Gly Asn Asp Val His Ala Val
        115                 120                 125
Ala Ala Ala Leu Pro Gly Ile Thr Ala Lys Lys Ile Leu Val Val Glu
    130                 135                 140
Ala Tyr Tyr Ala Gly Arg Ala Ala Ala Gly Arg Pro Thr Lys Pro Tyr
145                 150                 155                 160
Glu Ser Gly Ala Ile Pro Arg Arg Leu Arg Arg Lys Ser Gln Tyr Leu
                165                 170                 175
Leu Ser Pro Ser Val Ala Arg Ala Thr Ser Lys Ser Thr Leu Met Ser
            180                 185                 190
```

<210> 27336
<211> 62
<212> PRT
<213> A.fumigatus

<400> 27336

```
Ile Trp Arg Tyr Ser Ala Pro Pro Pro Lys Lys Lys Pro Val Ser Thr
1               5                   10                  15
Gln Ser Phe Gly Gly Gln Gly Asn Ile Glu Glu Tyr Phe Asp Glu Leu
            20                  25                  30
Arg Glu Ile Tyr Thr Thr Tyr Pro Ser Phe Val Glu Asp Leu Ile Ser
        35                  40                  45
Ser Ser Ala Val Phe Thr Thr Gly Ala Glu Gly Ser Ala Leu
    50                  55                  60
```

<210> 27337
<211> 184
<212> PRT
<213> A.fumigatus

<400> 27337
Pro Pro Ser Thr Cys Cys Gly Ser Ser Ala Ser Arg Met Asp Ser Ala
1 5 10 15
Ser Ile Ser Ser Thr Val Lys Thr Arg Ala Thr Thr Pro Thr Ser Ala
20 25 30
Ala Met Val Pro Pro Val Ser Ser Ser Ala Val Ser Lys Ser Ser Val
35 40 45
Pro Ser Ala Ser Cys Ser Ser Leu Cys Trp Pro Ser Ala Val Ala Ser
50 55 60
Met Ser Ser Thr Ala Ala Arg Ser Thr Ser Thr Ala Ala Pro Ser Gly
65 70 75 80
Ala Asp Ser Arg Thr Thr Gly Leu Pro Ser Thr Pro Glu Ser Ser Thr
85 90 95
Ala Ser Leu Pro Gln Pro Ser Ile Pro Pro Phe Ser Ser Met Pro Pro
100 105 110
Val Ala Ser Ala Ser Trp Leu Pro Arg Lys Pro Pro Ser Thr Val Leu
115 120 125
Lys Ala Gly Thr Thr Thr Pro Ser Gly Ala Thr Ser Arg Pro Pro Arg
130 135 140
Met Lys Ala Thr Phe Pro Ser Ala Thr Thr Arg Val Thr Thr Pro Thr
145 150 155 160
Ile Cys Ala Ser Pro Arg Ala Gly Pro Gly Ser Ser Val Ser Pro Pro
165 170 175
Gly Arg Ala Ala Pro Ser Pro Thr
180

<210> 27338
<211> 461
<212> PRT
<213> A.fumigatus

<400> 27338
Arg Ser Cys Gly Met Ser Met Thr Ser His His Pro Ala Ala Asn Asn
1 5 10 15
Pro Ser Pro Thr Ser Arg Val Gln Ser Ser Val Ile Gln Ser Ser Leu
20 25 30
Thr Ser Val Thr Thr Lys Met Thr Val Thr Lys Pro Thr Pro Lys His
35 40 45
Thr Phe Ala Glu Arg Ala Ala Ala Asn Asn Leu Asn Asp Ala Gln Ile
50 55 60
Leu Asn Ser Asn Asn Pro Ala Gly Ala Asp Ile Pro Glu Lys Ser Asp
65 70 75 80
Val Val Val Ala Gly Gly Gly Ile His Gly Leu Ile Tyr Ala Ile His
85 90 95
Ala Ala Lys Tyr Lys Pro Gly Lys Leu Asn Ile Ser Leu Ile Glu Lys
100 105 110
Gly Thr Lys Pro Gly Tyr Lys Ile Gly Glu Ser Thr Leu Pro Leu Phe
115 120 125
Ser Leu Trp Cys Lys Met His Gly Leu Thr Ala Glu Tyr Met Leu Arg
130 135 140
Leu Phe Gly Leu Lys Asp Gly Leu Cys Phe Tyr Phe Leu Asp Arg Glu
145 150 155 160
Asn Gln Gly His Tyr Thr Asp Phe Cys Ser Asn Gly Thr Pro Gly Leu
165 170 175
Phe Leu Ser Gly Phe Gln Ile Glu Arg Pro Ile Ser Glu Leu Leu Phe

```
            180                 185                 190
Thr Leu Leu Ala Gln Arg Ser Gly Val Asn Val Phe His Gly Arg Gln
        195                 200                 205
Val Asp Phe Asn Gly Ser Thr Ile Arg Gly Gly Phe Gln Asn Asn Arg
    210                 215                 220
Val Ala Ile Asn Pro Gly Lys Phe Asp Gly Lys Pro Ala Thr Thr Ile
225                 230                 235                 240
Asp Ser Ser Leu Leu Val Asp Ala Thr Gly Arg Phe Arg Gln Leu Ala
                245                 250                 255
Ser Lys Lys Ala Ser Leu His Arg Phe Glu Gly Trp Asn Tyr Asp Ala
            260                 265                 270
Phe Trp Gly Tyr Phe Thr Ala Pro Lys Asp Glu Ser Asn Ile Pro Phe
        275                 280                 285
Arg Tyr Tyr Glu Gly Asp His Thr Asn His Leu Cys Phe Pro Glu Gly
    290                 295                 300
Trp Ala Trp Val Ile Arg Leu Pro Ser Trp Glu Gly Ser Pro Ile Pro
305                 310                 315                 320
Asn Leu Met Asp Met Ile Ser Tyr Leu Leu Asp Cys Ala Glu Ala Gly
                325                 330                 335
Val Pro Gly Asp Gln Ile Pro Ser Ser Glu Glu Leu Ala Lys Met Phe
            340                 345                 350
Asp Leu Lys Phe Arg Trp Val Thr Ser Ile Gly Phe Ala Val Arg Asn
        355                 360                 365
Asp Val Lys Tyr Pro Glu Asp Met Ser Ala Tyr Gly Thr Arg Glu Ala
    370                 375                 380
Glu Arg Lys Phe Asn Tyr Phe Val Glu Lys Tyr Asp Leu Ile Lys Lys
385                 390                 395                 400
Phe Met Ser Asn Phe Glu Leu Val Glu Asp Leu Tyr Gly Pro Gly Thr
                405                 410                 415
Thr Trp Tyr Ile Arg Lys Ser Leu Thr Tyr Gln Ser Pro Val Val Ser
            420                 425                 430
Gly Pro Gly Trp Leu Ala Val Gly Asp Ala Cys Gly Phe Thr Asn Pro
        435                 440                 445
Leu His Cys Leu His His Gly Ala Gly Arg Ser Arg Ala
    450                 455                 460
```

<210> 27339
<211> 429
<212> PRT
<213> A.fumigatus

<400> 27339

```
Gly Ala Ala Pro Ser Ser Pro Val Val Lys Thr Val Gln Arg Val Gly
1               5                   10                  15
Glu Ala Thr Gly Val Ala Asp Ser Lys Pro Ala Arg Ala Arg Asp Asp
            20                  25                  30
Arg Gly Leu Val Gly Lys Arg Leu Ala Asp Val Pro Arg Arg Ser Arg
        35                  40                  45
Ser Ile Glu Ile Leu Asn Glu Leu Glu Val Ala His Glu Leu Leu Asp
    50                  55                  60
Glu Val Ile Leu Phe Asn Lys Val Val Glu Leu Ala Leu Arg Leu Thr
65                  70                  75                  80
Gly Ala Val Arg Gly His Val Leu Trp Val Leu Asp Ile Val Ala Asp
                85                  90                  95
Gly Glu Pro Asp Ala Gly Asn Pro Pro Glu Leu Lys Val Lys His Leu
            100                 105                 110
```

```
Gly Glu Leu Leu Gly Ala Gly Asp Leu Val Ala Gly Asp Thr Ser Leu
        115                 120                 125
Gly Ala Val Glu Gln Val Arg Asp His Val His Gln Val Gly Asp Gly
    130                 135                 140
Ala Ala Leu Pro Gly Gly Glu Thr Asp Asp Pro Gly Pro Ala Leu Gly
145                 150                 155                 160
Glu Ala Gln Met Val Gly Val Val Thr Leu Val Val Ala Glu Gly Asn
                165                 170                 175
Val Ala Phe Ile Leu Gly Gly Arg Glu Val Ala Pro Glu Gly Val Val
            180                 185                 190
Val Pro Ala Phe Lys Thr Val Glu Gly Gly Phe Leu Gly Ser Gln Leu
        195                 200                 205
Ala Glu Ala Thr Gly Gly Ile Asp Glu Lys Gly Gly Ile Asp Gly Cys
    210                 215                 220
Gly Arg Leu Ala Val Glu Leu Ser Gly Val Asp Gly Asn Pro Val Val
225                 230                 235                 240
Leu Glu Ser Ala Pro Asp Gly Ala Ala Val Glu Val Asp Leu Ala Ala
                245                 250                 255
Val Glu Asp Ile Asp Ala Thr Ala Leu Gly Gln Gln Ser Glu Glu Gln
            260                 265                 270
Leu Ala Asp Gly Thr Leu Asp Leu Glu Thr Ala Glu Glu Glu Thr Gly
        275                 280                 285
Gly Thr Ile Ala Ala Glu Val Gly Val Val Ala Leu Val Phe Thr Val
    290                 295                 300
Glu Glu Ile Glu Ala Glu Ser Ile Leu Glu Ala Glu Glu Pro Gln His
305                 310                 315                 320
Val Leu Gly Gly Gln Ala Val His Leu Ala Pro Gln Gly Glu Glu Arg
                325                 330                 335
Glu Arg Ala Leu Pro Asn Leu Val Ala Trp Leu Gly Ala Leu Leu Asp
            340                 345                 350
Gln Gly Asp Val Glu Leu Ala Trp Leu Val Leu Gly Ser Val Asn Arg
        355                 360                 365
Val Asp Glu Ala Met Asp Thr Thr Thr Ser Asp Asn Asn Val Gly Phe
    370                 375                 380
Leu Arg Asp Val Cys Thr Cys Arg Val Val Gly Val Glu Asp Leu Cys
385                 390                 395                 400
Ile Val Glu Ile Val Gly Gly Ser Thr Leu Ser Lys Gly Val Leu Arg
                405                 410                 415
Gly Gly Leu Gly His Ser His Phe Gly Ser Asp Arg Cys
            420                 425
```

<210> 27340
<211> 76
<212> PRT
<213> A.fumigatus

<400> 27340

```
Pro Arg Ala Val Pro His Leu Arg Leu Ala Tyr Val Thr Thr Met Tyr
1               5                   10                  15
Asn Met Met Ala Arg Glu Cys Ala Glu Asn Gln Gln His Trp Leu Pro
            20                  25                  30
Leu Arg Glu Ser Arg Pro Lys Asn Leu Gly Thr Trp Phe Leu Val Thr
        35                  40                  45
Lys Lys Leu Met Ile Tyr Tyr Leu His Tyr Pro Asn Cys Lys His Lys
    50                  55                  60
Ala Asp Pro Thr Ala Arg Gly Asp Leu Pro Ser Glu
```

65 70 75

<210> 27341
<211> 137
<212> PRT
<213> A.fumigatus

<400> 27341
Ser Lys Thr Ser Met Gln Ala Leu Leu Arg Arg Gly Thr Ser Leu Phe
1 5 10 15
Gly Ser Thr Pro Ser Gly Ser Pro Lys Glu Ser Gly Gly Ile Asp Glu
20 25 30
Phe Arg Lys Ala Pro Ser Pro Asp Val Leu Phe Pro Lys Val Asp Pro
35 40 45
Ala Val Asp Gly Glu Glu Cys Leu His Asp Cys Ala Ser Cys Thr Val
50 55 60
Lys Tyr Pro Ala Lys Phe Asp Val Asp Tyr Glu Asp Glu Leu Tyr Gly
65 70 75 80
His Val Asn Gly Trp Ala Thr His Leu Leu Val Ala Thr Gly Lys Thr
85 90 95
Asp Trp Val Arg Asp Val Ala Asp Glu Lys Gly Ser Leu Met Glu Ala
100 105 110
Ile Glu Lys Gly Gly Leu Val Pro Ser Asn Gly Asp Val Val Phe Ser
115 120 125
Ser Glu Pro Pro Ile Arg Val Val Gly
130 135

<210> 27342
<211> 391
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (10)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27342
Gly Arg Lys Ser Phe Leu Ile Pro Pro Xaa Ile Gly Leu Ile Leu Gly
1 5 10 15
Arg Val Leu Arg Ile Leu Asn Phe Pro Phe Arg Pro Asn Ser Ile Pro
20 25 30
Phe Cys Arg Pro Ala Leu Pro His Pro His Pro Pro Glu Ser Asn Thr
35 40 45
Ser Asp Val Asp Gln Asp Asp Lys Ile Arg Val Leu Asp Ala Pro Ala
50 55 60
Gly Asn Pro Ser Glu Asp Leu Asn Ala Glu Asp Gln Arg Leu Leu Asp
65 70 75 80
Asn Trp Cys Asn Ser Thr Glu Gln Ser Leu Ala His Ser Lys Ser Lys
85 90 95
Asp Arg Pro Trp Gln Ala Ile Ile Arg Arg Glu Ala Ser Arg His Pro
100 105 110
Ala Leu Arg His Ser Thr Leu Ala Leu Ser Ala Met Glu Leu Ala Ser
115 120 125
Thr Ser Glu Ala Gly Thr Pro Gln Arg Gln Arg His Leu Gln Ala Ala
130 135 140

```
Glu Ser His Tyr Thr Gln Ala Thr Glu Gln Leu Pro Asn Ile Leu Asp
145                 150                 155                 160
Ser Arg Thr Ala Ser Gly Pro Asn Ala Ala Phe Ser Thr Ala Ser Ile
                165                 170                 175
Leu Phe Met Cys Asp Leu Ala Ser Ser Ala Leu Ala Gly Glu Gly Ser
            180                 185                 190
Lys Ser Val Phe Pro Ser Pro Asp Asn Gln Thr Pro Ala Ser Gln Glu
        195                 200                 205
Ser Pro Asp Pro Ser Pro Ser Ala Cys Pro Ser Leu Gln Lys Leu Leu
    210                 215                 220
Asp Leu Phe Asp Thr Ile Arg Ala Leu Leu Pro Cys Ala Glu Thr Leu
225                 230                 235                 240
Asn Lys Val Glu Thr Gly Ala Leu Lys Asp Leu Phe Thr Gln Gly Asp
                245                 250                 255
Pro Tyr His Gln Leu Pro Ser Thr Tyr Thr Leu Thr Ile Leu Ser Met
            260                 265                 270
Lys Asn Leu Asn Ala Leu Ser Ala Arg Ser Asp Pro Ala His Glu Thr
        275                 280                 285
Ala Val Tyr Asn Asp Thr Ile Ala His Leu Asp Asn Ser Leu Glu Met
    290                 295                 300
Leu Thr Lys Gly Gly Asp Pro Thr Thr Ile Ala Leu Arg Trp Met Phe
305                 310                 315                 320
Arg Ile Pro Ser Arg Tyr Leu Asp Leu Val Arg Glu Lys Gln Pro Leu
                325                 330                 335
Ala Leu Ile Ile Phe Ala His Tyr Cys Ala Val Leu His His Leu Arg
            340                 345                 350
Asp Arg Trp Trp Met Gly Asp Leu Gly Ala Arg Leu Leu Lys Glu Ile
        355                 360                 365
Cys Arg Leu Leu Gly Ser Ala Arg Met Gly Ser Ile Leu Trp Ala Thr
    370                 375                 380
Asp Ile Val Gly Ile Gln Thr
385                 390
```

<210> 27343
<211> 135
<212> PRT
<213> A.fumigatus

```
<400> 27343
Leu Cys Gly Phe His Phe Thr Gly Ser Glu Ala Val Asp Ala Ala Met
1                   5                   10                  15
Lys Leu Ser His Gln Tyr Phe Ala Glu Glu Asn Pro Asp Thr Arg Arg
            20                  25                  30
Thr Lys Phe Ile Ser Arg Arg Gly Ser Trp His Gly Cys Thr Leu Gly
        35                  40                  45
Ser Leu Ser Leu Gly Asp Phe Lys Pro Arg Lys Ala Arg Phe Lys Ser
    50                  55                  60
Ile Leu His Pro Asn Val Thr His Val Ser Ala Cys Asp Pro Tyr His
65                  70                  75                  80
Ala Leu Lys Asp Asn Glu Asp Leu Glu Met Tyr Val Ala Arg Leu Lys
                85                  90                  95
Gln Glu Leu Asp Glu Glu Phe Gln Arg Gln Gly Pro Asp Thr Val Cys
            100                 105                 110
Ala Phe Phe Leu Glu Pro Val Ala Gly Thr Val Arg Asp Ser Leu Cys
        115                 120                 125
Leu Ile Gly Leu Asp Ile His
```

130 135

<210> 27344
<211> 371
<212> PRT
<213> A.fumigatus

<400> 27344

```
Ser Phe Pro Thr Ser Thr Leu Gln Arg Lys Ile Gln Thr Pro Asp Glu
1               5                  10                  15
Pro Ser Leu Ser Arg Asp Ala Val Leu Gly Met Val Ala Pro Trp Gly
            20                  25                  30
Leu Cys Pro Trp Glu Thr Ser Ser Arg Gly Arg Leu Gly Leu Asn Gln
        35                  40                  45
Phe Tyr Ile Pro Met Ser Pro Thr Tyr Gln His Ala Thr Arg Thr Met
    50                  55                  60
Pro Ser Lys Ile Met Lys Ile Trp Arg Cys Met Trp Leu Asp Leu Ser
65                  70                  75                  80
Arg Ser Ser Thr Arg Asn Ser Lys Gly Arg Asp Leu Thr Pro Ser Val
                85                  90                  95
His Phe Ser Leu Ser Gln Trp Pro Glu Gln Tyr Ala Thr Leu Tyr Val
            100                 105                 110
Leu Leu Asp Leu Thr Tyr Ile Asn Arg Tyr Glu Ile Gln Ala Leu Gly
        115                 120                 125
Cys Val Ala Ala Val Pro Gly Tyr Leu Lys Ala Met Arg Glu Val Cys
    130                 135                 140
Asp Arg Tyr Gly Ala Leu Leu Val Phe Asp Glu Ile Met Cys Gly Met
145                 150                 155                 160
Gly Arg Thr Gly Ala Ile His Ala Trp Gln Val Asp Gly Val Val Pro
                165                 170                 175
Asp Ile Gln Leu Val Gly Lys Gly Leu Ala Ala Gly Tyr Gly Thr Ile
            180                 185                 190
Ser Ala Leu Leu Val Ser Asp Arg Val Val Ser Gly Leu Lys Gln Gly
        195                 200                 205
Gly Gly Tyr Phe Val His Gly Gln Thr Tyr Gln Ser His Pro Leu Gly
    210                 215                 220
Cys Ala Ala Ala Val Glu Val Gln Arg Ile Val Lys Glu Tyr Asn Leu
225                 230                 235                 240
Val Asp Asn Cys Arg Lys Met Gly Glu Tyr Leu Gly Met Glu Leu Lys
                245                 250                 255
Leu His Leu Gly Asp His Pro His Val Gly Asp Ile Arg Gly Arg Gly
            260                 265                 270
Leu Phe Trp Ala Val Glu Phe Met Glu Asp Lys Asp Ser Lys Thr Pro
        275                 280                 285
Phe Asp Ser Asn Leu Thr Leu Ser Lys Arg Leu Gln Thr Lys Gly Leu
    290                 295                 300
Glu Lys Gly Tyr Asp Ile Cys Leu Phe Ala Ala Thr Gly Ala Val Asp
305                 310                 315                 320
Gly Trp Asn Gly Asp His Phe Leu Leu Ala Pro Pro Tyr Thr Val Gly
                325                 330                 335
Lys Gln Asp Val Asp Glu Ile Val Ser Arg Val Val Lys Val Ile Asp
            340                 345                 350
Ser Val Phe Glu Asp Ile Tyr Ala Leu Arg Gln Gln His Pro His His
        355                 360                 365
Ser Gly Phe
    370
```

<210> 27345
<211> 419
<212> PRT
<213> A.fumigatus

<400> 27345
Pro Asn Leu Leu Gln Asp Val Ser Leu His Val Asn Asp Cys Leu Asp
1 5 10 15
Gly Lys Pro Thr Ala Asn Ser Ala Glu Thr His Ser Asn Ala Pro Arg
20 25 30
Gln Ala Leu Ser Arg Ser Asp Arg Ala Ala Val Pro Arg Pro Ala Gln
35 40 45
Arg Asp Pro Phe Ser Ser Gly Gly Ile Lys Ser Arg Ser Ala Phe Ser
50 55 60
Met Ile Met Ala Gly Asn Ala Glu Asp Ala Ala Trp Ala Ser Ala Ala
65 70 75 80
Ala Gly Glu Val Ala Ser Arg Gly Lys Gln Ala Tyr Gln Arg Thr Cys
85 90 95
Pro Phe Tyr Lys Ile Leu Pro Asn Phe Ser Ile Cys Val Asp Ala Phe
100 105 110
Arg Tyr Gly Ala Val Glu Gly Cys Asn Ala Tyr Phe Leu Ser His Tyr
115 120 125
His Ser Asp His Tyr Met Gly Leu Thr Ser Ser Trp Arg His Gly Pro
130 135 140
Ile Tyr Cys Ser Arg Ala Thr Ala Asn Leu Val Arg Gln Gln Leu Lys
145 150 155 160
Val Asp Pro Lys Trp Val Val Asp Leu Pro Phe Glu Lys Lys Thr Glu
165 170 175
Val Pro Gly Thr Asn Gly Val His Val Thr Met Ile Glu Ala Asn His
180 185 190
Cys Pro Gly Ser Ala Ile Phe Leu Phe Glu Lys Gln Met Gly Ser Gly
195 200 205
Pro Ser Ala Arg Val Gln Arg Ile Leu His Cys Gly Asp Phe Arg Ala
210 215 220
Ser Pro Thr His Val Gln His Val Leu Leu Arg Pro Glu Val Asp Asp
225 230 235 240
Pro Thr Thr Gly Gln Arg Arg Gln Gln Lys Ile Asp Val Cys Tyr Leu
245 250 255
Asp Thr Thr Tyr Leu Ser Pro Lys Tyr Ala Phe Pro Ser Gln Glu Asp
260 265 270
Val Ile Glu Ala Cys Ala Asn Leu Cys Val Ser Leu Asp Gln Asn Pro
275 280 285
Glu Gln Gly Val Gly Gln Ser Leu Leu Gln Lys Glu Ser Ser Gly Ala
290 295 300
Gly Lys Val Met Ser Arg Phe Phe Ser Ala Met Ser Gly Ser Arg Gly
305 310 315 320
Asn Ser Asp Lys Gln Ala Ala Gln Ala Gln Gly Arg Leu Leu Val Val
325 330 335
Ile Gly Thr Tyr Ser Ile Gly Lys Glu Arg Ile Cys Leu Gly Ile Ala
340 345 350
Arg Ala Leu Lys Ser Lys Ile Tyr Ala Thr Pro Ala Lys Lys Arg Val
355 360 365
Cys Glu Cys Leu Glu Asp Pro Glu Leu Ser Ser Leu Leu Thr Asp Asn
370 375 380
Pro Ala Glu Ala Gln Val His Met Gln Thr Leu Phe Glu Ile Arg Ala

385 390 395 400
Glu Thr Leu Ala Asp Tyr Leu Asp Ser Met Lys Pro His Phe Ser Arg
405 410 415
Val Val Gly

<210> 27346
<211> 80
<212> PRT
<213> A.fumigatus

<400> 27346
Gly Lys Arg Ala Ser Arg Lys Thr Ser Gly Pro Lys Leu Glu Gln Leu
1 5 10 15
Arg Arg Ser Pro Lys Thr Ser Pro Thr Phe Pro Glu Lys Ile Leu Trp
20 25 30
Arg Gln Lys Glu Gln Phe Ser Asp Gly Val Gly Asn Ser Trp Ile Asp
35 40 45
Gly Leu Lys Asp Gln Pro Glu Lys Gln Ile Thr Asp Glu Met Met Lys
50 55 60
Asn Pro Lys Pro Glu Trp Gly Asn Asp Ile Pro Asp Thr Lys Glu Ala
65 70 75 80

<210> 27347
<211> 92
<212> PRT
<213> A.fumigatus

<400> 27347
His Gln Gly Ser Val Ser Pro Pro Ile Ser Glu Ala Gln Val Gly Asp
1 5 10 15
Ile Ser Leu Thr Thr Thr Phe Arg Tyr Trp Tyr Arg Met Met Phe Asp
20 25 30
Glu His Phe Pro Pro Thr Cys Ala Ser Thr Val Glu Arg Trp Thr Pro
35 40 45
Thr Trp Ser Lys Gln Thr Asp Pro Ser Gly Arg Tyr Gly Pro Gln Leu
50 55 60
Ile Phe Gly Gln Arg Phe Ser His Ala Asp Thr Ser Ile Ser Arg Ala
65 70 75 80
Ile Ala Ile His Ala Ala Lys Tyr Glu His Ile Glu
85 90

<210> 27348
<211> 272
<212> PRT
<213> A.fumigatus

<400> 27348
Ile Leu Ala Arg Ser Val Ala Pro Cys Gly Glu Glu Trp Val Gln Phe
1 5 10 15
Phe Tyr Arg His Lys Pro Ser Asp Thr Val Pro Asp Ser Leu Leu Gly
20 25 30
Asn Asp Val Cys Ile Thr Thr Gln Pro Pro Pro Ser Ile Gln His Lys
35 40 45
Asn Cys Arg Lys Gly Asn Ser Thr Val Gln Ile Cys Glu Asn Asn Asn
50 55 60

```
Lys Arg Ser Tyr Glu Gln Pro Arg Met Pro Arg Asp Ser Asn Asn Leu
65                  70                  75                  80
Pro Thr Thr Lys Arg Tyr Ile Thr Thr His Ser Thr Glu Gly Glu Ser
                85                  90                  95
Val Phe Ile Ser His Ser Gln Ile Pro Glu Tyr Ile Pro Ser Lys Pro
            100                 105                 110
Ile Ser Asp Asp Gly Asp Ile Ala Leu Leu Tyr Ala Thr Val Ser Asn
        115                 120                 125
Pro Val Ser Val Asp Asp Glu Ile Asp Val Gln Ala Tyr Asp Glu Tyr
    130                 135                 140
Leu His Thr Ser Pro Gly Leu Thr Thr Ser Leu Gly Thr Val Leu Gln
145                 150                 155                 160
Thr Ile Asp Leu His Pro Gly Lys Thr Ser Pro Met His Arg Thr Val
                165                 170                 175
Ser Val Asp Tyr Gly Val Val Leu Glu Gly Glu Val Asp Leu Ile Leu
            180                 185                 190
Asp Ser Gly Gln Ser Arg Thr Leu Arg Arg Gly Asp Val Ser Ile Gln
        195                 200                 205
Arg Gly Thr Ala His Ser Tyr Lys Asn Arg Ser Asp Thr Glu Trp Cys
    210                 215                 220
Arg Met Leu Phe Val Phe Leu Pro Met Gln Lys Leu Thr Ile Lys Gly
225                 230                 235                 240
Arg Asp Leu Asp Gln Glu Val Tyr Asp Glu His Tyr Asp His Asp Thr
                245                 250                 255
Gly Ser Glu Asn Glu Ser Gln Gly Gly Asn Gly Asn Gly Lys Gly Ser
            260                 265                 270
```

<210> 27349
<211> 248
<212> PRT
<213> A.fumigatus

<400> 27349

```
Lys Asp Leu Ser Ser Pro Pro Ser Phe Pro His Gly Glu Arg Ser Ser
1               5                   10                  15
Trp Thr Leu Ser Ser Ser Gln Ser Leu Thr Arg Leu Cys Met Trp Gly
            20                  25                  30
Asn Thr Ala Tyr Arg Arg Glu Met Ile Ser His Thr Gly Pro Ser Leu
        35                  40                  45
Glu Lys Ser Asp Ser Lys Ile Glu Ser His Pro Ser Arg Pro Tyr Gly
    50                  55                  60
Glu Asp Val Ala Pro Tyr Pro Lys Glu Asp Ala Leu Gln Leu Asn Val
65                  70                  75                  80
Gly Gly Arg Gly Ala Thr Gln Arg Arg Leu Lys Asn Tyr Gln Val Thr
                85                  90                  95
Met Ile Gly Phe Cys Gly Gly Ile Gly Thr Gly Leu Phe Val Gly Thr
            100                 105                 110
Gly Ala Ala Tyr Ala Lys Ala Gly Pro Ala Gly Leu Leu Leu Ala Tyr
        115                 120                 125
Ala Val Val Gly Leu Val Leu Trp Cys Val Met Gln Ser Ile Ala Glu
    130                 135                 140
Leu Ala Thr Leu Leu Pro Thr Ala Gly Ser Phe Pro His Trp Ala Thr
145                 150                 155                 160
Arg Phe Ile Asp Pro Ser Val Gly Phe Ser Leu Ala Ile Ser Tyr Gly
                165                 170                 175
Tyr Trp Tyr Thr Ile Ala Ile Ala Ser Glu Val Ser Ala Ala Ala Val
```

```
            180                 185                 190
Ile Val Ser Tyr Trp Thr Asp Ile Thr Pro Ala Val Val Ile Thr Val
        195                 200                 205
Gly Leu Val Leu Ile Leu Ala Ile Asn Val Met Asn Val Arg Leu Tyr
    210                 215                 220
Gly Glu Thr Glu Val Leu Ala Gly Ser Val Pro Asp Pro Leu Leu Leu
225                 230                 235                 240
Arg Met Cys Leu Thr Ala Gly Pro
                245
```

<210> 27350
<211> 142
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (111)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27350

```
Val Gly Phe Lys Gly Gln Ala Arg Val Ile Leu Pro Thr Leu Ser Ser
1               5                   10                  15
Cys Ile Glu Cys Gln Leu Asp Met His Ala Pro Arg Pro Ala Val Pro
            20                  25                  30
Leu Cys Thr Ile Ala Thr Ile Pro Arg Gln Pro Gln His Cys Ile Glu
        35                  40                  45
Trp Ala His Gln Ile Asp Trp Gln Glu Lys Arg Lys Asp Asp Pro Leu
    50                  55                  60
Thr Ala Met Asn Trp Asn Ile Ser Thr Gly Phe Ile Thr Pro Leu Phe
65                  70                  75                  80
Glu Arg Ala Ile Asn Ser Thr Ser Thr Gly Val Thr Phe Gln Met Thr
                85                  90                  95
Gln Gly Val Val Gln Lys Tyr Pro Ser Arg Tyr Trp Leu Pro Xaa Lys
            100                 105                 110
Ala Val Leu Arg Asn Pro Glu Pro Ser Leu Glu Ala Leu Glu Asn Ser
        115                 120                 125
Leu Pro Pro Arg Asn Pro Leu Thr Trp Ile Thr Phe Leu Ile
    130                 135                 140
```

<210> 27351
<211> 121
<212> PRT
<213> A.fumigatus

<400> 27351

```
Thr Trp Val Ser Val Ser Ile Thr Ile Arg Leu Cys Val Gly Leu Thr
1               5                   10                  15
Pro Lys Asp Thr Ile Asp Ile Ser Asn Leu Asn Arg Gln Phe Leu Phe
            20                  25                  30
Arg Gln Thr Asp Ile Gly Lys Pro Lys Ala Glu Val Ala Ala Ser Phe
        35                  40                  45
Val Glu Lys Arg Val Lys Gly Val Lys Ile Thr Pro Tyr Val Gly Lys
    50                  55                  60
Ile Gln Asp Lys Asp Glu Asp Tyr Tyr Met Gln Phe Lys Ile Ile Val
65                  70                  75                  80
```

```
Cys Gly Leu Asp Ser Ile Glu Ala Arg Arg Trp Ile Asn Ser Thr Leu
                85                  90                  95
Ile Gly Met Val Asp Pro Glu Asn Pro Glu Ser Leu Lys Pro Leu Ile
            100                 105                 110
Asp Gly Gly Thr Glu Gly Lys Val Ile
        115                 120
```

<210> 27352
<211> 61
<212> PRT
<213> A.fumigatus

<400> 27352

```
Pro Thr Arg Tyr Gly Val Cys Glu Glu Ile Ala Gln Thr Ser Gly Asn
1               5                   10                  15
Pro Leu Cys Ile Val Phe Ser Arg Ser Thr Thr Glu Tyr Tyr Gly Ser
            20                  25                  30
Ile Leu Ser Ser Ser Arg Ser Ala Gln Tyr Arg Ala Thr Tyr Val Gln
        35                  40                  45
Val Asp Leu Leu Val Thr Ser Tyr Tyr Arg Ser Pro Cys
    50                  55                  60
```

<210> 27353
<211> 208
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (204)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27353

```
Ser Glu Cys Leu Leu Arg Glu Arg Asp Thr Ser His Arg Arg Ser His
1               5                   10                  15
Val Leu Lys Ile Asp Asp Ser Ser Leu Pro Ser Gly Thr Val Thr Pro
            20                  25                  30
Gln Ile His Lys Met Thr Asp Asp Lys Glu Thr Pro Ala Glu Glu Glu
        35                  40                  45
Val Val Glu Ser Leu Ile Gln Gly Arg Ala Arg Arg Ser Thr Ala Gly
    50                  55                  60
Arg His Leu Ser Ala Leu Leu Asn Ala Glu Ala Asp Asp Glu Leu Ala
65                  70                  75                  80
Leu Leu Phe Glu Glu Val Asp Asp Asp Asn Glu Phe Ser Ile Asp Ala
                85                  90                  95
Glu Glu Glu Ala Glu Glu Asp Asp Met Ala Leu Asp Ser Ser Ser Asp
            100                 105                 110
Asp Asp Glu Asp Gln Gly Pro Asn Ala Arg Ser Asp Asp Leu Glu Gly
        115                 120                 125
Glu Lys Glu Ile Glu Lys Glu Ala Lys Ala Asp Arg Gln Lys Arg Arg
    130                 135                 140
Ala Arg Glu Asp Leu Arg Leu Lys Leu Ala Arg Lys Lys Val Lys Ile
145                 150                 155                 160
Asp Pro Ser Ala Val Ser Ala Val Ser Ala Val Pro Ala Pro Arg Pro
                165                 170                 175
Lys Lys Lys Ser Glu Arg Ile Ser Trp Leu Pro Thr Val Glu Asp Arg
```

```
            180                 185                 190
Pro Thr Arg Ser Leu Cys Thr Arg Arg Gly Glu Xaa Lys Ser His Trp
        195                 200                 205

<210> 27354
<211> 85
<212> PRT
<213> A.fumigatus

<400> 27354
Ser Leu Arg Met Cys Glu Gln Lys Leu Gln Pro Arg Ile Met Ala Phe
1               5                   10                  15
Ala Gln Leu Phe Glu Lys Lys Leu Asn Asp His Gly Ser Asp Asp Leu
            20                  25                  30
Ser Leu Thr Gly Leu His Ser Arg Cys Arg Ser Leu Ser Arg Pro Leu
        35                  40                  45
Pro Val Lys Thr Ile Thr Leu Glu Val Glu Ser Ser Asp Thr Ile Glu
    50                  55                  60
Asn Val Gln Ser Lys Ile Gln Gly Tyr Pro Thr Pro Pro Ser Ile Leu
65                  70                  75                  80
Ala Ala Glu Asp Ser
                85

<210> 27355
<211> 76
<212> PRT
<213> A.fumigatus

<400> 27355
Ser Ala Asp Arg Arg Val His Gly Pro Thr Pro Thr Lys Gly Ala Lys
1               5                   10                  15
Gly Ser Glu Ala Ala Gly Leu Tyr Gly Phe Gly Gln Ser Ala Ser Thr
            20                  25                  30
Val Gly Met Asn Lys Ser Ile Cys Ala Thr Ala Met Ile Ile Ile Ser
        35                  40                  45
Asn Val His Ile Leu Arg Gly Asp Val Phe Ile Ile Leu Tyr Ser Arg
    50                  55                  60
Gln Gln Leu Asn Lys Leu His Leu Asp Ser Ala Ser
65                  70                  75

<210> 27356
<211> 299
<212> PRT
<213> A.fumigatus

<400> 27356
Ile Leu Thr Arg Val Ile Gln Ala Ser Ser Ser Lys Arg Thr Phe Ile
1               5                   10                  15
Glu Leu Glu Ala Glu His Lys Thr Gln Met Pro Pro Tyr Leu Ser Ile
            20                  25                  30
Cys Thr Gln Val Leu Arg Ser Ile Ala Glu Ala Ser Gly His Gln Ala
        35                  40                  45
Thr Ser Thr Met Thr Ser Arg Glu Ala Leu Thr Val Ala Val Ala Ser
    50                  55                  60
Val Leu Leu Ala Gln Asn Gln Asn Glu Ala Ser Lys Lys Ile Ile Ala
65                  70                  75                  80
```

```
Ile Leu Leu Leu His Leu Ala Cys Leu Lys Arg Leu Ser Leu Gln Gln
                85                  90                  95
Arg Arg Thr Ala Ser Leu Glu Ile Pro Asn Glu Gly Met Tyr Asn Lys
            100                 105                 110
Phe Val Arg Lys Phe Ser Arg Ala Ala Thr Ile Met Leu Gln Thr Asn
        115                 120                 125
Glu Trp Lys Gly Leu Asn Ile Ile Lys Ser Trp Gly Asp Leu His Asp
    130                 135                 140
Leu Phe Asp Gly Arg Leu Phe Arg Ser Cys Ala Ala Tyr Tyr Ser Val
145                 150                 155                 160
Glu Lys Val Ala His Leu Ser Ser Leu Ile Thr Asp Asp Trp His Thr
                165                 170                 175
Val Trp Thr Cys Leu Asn His Ile Glu Glu Leu Gly Gly Pro Glu Val
            180                 185                 190
Phe Phe Ser Gln Asn Phe Pro Tyr Thr Ala Thr Leu Gln His Glu Gly
        195                 200                 205
Arg Ile Phe Asp Asp Glu His Glu Asp Asn Gln Asp Asp Glu Glu Asp
    210                 215                 220
Glu Gly Asp Glu Glu Glu Gly Asp Glu Glu Gly Glu Asp Asp Glu Thr
225                 230                 235                 240
Asp Gly Asp Glu Ala Thr Asn Glu Glu Asp Glu Asp Met Glu Ser Lys
                245                 250                 255
Tyr Ala Leu Leu Pro Phe Glu Asn Leu Thr Phe Asp Gln His Leu Ala
            260                 265                 270
Ser Val Arg Val Val Ile Glu Asp Ser Gln Gly Glu Tyr Pro Glu Arg
        275                 280                 285
Ala Phe Ser Pro Arg Ser Lys Gln Ile His Asp
    290                 295

<210> 27357
<211> 129
<212> PRT
<213> A.fumigatus

<400> 27357
Val Gln Asp Arg Thr Leu Leu Leu Leu Met Asp Asp Thr Glu Asn Gln
1               5                   10                  15
Gly Ile Ser Thr Gln Ala Ala Ser Asn Ile Asp Arg Ser Lys Tyr Gln
            20                  25                  30
Leu Ala Arg Glu Ile Ile Tyr Gln His Leu Lys Val His Ile Gln Asp
        35                  40                  45
Gln Tyr Pro Asp Leu Gln Val His Arg Phe Pro Ser Met Arg Ser Pro
    50                  55                  60
Glu Phe His Gln His Val Gln Thr Tyr Ser Val Tyr Phe Val Met Cys
65                  70                  75                  80
His Asn Gly Val Leu Gln Asn Arg Arg Arg Leu Ile Asp Asp Thr Leu
                85                  90                  95
Arg Val Ile Cys Asn Met Met Thr Leu Gly Leu Asp Val Ala Ile Ile
            100                 105                 110
Asn Glu Ile Glu Trp Arg Asp Thr Lys Val Arg Ile Phe Pro Leu Ser
        115                 120                 125
Val

<210> 27358
<211> 103
```

<212> PRT
<213> A.fumigatus

<400> 27358
Thr Pro Gly Pro Thr Val Pro Gly Ala Thr Gly Ser Ile Asp Phe Met
1 5 10 15
Arg Glu Leu Arg Ala Met Val Asp Asn Ile Asn Phe Leu Val Ile Leu
20 25 30
Ile Thr Leu Gly Asn Pro Lys Gly Asn Leu Leu Val Thr Val Trp Trp
35 40 45
Ile Ser Ala Val Gly Glu Phe Asn Gly Phe Ser Ile Tyr Asp Tyr Leu
50 55 60
Arg Arg Gly Phe Phe Ala Trp Phe Asn Lys Glu Trp Pro Arg Leu Phe
65 70 75 80
Ser Trp Asn Ser Tyr Leu Ile Lys Tyr Leu Val Met Ala Ile Ile Leu
85 90 95
Asp Phe Gly Phe Ala Val Ser
100

<210> 27359
<211> 109
<212> PRT
<213> A.fumigatus

<400> 27359
Ile Leu Leu Ser Asn Tyr Leu Ser Arg His Gln Ser Ala Phe Phe Ser
1 5 10 15
Met Arg Cys Leu Phe Leu Phe Leu Ala Ala Ala Leu Met Ala Pro Thr
20 25 30
Leu Ala Ile Ser Glu Pro Ala Trp Met Lys Tyr Leu Ala Gly Leu Asp
35 40 45
Glu Pro Ala Asp Ala Ala Glu Gln Ile Asn Leu Asn Tyr Leu Ala His
50 55 60
Leu Ala Asp Ile Ala Asp Ser Val Gly Val Ala Asn Pro Val Ser Leu
65 70 75 80
Asp Glu Leu Ala Tyr Leu Ala Lys Leu Ala Tyr Leu Thr Asp Ser Lys
85 90 95
Ala Lys Ile Gln Asn Asn Cys His Tyr Lys Val Phe Tyr
100 105

<210> 27360
<211> 247
<212> PRT
<213> A.fumigatus

<400> 27360
Ile Ser Ala Val Glu Ala Lys Val Pro Thr Pro Pro Leu Tyr Leu Gln
1 5 10 15
Ile Cys Ser Ser Trp Tyr Leu Pro Thr Asn Ile Lys Val Cys Arg Pro
20 25 30
Glu Arg Gln Leu Ala Cys Asn Ile Glu Pro Gln Pro Phe Cys Ser Ser
35 40 45
Pro Ser Ile His Pro Met Leu Thr Met Ala Glu Ala Ser Asn Gly Gln
50 55 60
Arg Arg Asp Pro Ser Lys Val Gln Ala Trp Leu Val Gly Ser Gly Met
65 70 75 80

```
Ala Cys Leu Ala Ala Ala Val His Leu Ile Arg Glu Gly Asn Leu Pro
                85                  90                  95
Gly Lys Asn Val His Ile Leu Asp Leu His Leu Gly Phe Gly Gly Glu
            100                 105                 110
Met Gly Thr Ser Gly Asp Ala Gln Asn Gly Tyr Phe Val Pro Phe Glu
        115                 120                 125
Cys His Pro Tyr Phe His Gly Asp Cys Ile Lys Asp Leu Leu Ser Ile
    130                 135                 140
Val Pro Ser Pro Gly Glu Pro Gly Lys Ser Met Met Asp Asp Ile Tyr
145                 150                 155                 160
Ser Leu Glu Lys Asn Glu Arg Arg Pro Pro Gln Asp Ser Gly Met Thr
                165                 170                 175
Arg Ala Ile Lys Leu Gly Lys Leu Gly Pro Glu Val Val His Phe Arg
            180                 185                 190
Gly Ile Gln Val Gly Leu Lys His Arg Leu Glu Leu Met Lys Phe Ile
        195                 200                 205
Met Glu Ser Glu Thr Ser Leu Gly Ala Lys Ser Ile Asn Gln Ile Phe
    210                 215                 220
Glu Pro Ser Phe Phe Glu Thr Gly Phe Trp Thr Arg Trp Ser Thr Ala
225                 230                 235                 240
Tyr Ala Thr Gln Trp His Pro
                245
```

<210> 27361
<211> 67
<212> PRT
<213> A.fumigatus

<400> 27361

```
Asn His Thr Leu Tyr Ser Trp Leu Ser Thr Thr Phe Thr Ile Pro Lys
1               5                   10                  15
Gly Trp Glu His Gln Asn Val Leu Leu Asn Phe Gly Ala Val Asp Tyr
            20                  25                  30
Glu Ala Thr Val Phe Val Asn Gly Lys Gln Ala Gly Phe Asn Arg Gly
        35                  40                  45
Gly Tyr Phe Ser Phe Tyr Pro Gly His His Ala Ile Cys Leu Leu Arg
    50                  55                  60
Arg His Glu
65
```

<210> 27362
<211> 79
<212> PRT
<213> A.fumigatus

<400> 27362

```
Ile Val Arg Asn Leu Ala Gln Ser Tyr Phe Gln Ala Asp Ser Ile Arg
1               5                   10                  15
Leu Val Phe Val His Asp Pro Thr Asp Ser Gly Asp Tyr Val Ile Pro
            20                  25                  30
Ile Gly Lys Gln Arg Leu Ile Pro Ala His Ile Phe Tyr Thr Pro Cys
        35                  40                  45
Ser Gly Ile Trp Gln Ser Val Trp Ile Glu Ser Ala Pro Ala Asn Tyr
    50                  55                  60
Ile Thr Glu Leu Asp Ile Ser Ala Gly Met Asp Gly Gln Gly Ala
65                  70                  75
```

<210> 27363
<211> 123
<212> PRT
<213> A.fumigatus

<400> 27363
Arg Leu Phe Leu Arg Lys Leu Thr Ala Lys Val Asn Val Thr Ala Val
1 5 10 15
Ser Ala Ser Gly Lys Ser Met Pro Val Asp Ile Thr Val Phe Asp Gly
20 25 30
Ser Ser Asp Lys Lys Val Ala Phe His Lys Gly Thr Ser Asp Gln Pro
35 40 45
Phe Ser Phe Lys Val Glu Ser Pro Lys Leu Trp Ser Pro Asp Ser Pro
50 55 60
Thr Leu Tyr Asn Ile Ser Val Lys Met Gly Ala Asp Glu Val Lys Ser
65 70 75 80
Tyr Thr Gly Phe Arg Thr Ile Ser Lys Gly Thr Val Asn Gly Ile Leu
85 90 95
Arg Pro Leu Ile Asn Gly Glu Phe Thr Phe Val Phe Gly Thr Leu Asp
100 105 110
Leu Gly Asn Asp Pro Asn Val Trp Thr Leu Asn
115 120

<210> 27364
<211> 71
<212> PRT
<213> A.fumigatus

<400> 27364
Arg Thr Pro Pro Pro Met Asp Leu Arg Asn Gln Arg Ala Phe Phe Met
1 5 10 15
Asn Ser Val Asp Pro Thr Met Met Leu Pro Ile Gly Ala Pro Lys Pro
20 25 30
Phe Glu Lys Gln Arg Leu Thr Leu Ser Asn Arg Pro Ala Tyr Ser Gly
35 40 45
Lys Leu Pro Ala Pro Glu Thr Thr Ala Ser Gln Ser Leu Ala Pro Ser
50 55 60
Lys Cys Thr Leu Thr Pro Phe
65 70

<210> 27365
<211> 384
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (371)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27365
Thr Ala Leu Ala Phe Tyr Ala Gly Asn Phe Leu Pro Ser Gly His Ile
1 5 10 15
Leu Pro Leu Lys Arg Ser Glu Gly Ile Glu Tyr Leu Pro Trp Arg Ala
20 25 30

```
Leu Gln Pro Val Ser Met Gly Pro Met Ala Gly Ser Val Val Gly Arg
        35                  40                  45
Val Pro Ala Gln Gln Asn Ser Thr Cys Glu Val Ser Ser Leu Gln Cys
    50                  55                  60
Ser Gly Arg His Glu Glu Leu Ile Arg Lys Asn Thr Gln Gly Asp Thr
65                  70                  75                  80
Met Thr Lys Pro Thr Pro Ser Met Leu Glu Ala Ile Cys Gln Thr Thr
                85                  90                  95
Leu Leu Asp Asp Val Phe Glu Glu Asp Pro Val Thr Asn Asp Leu Gln
            100                 105                 110
Ala Tyr Val Ala Glu Arg Thr Gly His Gln Ser Ala Leu Leu Val Met
        115                 120                 125
Ser Gly Thr Met Gly Asn Gln Val Ala Ile Arg Thr His Leu Val Gln
    130                 135                 140
Pro Pro Tyr Ser Val Leu Cys Asp His Arg Ser His Ile Val Arg Tyr
145                 150                 155                 160
Glu Ala Gly Gly Val Ser Ser Leu Thr Gly Ala Met Val Gln Pro Ile
                165                 170                 175
Val Pro Ser Asn Gly Ile His Leu Thr Leu Glu Asp Ile Gln Lys His
            180                 185                 190
Ala Val Leu Asp Glu Asp Val His Tyr Cys Pro Thr Lys Leu Ile Ser
        195                 200                 205
Leu Glu Asn Thr Leu Asp Gly Met Val Met Pro Leu Ala Glu Ala Arg
    210                 215                 220
Arg Ile Thr Glu Trp Ala His Gln Asn Gly Val Lys Val His Leu Asp
225                 230                 235                 240
Gly Ala Arg Leu Trp Glu Ala Val Val Ser Gly Ala Gly Ser Leu Pro
                245                 250                 255
Glu Tyr Ala Gly Leu Phe Asp Ser Val Ser Leu Cys Phe Ser Lys Gly
            260                 265                 270
Leu Gly Ala Pro Ile Gly Ser Ile Ile Val Gly Ser Thr Glu Phe Ile
        275                 280                 285
Lys Lys Ala Arg Trp Phe Arg Lys Ser Ile Gly Gly Gly Val Arg Gln
    290                 295                 300
Ala Gly Val Ile Ala Ala Ala Ala Arg Val Ala Leu Glu Glu Thr Phe
305                 310                 315                 320
Gly Pro Asp Pro Asn Gly Gln Lys Gly Lys Leu Arg Glu Thr His Ile
                325                 330                 335
Asn Ala Lys Arg Val Ala Glu Met Trp Thr Thr Arg Gly Gly Lys Leu
            340                 345                 350
Gln His Pro Val His Thr Asn Met Val Trp Leu Asp Leu Glu Ser Ser
        355                 360                 365
Gly Val Xaa Pro Asn Asp Leu Ala Glu Ile Gly Arg Ser Leu Ala Ser
    370                 375                 380
```

<210> 27366
<211> 321
<212> PRT
<213> A.fumigatus

```
<400> 27366
His Gln Glu Leu Pro Gln Thr Asp Arg Pro Arg Arg Gln Val Ser Tyr
1               5                   10                  15
Thr Val Thr Gln Glu Arg Phe Trp Leu Gly Lys Phe Pro Val Asn Tyr
            20                  25                  30
Arg Val His Gly Leu Ser Val His Ala Leu Ser Pro His Asn Val Pro
```

```
        35                  40                  45
Ser Ser Asp Pro Ala Leu Ser Pro Trp Ile Pro Phe Phe Phe Val Ile
    50                  55                  60
Leu Tyr Leu Val Asp Phe Ala Asp Tyr Tyr Pro Gln Leu Ser Ala Asn
65                  70                  75                  80
Ser Asp Ala Leu Asp Leu Ala Asn Ser Arg Thr Pro Asn Pro Glu Thr
                85                  90                  95
Trp Asn Ser His Ser Arg His Arg Ser Ser His Gln Ser Met Pro Gln
            100                 105                 110
Asn Ala Leu Asn Met Phe Arg Leu Asp Gln Leu Gly Asn Ser Thr Ser
        115                 120                 125
Glu Ser His Ala Gln Ala Ser Asn Pro Ala Arg His Ile Ala Arg His
    130                 135                 140
Ser Leu Glu Ala Thr Leu Leu His Ser Gln Glu Gly Gly His Gly Asn
145                 150                 155                 160
Ile Gly Pro Ala Val Ser Ser Arg Pro Thr Ser Leu Gln Thr Ser Tyr
                165                 170                 175
Ser Thr Asn Asp Val Pro Thr Ile Gln Gly Asp Gly Phe Asn Pro Ala
            180                 185                 190
Ile Thr Pro Pro Gln Ala His Ala Glu Ser Phe Gln Gln His Asn Asn
        195                 200                 205
Thr Pro Gly Arg Ile Pro Ser Pro Ile Pro Leu Ala Leu Ser Arg Arg
    210                 215                 220
Thr Pro Trp Gln His Asp Glu Pro Lys Pro Gln Asn Ser Leu Thr Gln
225                 230                 235                 240
Gln Thr Thr Leu Gln Ala Ser Ala Pro Pro Phe Gly Pro Gln Leu Thr
                245                 250                 255
Ala Ala Ala Val Thr Gln Asn Thr Val Thr Pro Thr Ala Met Thr Ala
            260                 265                 270
Phe Pro Ala Pro Phe Tyr Gly Tyr Gly Ile Gln Thr Tyr Met Gly Asn
        275                 280                 285
Pro Val Gln Val Asn Gly Gln Leu Gln Asn Phe Ser Pro Thr Ala Pro
    290                 295                 300
Tyr Gly Ala Tyr Pro Pro Tyr Gly Asn Tyr Arg Leu Ala Glu Gly Gln
305                 310                 315                 320
Ala
```

<210> 27367
<211> 73
<212> PRT
<213> A.fumigatus

```
<400> 27367
Gly Val Ala Ala Arg Arg Ser Gly Asp Gly Asp Ser Asn Gln Leu Ser
1               5                   10                  15
Arg Phe Thr Asn Phe Pro Leu Glu His Tyr Arg Gly Glu Leu Tyr Thr
            20                  25                  30
Leu Cys Lys Asp Gln His Gly Cys Arg Tyr Leu Gln Arg Lys Leu Glu
        35                  40                  45
Glu Arg Asn Pro Glu His Val Gln Leu Ile Phe Asp Glu Thr Asn Met
    50                  55                  60
His Val Val Glu Leu Met Thr Gly Ser
65                  70
```

<210> 27368

<211> 173
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (166),(171)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27368
Asn Leu Pro His Leu His Leu Glu Lys His Leu Ser Ser Asn Ile Val
1 5 10 15
Pro Thr Asp Pro Phe Gly Asn Tyr Leu Cys Gln Lys Leu Leu Glu Phe
20 25 30
Ser Asn Asp Glu Gln Arg Thr Ala Leu Ile Asn Asn Ala Ala Asn Gln
35 40 45
Leu Val Lys Ile Ala Leu Asn Gln His Gly Thr Arg Ala Leu Gln Lys
50 55 60
Met Ile Glu Phe Ile Ser Thr Pro Glu Gln Ile Gln Thr Val Ile Gln
65 70 75 80
Ala Leu Arg Asp His Val Val Glu Leu Val Gln Asp Leu Asn Gly Asn
85 90 95
His Val Ile Gln Lys Cys Leu Asn Arg Leu Ser Ala Glu Asp Ala Gln
100 105 110
Phe Ile Tyr Asp Ala Val Gly Ala Asn Cys Val Val Val Gly Thr His
115 120 125
Arg His Glu Cys Cys Val Met Gln Arg Cys Ile Asp His Ala Ser Gly
130 135 140
Glu Gln Arg Ala Arg Leu Met Ser Ser Pro Arg Gly Trp Lys Tyr Gln
145 150 155 160
Arg Gly Gln Lys Gly Xaa Thr Arg Leu Ser Xaa Phe Arg
165 170

<210> 27369
<211> 94
<212> PRT
<213> A.fumigatus

<400> 27369
Leu Thr Asp Phe Leu Tyr Pro Arg Ile His Arg Tyr Ser Met Pro Ser
1 5 10 15
Thr Gly Leu Gly Ser Gln Ile Arg Pro Asn Ile Ala Ala Phe Ser Asn
20 25 30
Thr Ser Gly Leu Asp Ser Phe Ser Ala Ala Lys Tyr Leu Phe His Asn
35 40 45
Glu Asp Asp Arg Ala Thr Val Thr Glu Glu Asp Arg Ile Pro Thr Pro
50 55 60
Asp Ile Lys Ser Tyr Leu Lys Leu Thr Asp Pro Asp Asp Lys Phe Pro
65 70 75 80
Thr Leu Ser Arg Lys Ser Asp Ser Gly Leu Val Ser Phe Gln
85 90

<210> 27370
<211> 174
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (173)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27370
Tyr His Ser Ser Val Pro Ser Thr Pro Cys Gly Arg Arg Gln Pro Glu
1 5 10 15
Glu Pro Pro Arg Arg Pro Ser Glu Asp Thr Val Ala Gly Ser Gly Gly
20 25 30
Leu Pro Asp Leu Lys Tyr Gly Thr Val Leu Asp Glu Leu Pro Gln Asp
35 40 45
Trp Glu Val Val Pro Gly Glu Ser Met Gly Asn Phe Tyr Ala Gly Asn
50 55 60
Met Ala Ile Met Ser Ala Asp Thr Asn Phe Phe Pro Ala Ser Leu Pro
65 70 75 80
Asn Asp Gly Leu Ile Asp Val Val Thr Ile Asp Gly Thr Ile Ser Arg
85 90 95
Leu Thr Ser Leu Lys Met Met Thr Glu Ile Pro Glu Gly Gly Phe Phe
100 105 110
Asp Met Pro Asp Val Arg Ile Arg Lys Ala Ser Ala Tyr Arg Leu Thr
115 120 125
Pro Arg Glu Lys Asp Gly Tyr Ile Ser Val Asp Gly Glu Arg Ile Pro
130 135 140
Phe Glu Pro Phe Gln Val Glu Val His Arg Gly Leu Gly Thr Val Leu
145 150 155 160
Ser Lys Ser Gly His Leu Tyr Glu Ala Glu Gly Pro Xaa Pro
165 170

<210> 27371
<211> 282
<212> PRT
<213> A.fumigatus

<400> 27371
Ser Thr Asn Asn Thr Pro Ile Arg Ile Gly Phe Tyr His Ser Asp Arg
1 5 10 15
Pro Leu Thr Gln Gln Ala Leu Ala Arg Asn Leu Ser Tyr Ala Leu Val
20 25 30
Pro Thr Leu Pro Arg Gln Thr Leu His Arg Phe Leu Arg Ala Phe Trp
35 40 45
Ile Thr Ile Gly Arg Asp Phe His Ser Leu Asp Arg Leu Arg Leu Asp
50 55 60
Lys Tyr Leu Tyr Leu Ile Arg Cys Tyr Val Gly Val Ala Phe Glu Ile
65 70 75 80
Phe Leu Lys Gly Asn Lys Gly Glu Gln Gln Gln Ser Thr His Thr Asn
85 90 95
Gly Ala Ser Lys Lys Arg Lys Arg Glu Glu Gln Thr Ala Ala Gly Lys
100 105 110
Lys Lys Arg Ser Lys Ala Asp Lys Glu Asp Glu Ala Arg Asp Glu Ala
115 120 125
Asp Val Glu Glu Gly Gln Asp Gly Glu Gly Asp Trp Ala Glu Leu Glu
130 135 140
Ser Tyr Met Thr Ile Ile Glu Glu Gly Pro Leu Cys Pro Leu Asn Phe
145 150 155 160

```
Asp Pro Asp Gln Pro Pro Ala Asp Glu Lys Asn Pro Asn Tyr Val Pro
                165                 170                 175
Met Pro His Gly Pro Asp Gly Leu Arg Tyr His Leu Leu Asp Ile Trp
            180                 185                 190
Ile Asp Glu Ile Glu Lys Val Leu Glu Phe Glu Glu Gly Glu Thr Gln
        195                 200                 205
Asp Gly Ser Ser Arg Lys Val Lys Gly Gln Val Pro Met Glu Leu Leu
    210                 215                 220
Leu Arg Pro Ile Glu Lys Leu Arg Lys Glu Ser Pro Phe Lys Pro Val
225                 230                 235                 240
Arg Thr Arg Ala Ala Glu Thr Leu Asn Asp Asp Arg Leu Val Gln Trp
                245                 250                 255
Gly Phe Lys Thr Arg Glu Val Glu Glu Glu Asp Gly Asp Asp Asp Ser
            260                 265                 270
Glu Gln Glu Trp Gly Gly Phe Ala Asp Asp
        275                 280
```

<210> 27372
<211> 558
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (368)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27372

```
Lys Ile Thr Arg Asn Ala Glu Ser Arg Ile Arg Lys Gly Gly Asp Ser
1               5                   10                  15
Ser Asp Leu Ser Phe Ser Leu His Arg Pro Ile Ser Pro Ala His Leu
            20                  25                  30
Tyr Leu Pro Ser Arg Pro Arg Pro Ala Met Ala Ser Phe Lys Ser Pro
        35                  40                  45
Tyr Ile Cys Leu Asn Cys Arg Leu Thr Ser Arg Leu Thr Arg Arg Asn
    50                  55                  60
Phe Ala Ala Ser Ala Arg Thr Leu Glu Leu Leu Arg Pro Ala Thr Ala
65                  70                  75                  80
Pro Lys Pro Thr Pro Asp Ile Lys His Ile Arg Gln Asn Ala Glu Leu
                85                  90                  95
Tyr Ser Lys Asn Ser Val Asp Arg Asn Tyr Pro Thr His Ala Asp Tyr
            100                 105                 110
Pro Tyr Lys Ile Gln Glu Leu Ser Glu Glu Ala Arg Arg Leu Asp Gln
        115                 120                 125
Asp Leu Lys Ala Pro Arg Ser Arg Ile Lys Gln Leu Glu Lys Thr Ile
    130                 135                 140
Ala Asn Leu Ala Ala Ser Ala Arg Gln Asn Gly Ala Ser Ser Ala Ile
145                 150                 155                 160
Glu Glu Glu Leu Ala Ser Leu Arg Ser Glu Ala Gln Arg Leu Lys Asp
                165                 170                 175
Glu Ser His Ala Met Asn Thr Arg Arg Thr Thr Cys Thr Glu Glu Ile
            180                 185                 190
Gln Arg Leu Ala Leu Ser Leu Pro Asn Leu Ser Ser Ala Asp Thr Pro
        195                 200                 205
Val Gly Asp Asp Pro Lys Leu Val Thr Tyr Ile Asn Phe Asp Pro Gln
    210                 215                 220
```

```
Ser Pro Pro Glu Trp Val Ser Arg Pro Asp Pro Ser Arg Ser His Val
225                 230                 235                 240
Ala Ile Gly Thr Ala Leu Glu Leu Ile Asp Phe Thr Ser Ser Ala Thr
                245                 250                 255
Thr Thr Gly Trp Gly Trp Tyr Phe Leu Thr Asn Glu Gly Ala Leu Leu
            260                 265                 270
Glu Gln Ala Leu Val Gln Tyr Ala Leu Ser Val Ala Arg Asn Arg Gly
        275                 280                 285
Trp Lys Val Val Ser Pro Pro Ser Ile Val Tyr Ser Tyr Ile Ala Glu
    290                 295                 300
Ala Cys Gly Phe Gln Pro Arg Asp Gln His Asn Glu Gln Gln Ile Trp
305                 310                 315                 320
Ala Ile Glu Gln Ser Asp Lys Asp Lys Ser Lys Pro Gln Arg Ser Leu
                325                 330                 335
Thr Gly Thr Ala Glu Ile Pro Leu Ala Ala Met Tyr Ala Gly Arg Asp
            340                 345                 350
Leu Asp Ala Ser Ser Ile Pro Leu Lys Leu Val Gly Ala Ser Arg Xaa
        355                 360                 365
Tyr Arg Ala Glu Ala Gly Ser Arg Gly Val Asp Thr Lys Gly Leu Tyr
    370                 375                 380
Arg Val His Glu Phe Thr Lys Val Glu Leu Phe Gly Trp Ala Asp Thr
385                 390                 395                 400
Leu Pro Ala Thr Ile Ser Ser Asp Asn Leu Phe Thr Glu Leu Leu Asp
                405                 410                 415
Ile Gln Thr Glu Ile Leu Thr Ala Leu Ser Leu Pro Cys Arg Val Leu
            420                 425                 430
Glu Met Pro Thr Thr Asp Leu Gly Ala Ser Ala Ser Arg Lys Arg Asp
        435                 440                 445
Ile Glu Ala Leu Phe Pro Ser Arg Leu Arg Val Pro Gly Ser Ser Ser
    450                 455                 460
Gly Ser Gly Ser Ser Ser Pro Asp Leu Glu Ser Gly Trp Gly Glu Val
465                 470                 475                 480
Thr Ser Ala Ser Ile Cys Thr Asp Tyr Gln Ser Arg Arg Leu Gly Thr
                485                 490                 495
Arg Val Arg Gly Gly Ser Ala Lys Glu Ser Arg Phe Pro His Thr Val
            500                 505                 510
Asn Gly Thr Ala Met Ala Val Pro Arg Val Leu Ala Ala Ile Leu Glu
        515                 520                 525
Asn Gly Trp Asp Glu Lys Arg Lys Val Val Val Ile Pro Glu Val Leu
    530                 535                 540
Arg Lys Trp Met Gly Gly Met Glu Val Ile Gly Glu Lys Ser
545                 550                 555
```

<210> 27373
<211> 141
<212> PRT
<213> A.fumigatus

<400> 27373

```
Trp Ser His Gln Arg Pro Glu Arg Val Ser Met His Leu Phe Ser Pro
1               5                   10                  15
Gly Arg Asp Ile Glu Thr Ser Phe Phe Ser Ile Ser Glu Leu Gln Leu
            20                  25                  30
His Ser Ile Arg Val Arg Ala Gly Ala Ala Gln Leu Glu Pro Asn His
        35                  40                  45
Cys Asn Phe Glu Ser Glu Phe Ala Ile Arg Asn Leu Gly Ser Ile Asn
```

```
    50                  55                  60
Cys Ile Arg Ile Thr Ser Lys Arg Asn Asn Leu Gly Arg Lys Tyr Asn
65                  70                  75                  80
Arg Tyr Met Gly Ala Leu Ser Lys Lys Gly Gln Thr Leu Leu Thr Cys
                85                  90                  95
Gln Asn Tyr Val Lys Thr Ala Ile Pro Tyr Ser Leu Gly Asp Tyr Tyr
            100                 105                 110
Ile Tyr Pro Leu Ile Gly Pro Ser Gly Ala Val Ile Thr Gly His Asn
        115                 120                 125
Ser Lys Pro Lys Asp Tyr Leu Pro Met Phe Thr Asn Pro
    130                 135                 140
```

<210> 27374
<211> 93
<212> PRT
<213> A.fumigatus

<400> 27374

```
Tyr Val Ser Ile Asp Pro Pro Leu Ser Ser Cys Lys Lys Glu Glu Gln
1               5                   10                  15
Leu Thr Phe Ala Ser Phe Asp Gly Phe Gly Ser Tyr Pro Glu His Met
            20                  25                  30
Gln Ser Ser Asn Met Phe Lys Asn Ile Gly Arg Ile Gly Ile Glu Met
        35                  40                  45
Tyr Leu Leu Phe Gln His His Thr Thr Leu Asp Ile Leu Arg Asn Val
    50                  55                  60
Asn Thr Asp Ile Asp Leu Phe Thr Ile Thr Gly Ile Gly Leu Ala Phe
65                  70                  75                  80
Cys Gln Val Phe Arg Thr Ser Cys Cys Arg Arg Trp Arg
                85                  90
```

<210> 27375
<211> 574
<212> PRT
<213> A.fumigatus

<400> 27375

```
Tyr Ala Pro Ser Gly Ile Ala Gly Thr Ser Thr Leu Ala Gly Leu His
1               5                   10                  15
Ala Gln Ser Ala Ala Ala Gln Arg Ile Ala Glu Pro Tyr Ala Gly Gln
            20                  25                  30
Leu Pro Arg Thr Gln Gln His Gln Phe Pro Thr Gln Arg Pro Trp Thr
        35                  40                  45
Pro Thr Glu Gln Pro Gly Ser Gln Pro His Gly Pro Pro Thr Val Tyr
    50                  55                  60
Gln Gly Ala Glu Ala Val Glu Ser Arg Ser Pro Asn Pro Pro Ala Ser
65                  70                  75                  80
Ser Tyr Gln Pro Pro Pro Pro Gln Pro Val Ala Thr Pro Pro His Ala
                85                  90                  95
Ala Ala Gln Gly Gln Gln Pro Pro Trp Ile Pro Pro Asn Ala Leu Glu
            100                 105                 110
Gln Asp Leu Glu Arg Met Arg Ile Ile Ser Ser Pro Pro Pro Ala Tyr
        115                 120                 125
Ser Ser Val Ser Gly Ser Ala Ala Pro Gln Gly Tyr Pro Asn Glu Lys
    130                 135                 140
Gln Arg Leu Ser Ala Ser Met Gly His Pro Ala Leu Ala Ala Ser His
```

```
145                 150                 155                 160
Pro Thr Thr Met Ala Thr Pro Thr Ala Ala Ala Ala Pro Thr Val
                165                 170                 175
Ser Pro Gln Asp His Pro Ala Phe Ala Asn Glu Pro Arg Gln Gln Ser
            180                 185                 190
Pro Ala Gly Phe Ser Pro Gln Asn Gly Thr Ser Ala Gly Arg Gln Pro
        195                 200                 205
Thr Pro Val Gln Asn Ala Pro Ala Thr Ser Val Pro Gly Ser Ser Thr
    210                 215                 220
Leu Pro Pro Ala Ser Pro Pro Pro Leu Pro Glu Gly Trp Ile Ala His
225                 230                 235                 240
Leu Asp Pro Asn Ser Gly Gln Tyr Tyr Tyr Ile His Leu Pro Thr Gln
                245                 250                 255
Ser Thr Gln Trp Glu Phe Pro Lys Gly Pro Thr Pro Leu Asn Leu Asn
            260                 265                 270
Glu Thr Pro Leu Ser Pro Val Gly Ser Val Tyr Ser Ser His Pro Leu
        275                 280                 285
Ala Ser Pro Gly Phe Ser Thr Phe Gly Lys Pro Leu Ala Ser Pro Gly
    290                 295                 300
Ile Pro Leu Thr Pro Gly Leu Ala Pro Gly Tyr Glu Ser Leu Gln Ser
305                 310                 315                 320
Pro Val Val Thr Gly Phe Ser Gly Pro Pro Pro Ser Ser Gly Val Asp
                325                 330                 335
Leu Tyr Lys Val Ala Pro Thr Asn Gly Val Tyr Phe Gly Pro Tyr Leu
            340                 345                 350
Arg Tyr Thr Asn Met Asp Leu Glu Arg Gly Ile Trp Leu Gly Ser Ile
        355                 360                 365
Leu Leu Val Thr Asp Ala Ala Gln Pro Pro Thr Ile His Ile His Gln
    370                 375                 380
Ser Val Asp Leu Ser Pro Asn Pro Arg Gln Leu Lys Pro Met Ser Ile
385                 390                 395                 400
Ala Val His Gln Arg Trp Thr Phe Tyr Lys Tyr Glu Val Asp Leu Arg
                405                 410                 415
Met Glu Glu Ser Gly Pro Ala Lys Trp Thr Tyr Ala Ile Thr Ser His
            420                 425                 430
Leu Gly Cys Thr Arg Tyr Glu Phe Leu Val Ala Gly Arg Tyr Glu Thr
        435                 440                 445
Asn Trp Arg Phe Val Ala Thr Ser Gly Asn Asp Phe Ser Leu Asn Val
    450                 455                 460
Asn Ala Asn Glu Arg Ser Arg Leu Gly Gly Ile Gly Phe Met Trp Lys
465                 470                 475                 480
Asp Ile Met Gln Lys His Ile Glu Ile Gly Gly Phe His Ala Gln Leu
                485                 490                 495
Cys Cys Gly Gly Gln Ile Tyr Ala Asp Arg Met Trp Lys Glu Ile Pro
            500                 505                 510
Ser Leu Lys Gln Trp Leu Ala Ile Ser Gly Lys Glu Ala Arg Lys Asn
        515                 520                 525
Ala Pro Trp Thr Ala Ala His Glu Glu Asp Val Ser His Ala Tyr Phe
    530                 535                 540
His Tyr Tyr Thr Ser His Phe Asp Gln Pro Tyr Leu Arg Glu Ser Phe
545                 550                 555                 560
Ala Gln Val Pro Tyr Val Cys Gln Leu Asp Asp His Asp Met
                565                 570
```

<210> 27376
<211> 78

<212> PRT
<213> A.fumigatus

<400> 27376
Ala Val Thr Trp Asp Cys Glu Pro Ile His Ala Lys Cys Trp Ser His
1 5 10 15
Ala Arg Ser Gln Arg Val Arg Thr Leu Leu Phe Phe Phe Phe Phe Ser
20 25 30
Ile Thr Val Gly Ala Arg Ile Ala Asp Met Tyr Ser Tyr Phe His Asp
35 40 45
Ala Ser Thr Tyr Glu Arg Pro Glu Gly Phe Glu Phe Phe Val Ser Pro
50 55 60
Arg Ser Gly Gly Lys Ile Thr Cys Ser Ala Val Phe Pro Gly
65 70 75

<210> 27377
<211> 70
<212> PRT
<213> A.fumigatus

<400> 27377
Ser Pro Leu Leu Ile Lys Ile Thr Thr Tyr Thr Ile Leu Ala Gly Phe
1 5 10 15
Pro Phe Leu Ala Leu Asn Ser Ser Leu Glu Lys Gly His Ser Ile Asp
20 25 30
Ile Ala Gly Trp Val Asn Ile Leu Gln Lys Thr Gly Ala Leu Arg Ser
35 40 45
Glu Thr Thr Val Arg Leu Leu Met Arg Leu Thr Tyr Ile Ser Tyr Lys
50 55 60
Ser Tyr Ile Ser His Gln
65 70

<210> 27378
<211> 256
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (34),(86)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27378
Ser Val Ala Pro Thr Ile Gln Gln Ala Pro Pro Pro Leu Ala Ile Ile
1 5 10 15
Gly Pro His Arg Tyr Phe Ser Phe Leu Val Arg Thr Pro Pro Lys Ser
20 25 30
Asn Xaa Pro Arg Leu Arg Lys Gln Ala Ser Ser Gly Ala Val Lys Val
35 40 45
Leu Ser Gly Leu Leu Val Val Ile Asn Leu Ser Asp Arg Ser Ala Arg
50 55 60
Arg Gln Leu Phe Phe Ser Gly Ala Ala Ala Met Ser Ala Cys Met Phe
65 70 75 80
Ala Thr Ala Ala Val Xaa Lys Ser Ser Pro Pro Ala Pro Ala Ser Pro
85 90 95
Gly Ser Ser Gln Gly Ser Thr Thr Ala Leu Leu Thr Pro Ala Ala Leu

```
            100                 105                 110
Ala Thr Ile Thr Leu Ile Tyr Leu Asp Ile Thr Ala Tyr Asn Leu Ser
        115                 120                 125
Trp Gly Pro Leu Pro Trp Pro Cys Val Ser Glu Leu Phe Pro Thr Arg
    130                 135                 140
Ile Arg Glu Pro Gly Val Ala Val Gly Val Gly Ala Gln Trp Met Phe
145                 150                 155                 160
Asn Phe Val Trp Ser Phe Ser Thr Pro Tyr Ile Leu Ser Lys Ile Lys
                165                 170                 175
Trp Ala Thr Phe Val Leu Phe Gly Gly Leu Asp Leu Leu Ile Val Gly
            180                 185                 190
Phe Val Trp Gly Phe Val Pro Glu Thr Arg Gly Lys Ser Leu Glu Glu
        195                 200                 205
Ile Ser Ala Leu Phe Glu Gly Asn Ser Ser Leu Leu Ser Ser Ser Arg
    210                 215                 220
Gly Thr Glu Gly His Tyr Glu Ala Gly Pro Asp Gly Asp Gly Val Asn
225                 230                 235                 240
Gly Lys Asp Gly Ser Ile Leu Pro Val Ala Ala Gly Ser Ala Ser Ser
                245                 250                 255
```

<210> 27379
<211> 292
<212> PRT
<213> A.fumigatus

<400> 27379

```
Gln Leu Asn Ile Glu Leu Ala Ser Thr Leu Glu Asn Ser Thr Leu Phe
1               5                   10                  15
Glu Lys Asn Pro Glu Tyr Arg Lys Ala Leu Ala Val Val Ser Val Pro
            20                  25                  30
Glu Arg Val Val Gln Phe Arg Val Val Trp Glu Asp Asp Asn His Gln
        35                  40                  45
Val Gln Ile Asn Arg Gly Tyr Arg Val Gln Phe Asn Ser Ala Leu Gly
    50                  55                  60
Pro Tyr Lys Gly Gly Leu Arg Phe His Pro Ser Val Asn Leu Ser Ile
65                  70                  75                  80
Leu Lys Phe Leu Gly Phe Glu Gln Ile Phe Lys Asn Ala Leu Thr Gly
                85                  90                  95
Leu Asn Met Gly Gly Gly Lys Gly Gly Ser Asp Phe Asp Pro Lys Gly
            100                 105                 110
Lys Ser Asp Asn Glu Ile Arg Arg Phe Cys Val Ala Phe Met Thr Glu
        115                 120                 125
Leu Cys Lys His Ile Gly Ala Asp Thr Asp Val Pro Ala Gly Asp Ile
    130                 135                 140
Gly Val Thr Gly Arg Glu Ile Gly Phe Leu Phe Gly Gln Tyr Arg Lys
145                 150                 155                 160
Ile Arg Asn Gln Trp Glu Gly Val Leu Thr Gly Lys Gly Gly Ser Trp
                165                 170                 175
Gly Gly Ser Leu Ile Arg Pro Glu Ala Thr Gly Tyr Gly Leu Val Tyr
            180                 185                 190
Tyr Val Asp His Met Ile Lys Tyr Val Thr Lys Gly Ala Glu Ser Phe
        195                 200                 205
Ala Gly Lys Arg Val Ala Ile Ser Gly Ser Gly Asn Val Ala Gln Phe
    210                 215                 220
Ala Ala Leu Lys Val Ile Glu Leu Gly Gly Ser Val Val Ser Leu Ser
225                 230                 235                 240
```

```
Asp Ser Asn Gly Ser Leu Val Val Asn Gly Glu Gly Ser Phe Ser Pro
                245                 250                 255
Ala Glu Asp Arg Asn His Arg Ala Thr Gln Cys Arg Pro Gln Ala Ala
            260                 265                 270
Leu Arg Cys Cys Tyr His Arg Ser Leu Trp His Gln Val Gln Val Ser
        275                 280                 285
Ser Lys Ala Ala
    290
```

<210> 27380
<211> 95
<212> PRT
<213> A.fumigatus

<400> 27380

```
Ser Ser Met Ser Pro Arg Val Pro Ser Pro Ser Pro Ala Ser Ala Ser
1               5                   10                  15
Pro Ser Pro Ala Leu Val Met Ser Pro Ser Ser Leu Pro Ser Arg Ser
            20                  25                  30
Ser Ser Ser Ala Val Pro Ser Ser Pro Cys Pro Thr Ala Met Ala Pro
        35                  40                  45
Trp Leu Ser Thr Ala Lys Ala Ala Ser Pro Pro Pro Lys Ile Glu Ile
    50                  55                  60
Ile Ala Gln Leu Asn Val Asp Arg Lys Gln Leu Ser Asp Val Ala Thr
65                  70                  75                  80
Thr Glu Val Phe Gly Thr Lys Phe Lys Phe Leu Pro Arg Arg Pro
                85                  90                  95
```

<210> 27381
<211> 211
<212> PRT
<213> A.fumigatus

<400> 27381

```
Gly Arg Leu Gly Arg Asn Leu Asn Leu Val Pro Lys Thr Ser Val Val
1               5                   10                  15
Ala Thr Ser Glu Ser Cys Leu Arg Ser Thr Leu Ser Cys Ala Met Ile
            20                  25                  30
Ser Ile Phe Gly Gly Gly Glu Ala Ala Phe Ala Val Asp Asn Gln Gly
        35                  40                  45
Ala Ile Ala Val Gly Gln Gly Asp Asp Gly Thr Ala Glu Leu Asp Asp
    50                  55                  60
Leu Glu Gly Ser Glu Leu Gly Asp Ile Thr Arg Ala Gly Asp Gly Asp
65                  70                  75                  80
Ala Leu Ala Gly Glu Gly Leu Gly Thr Leu Gly Asp Ile Leu Asp His
                85                  90                  95
Met Val Asp Val Val Asp Glu Thr Val Ala Gly Gly Leu Gly Thr Asp
            100                 105                 110
Gln Arg Thr Thr Pro Ala Thr Ala Leu Ala Gly Glu Asp Thr Leu Pro
        115                 120                 125
Leu Val Ala Asp Leu Ala Val Leu Ala Lys Glu Glu Thr Asp Leu Thr
    130                 135                 140
Thr Gly Asp Thr Asn Val Thr Gly Gly Asp Val Gly Val Gly Thr Asp
145                 150                 155                 160
Val Leu Ala Gln Leu Gly His Glu Gly His Ala Glu Ala Thr Asp Leu
                165                 170                 175
```

```
Val Val Gly Leu Ala Leu Gly Val Glu Val Gly Thr Thr Leu Ala Thr
            180                 185                 190
Thr His Val Gln Thr Gly Gln Ser Val Leu Glu Asp Leu Leu Glu Thr
        195                 200                 205
Lys Glu Leu
    210
```

<210> 27382
<211> 127
<212> PRT
<213> A.fumigatus

<400> 27382

```
Trp Leu Ser Leu Asp Arg Thr Gly Ala Asn Asp Arg Asp Glu Thr Arg
1               5                  10                  15
Gly Cys Leu Val Glu Lys Ser Ser Ser Glu Lys Gln Ala Pro Arg Leu
            20                  25                  30
Arg Val Lys Val Arg Leu Tyr Phe Gly Val Glu Tyr Ala Pro Gly Ile
        35                  40                  45
Asn Lys Ala Pro Thr Arg Leu Val Pro Glu Ala Ser Thr Lys Thr Leu
    50                  55                  60
Thr Asn Arg Thr Ala Ser Trp Phe Gly Gly Trp Gly His Pro Trp Asn
65                  70                  75                  80
Ile Asn Val Thr Asp Gln Leu Ser Val Tyr Asn Ser Leu Arg Gln Thr
                85                  90                  95
Gly Phe Asn Val Phe Asp Val Phe Leu Arg Lys Lys Val Ser Glu Tyr
            100                 105                 110
Leu Leu Pro Phe His Pro Ile Arg Ser Thr Leu Ile Cys Gly Ala
        115                 120                 125
```

<210> 27383
<211> 69
<212> PRT
<213> A.fumigatus

<400> 27383

```
Pro Leu Cys Arg Ile Val Thr Glu His Ala Asn Gly Ile Leu Leu Arg
1               5                  10                  15
Thr Asn Tyr Gly Arg Asp Thr Thr Thr Tyr Met Lys Asp His Asp Pro
            20                  25                  30
Val Ile Thr Asp Arg Leu Thr Lys Ile Ile Val Ile Arg Leu Val Glu
        35                  40                  45
Glu Ser Leu Leu Leu Gln Cys Ile Ala Ser Leu Gln Leu Leu Gly Asp
    50                  55                  60
Ile Ser Pro Ser Trp
65
```

<210> 27384
<211> 146
<212> PRT
<213> A.fumigatus

<400> 27384

```
Leu Leu Thr Gln Thr Leu Pro Ala Leu Met Ala Phe Asp Thr Arg Ile
1               5                  10                  15
Ala Val Leu Thr Phe Leu Val Trp Thr Ala Glu Ala Arg Pro Val His
```

```
            20                  25                  30
Glu Ile Ser Gly Gly Glu Pro Ala Gly Trp Leu Asp Thr Leu Thr Ile
        35                  40                  45
Val Gly Ala Val Ser Lys Leu Asp Gly Leu Leu Leu Gly Leu Glu Leu
    50                  55                  60
Leu His Cys Ala Asn Arg Ala Glu Asp Leu Leu Leu Asn Asn Leu His
65                  70                  75                  80
Ile Ala Val Asp Ile Arg Lys Asp Ser Gly Phe Asn Glu Ile Ser Leu
                85                  90                  95
Val Thr Lys Ala Phe Ser Ala Ser Asn Asn Ser Cys Thr Arg Leu Leu
            100                 105                 110
Ser Val Leu Asp Val Ala His Asp Ala Ile Glu Leu Gln Leu Arg Asn
        115                 120                 125
Leu Arg Ser Leu Glu Arg Leu Gly Ile Glu Gly Ile Ala Asp Phe Val
    130                 135                 140
Leu Phe
145
```

<210> 27385
<211> 125
<212> PRT
<213> A.fumigatus

```
<400> 27385
Arg Leu Phe Lys Arg Arg Ser Ser Ala Leu Phe Ala Gln Cys Arg Ser
1               5                   10                  15
Ser Arg Pro Arg Arg Arg Pro Ser Ser Leu Leu Thr Ala Pro Thr Met
            20                  25                  30
Val Ser Val Ser Ser His Pro Ala Gly Ser Pro Pro Leu Ile Ser Cys
        35                  40                  45
Thr Gly Leu Ala Ser Ala Val His Thr Lys Asn Val Asn Thr Ala Ile
    50                  55                  60
Arg Val Ser Asn Ala Ile Lys Ala Gly Ser Val Trp Val Asn Asn Tyr
65                  70                  75                  80
Asn Met Ile Tyr Pro Gln Ala Pro Phe Gly Gly Tyr Lys Glu Ser Gly
                85                  90                  95
Leu Gly Arg Glu Leu Gly Ser Tyr Ala Leu Glu Asn Tyr Thr Gln Val
            100                 105                 110
Lys Thr Val His Ile Arg Thr Gly Asp Cys Pro Phe Pro
        115                 120                 125
```

<210> 27386
<211> 68
<212> PRT
<213> A.fumigatus

```
<400> 27386
Ser Ile Pro Arg His His Ser Val Ala Thr Arg Asn Arg Val Leu Ala
1               5                   10                  15
Val Asn Ser Ala Leu Met Leu Leu Arg Thr Ile Leu Arg Ser Arg Gln
            20                  25                  30
Tyr Thr Ser Gly Gln Ala Ile Ala Arg Ser Pro Glu Ala Val Thr Gln
        35                  40                  45
Cys Ala Phe Glu Gly Lys Tyr Ser Asp Leu Thr Asn Ser Phe Val Tyr
    50                  55                  60
His Val Gln Ala
```

65

<210> 27387
<211> 207
<212> PRT
<213> A.fumigatus

<400> 27387
Ala Leu Lys Trp Ala Ser Phe Gly Ile Tyr Phe Asn His Gly Gln Cys
1 5 10 15
Cys Cys Ala Gly Ser Arg Ile Leu Val Gln Glu Ser Ile Tyr Glu Glu
20 25 30
Phe Leu Ala Arg Phe Lys Glu Arg Ser Glu Gln Asn Lys Val Gly Asp
35 40 45
Pro Phe Asp Pro Gln Thr Phe Gln Gly Pro Gln Val Ser Gln Leu Gln
50 55 60
Phe Asp Arg Ile Met Gly Tyr Ile Gln Asp Gly Lys Gln Ala Gly Ala
65 70 75 80
Arg Val Val Thr Gly Gly Glu Arg Leu Gly Asp Lys Gly Tyr Phe Ile
85 90 95
Lys Pro Thr Ile Phe Ala Asp Val Asn Gly Asp Met Lys Ile Val Gln
100 105 110
Glu Glu Ile Phe Gly Pro Val Cys Thr Val Gln Lys Phe Lys Thr Glu
115 120 125
Glu Glu Ala Ile Lys Leu Ala Asn Ser Thr Asn Tyr Gly Lys Cys Ile
130 135 140
Gln Pro Pro Ser Trp Phe Thr Pro Ala Asn Leu Met His Arg Ser Cys
145 150 155 160
Leu Cys Cys Pro His Gln Glu Arg Gln Tyr Arg Asn Ser Cys Ile Lys
165 170 175
Arg His Gln Gly Trp Lys Arg Leu Gly Gln Gln Leu Gln Tyr Asp Leu
180 185 190
Ser Pro Gly Thr Ile Arg Trp Leu Gln Gly Ile Gly Ser Trp Pro
195 200 205

<210> 27388
<211> 693
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (680)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27388
Ala Val Pro Ser Ser Pro Val Val Lys Thr Lys Leu Gly Val Ile Thr
1 5 10 15
Gly Asp Gln Ala Val Gly Phe Phe Met Lys Ala Gln Leu Pro Glu Glu
20 25 30
Val Leu Ala Gln Ile Trp Asp Leu Ala Asp Ile Asp Ala Asp Gly Gln
35 40 45
Leu Thr Lys Asp Glu Phe Ala Val Ala Met Tyr Leu Val Arg Ser Gln
50 55 60
Arg Thr Gly Lys Glu Pro Leu Pro Gln Thr Leu Pro Pro Ala Leu Val
65 70 75 80

```
Pro Pro Ser Met Arg Arg Pro Thr Thr Ala Gln Ala Val Pro Pro Pro
                85                  90                  95
Pro Pro Ser Val Arg Ser Ala Ala Asp Asp Leu Phe Gly Leu Asp Ala
            100                 105                 110
Phe Ser Ala Pro Pro Ala Pro Ala Ala Pro Ser Gln Val Pro Gln Ser
        115                 120                 125
Thr Gly Gly Ser Asn Thr Pro Phe Gln Thr Pro Gly Ser Pro Thr Ser
    130                 135                 140
Arg Ala Ser Pro Pro Ala Asn Ser Thr Thr Phe Lys Pro Phe Ile Pro
145                 150                 155                 160
Thr Ser Ser Phe Gly Gln Ser Leu Gln Pro Gln Ile Thr Gly Ala Ser
                165                 170                 175
Ala Gly Ala Pro Pro Pro Val Arg Ser Pro Pro Pro Pro Ser Asp Asp
            180                 185                 190
Leu Leu Gly Asp Asn Asp Pro Glu Glu Ser Ser Lys Leu Thr Gln Glu
        195                 200                 205
Thr Ala Glu Leu Ala Asn Leu Ser Asn Gln Ile Gly Ser Leu Ala Lys
    210                 215                 220
Glu Met Gln Asn Val Gln Thr Lys Arg Thr Ser Ala Glu His Glu Leu
225                 230                 235                 240
Ser Gln Thr Ser Gln Gln Lys Arg Asp Phe Glu Thr Arg Leu Ala Gln
                245                 250                 255
Ala Arg Ala Met Tyr Glu Gln Glu Val Lys Asn Phe Lys Ala Leu Glu
            260                 265                 270
Glu Arg Leu Asn Ala Ser Lys Ala Glu Thr Lys Arg Leu Gln Gln Glu
        275                 280                 285
Tyr Ala Leu Ile Glu Gly Ser Arg Gln Asp Leu Gln Thr Gln Tyr Asn
    290                 295                 300
Gln Val Ser Ala Ala Leu Thr Ala Asp Gln Gln Glu Asn Ala Asn Leu
305                 310                 315                 320
Lys Glu Lys Ile Arg Gln Ala Asn Ala Ala Val Ala Gln Leu Lys Pro
                325                 330                 335
Ala Leu Glu Lys Ala Arg Ser Asp Ala Arg Gln Gln Lys Gly Leu Val
            340                 345                 350
Ala Ile Asn Lys Lys Gln Leu Ser Thr Val Glu Gly Glu Arg Asp Lys
        355                 360                 365
Ile Gln Glu Glu Met Asp Thr Leu Ser Lys Glu Gln Pro Gln Gly Ser
    370                 375                 380
Asp Glu Ser Ala Ala Pro Ala Leu Ala Ser Pro Ala Leu Ser Thr Ala
385                 390                 395                 400
Ser Gln Asn Asn Asn Pro Phe Phe Arg Arg Thr Thr Thr Ala Ser Ser
                405                 410                 415
Asp Gly Gln Gly Ala Ser Pro Gln Val Ser Ser Glu Gln Gln Arg Ala
            420                 425                 430
Phe Asp Ser Leu Phe Gly Thr Ala Phe Ala Pro Pro Thr Thr Ala Thr
        435                 440                 445
Pro Pro Pro Pro Thr Ser Phe Arg Ala Asp Ser Arg Gln Ala Ser Leu
    450                 455                 460
His Ser Pro Val Thr Ser Gly Val Pro Thr Pro Ser Val Ser Pro Pro
465                 470                 475                 480
Pro Ser Val Gly Thr Val Pro Glu Pro Pro Gln Ser Arg Gln Phe Thr
                485                 490                 495
Pro Asn Val Leu Pro Leu Ala Glu Thr Gln Ser Val Thr Ser Ser Thr
            500                 505                 510
Lys Pro Ser Pro Pro Gly Ser Arg Phe Gly Gly Pro Glu Ser Ser Thr
        515                 520                 525
```

Val Gly Thr Pro Ala Pro Ala Gly Ala Thr Glu Ile Pro Ser Ala Ser
530 535 540
Pro Glu His Gly Glu Val Arg Ser Pro Phe Glu Glu Phe Glu Glu Ser
545 550 555 560
Lys Arg Phe Pro Glu Val Pro Val Val Ser Gly Glu Thr Ala Arg Ala
565 570 575
Asp Thr Ser Ala Thr Ala Asn Glu Asn Gln Thr Ala Ala Lys Asp Pro
580 585 590
Ser Phe Asp Glu Leu Phe Gly Gly Pro Ala His Gln Arg Ser Arg Ser
595 600 605
Gln Asn Ala Asn Asp Phe Glu Glu Ala Phe Ala Ala Met Lys Gln Gly
610 615 620
Ala Gly Ala Asn Gln Ala Leu Met Val Gln Leu Leu Leu Arg Ser Pro
625 630 635 640
Ser Ser Arg Arg Ser Gly Ser Ser Pro Met Met Thr Met Thr Thr Thr
645 650 655
Ala Leu Ile Ala Arg His Pro Trp Gly Phe Asp Glu His Phe Pro Pro
660 665 670
Asp Trp Phe Pro Pro Lys Asn Xaa Gln Thr Leu Lys Thr Gly Pro Asp
675 680 685
Gly Thr His Leu Asn
690

<210> 27389
<211> 240
<212> PRT
<213> A.fumigatus

<400> 27389
Ala Pro Ala Arg Ile Phe Gly Ser Ser Trp Thr Ile Pro Arg Arg Leu
1 5 10 15
Ile Leu Gly Thr Gly Met Lys Asp Ile Leu Pro Glu Thr Pro Gly Leu
20 25 30
Asp Glu Ala Trp Gly Lys Gly Val Tyr Trp Cys Pro Trp Cys Asp Gly
35 40 45
Trp Glu His Arg Asp Gln Pro Phe Gly Ile Leu Gly Ser Leu Val Asp
50 55 60
Val Val Gly Ser Val Leu Glu Val Tyr Thr Leu Asn Thr Asp Ile Ile
65 70 75 80
Ala Phe Val Asn Gly Thr Gln Thr Pro Lys Ala Glu Ala Lys Leu Ala
85 90 95
Glu Lys Tyr Pro Asn Trp Lys Lys Gln Leu Glu Ala Tyr Asn Ile Val
100 105 110
Leu Asn Asn Glu Thr Val Lys Ser Ile Glu Arg Val Gln Asn Gly Glu
115 120 125
Asp Val Tyr Asp Asp Gln Gly Arg Gln Phe Asp Ile Phe Arg Val Asn
130 135 140
Leu Ala Asp Gly Ser Ser Val Thr Arg Asn Ala Phe Ile Thr Asn Phe
145 150 155 160
Pro Ser Glu Gln Arg Ser Ser Ile Pro Lys Glu Leu Gly Leu Lys Met
165 170 175
Lys Asp Asn Lys Ile Asp Thr Asn Ile Asp Gly Met Arg Thr Ser Leu
180 185 190
Pro Gly Val Phe Ala Val Gly Asp Ala Asn Ser Asp Gly Ser Thr Asn
195 200 205
Val Pro His Ala Met Phe Ser Gly Lys Arg Ala Ala Val Phe Val His

```
    210                 215                 220
Gly Met Tyr Leu Phe Phe Pro Tyr Arg Cys Arg Thr Trp Ala Asp Tyr
225                 230                 235                 240
```

<210> 27390
<211> 142
<212> PRT
<213> A.fumigatus

<400> 27390

```
Asn Trp Leu Ile Phe Val Thr Arg Gly Val Glu Thr Trp Pro Ser Ile
1               5                   10                  15
His Phe Val Thr Ala Ile Leu Gly Val Asp Val Leu Ala Thr Ile Phe
            20                  25                  30
Cys Leu Phe Gly Trp Phe Thr Asn Glu Thr Met Pro Thr Lys Pro Ala
        35                  40                  45
Asp Ser Phe Val Glu Thr Arg Asn Gly Trp Thr Asp Ile Val Thr Val
    50                  55                  60
Val Arg Val Trp Gly Phe Ser Leu Gly Val Glu Ile Val Ile Ala Leu
65                  70                  75                  80
Val Tyr Tyr Met Leu Asn Lys Phe Lys Trp Leu Glu Asn Leu Gly Arg
                85                  90                  95
Ala Lys Arg Asp Lys Gly Asp Ile Lys Ile Gln Asn Leu Leu Gly His
            100                 105                 110
Leu Ala Arg Leu Thr Val Glu Tyr Asp Gln Pro Gly Gln Pro Lys Gly
        115                 120                 125
Arg Phe Phe Leu Thr Ser Ser Lys Glu Glu Glu Glu Ala Glu
    130                 135                 140
```

<210> 27391
<211> 181
<212> PRT
<213> A.fumigatus

<400> 27391

```
Arg Ser Ala Gln Val Glu Gln Ser Gly Thr Tyr Trp Tyr His Ser His
1               5                   10                  15
Thr Lys Gly Gln Tyr Pro Asp Gly Leu Arg Gln Ala Leu Val Val Thr
            20                  25                  30
Asp Pro Lys Asn Pro Tyr Ile Gly Gln Tyr Asp Glu Glu Arg Val Ile
        35                  40                  45
Ser Leu Ser Asp Trp Tyr His Asp Gln Met Pro Thr Leu Leu Lys Ser
    50                  55                  60
Phe Ile Ser Ile Ser Asn Pro Thr Gly Ala Glu Pro Val Pro Lys Ala
65                  70                  75                  80
Ala Leu Met Asn Asp Thr Gln Asn Leu Thr Val Ala Val Glu Pro Gly
                85                  90                  95
Lys Thr Tyr Leu Phe His Leu Val Asn Val Gly Ala Phe Ala Ser Gln
            100                 105                 110
Tyr Phe Trp Ile Glu Asp His Thr Met Lys Ile Val Glu Val Asp Gly
        115                 120                 125
Val Trp Thr His Ala Ser Glu Ala Asn Met Ile Tyr Ile Ala Ser Ala
    130                 135                 140
Gln Arg Tyr Ser Val Leu Val Thr Met Lys Asn Glu Thr Ser Gln Asn
145                 150                 155                 160
Tyr Ala Met Val Gly Ser Met Asp Thr Val Phe Ala Ser Ser Leu Gln
```

```
                165                 170                 175
Asp Asp Ala Gln Arg
            180

<210> 27392
<211> 73
<212> PRT
<213> A.fumigatus

<400> 27392
Asp Leu Phe Asp Thr Leu Pro Glu Ser Leu Asn Tyr Asn Val Thr Gly
1               5                  10                  15
Trp Leu Met Tyr Asn Asp Gln Ala Asp Lys Pro Thr Pro Ala Leu Val
            20                  25                  30
Ser Ala Phe Glu Pro Tyr Asp Asp Phe Asn Leu Val Pro Val Asp Gly
        35                  40                  45
Met Ala Leu His Lys Glu Ala Asp Tyr Thr Val Thr Leu Asp Val Thr
    50                  55                  60
Met Asp Asn Leu Gly Asp Gly Ala Asn
65                  70

<210> 27393
<211> 103
<212> PRT
<213> A.fumigatus

<400> 27393
Ser Arg Tyr Val Ser Ser Leu Ala Ala Ser Ser Leu Gln Gln Glu Ala
1               5                  10                  15
Asp His Leu Asp Pro Pro Leu Gly Val Trp Leu Phe His Cys His Ile
            20                  25                  30
Glu Trp His Met Asp Ser Gly Leu Ala Ala Thr Phe Ile Glu Ala Pro
        35                  40                  45
Leu Asp Leu Gln Lys Thr Leu Lys Ile Pro Glu Asp His Tyr Gln Val
    50                  55                  60
Cys Glu Ala Ser Gly Asn Leu Thr Ala Gly Asn Ala Ala Gly Asn Thr
65                  70                  75                  80
Asn Asp Leu Phe Asp Leu Thr Gly Gln Asn Val Ser Pro Ala Pro Leu
                85                  90                  95
Pro Ala Gly Phe Thr Ala Asn
            100

<210> 27394
<211> 92
<212> PRT
<213> A.fumigatus

<400> 27394
Phe Thr Val Ile Pro Asp Gly His Phe Glu Arg Leu Val Ile Gly Ile
1               5                  10                  15
Asn Gly Gln Trp Pro Pro Pro Val Leu Ser Phe Thr Arg Gly Asp Arg
            20                  25                  30
Ile Ile Ala Lys Val His Asn Ala Leu Gly Asn Glu Thr Thr Ser Val
        35                  40                  45
His Trp His Gly Phe Phe Gln Asn Gly Thr Asn His Met Asp Gly Pro
    50                  55                  60
```

```
Pro Ser Val Thr Gln Cys Asp Ile Ala Pro Gly Tyr Thr Phe Val Tyr
65                  70                  75                  80
Asn Phe Thr Val Ser Ile Gly Cys Gly Arg Ser Ser
                85                  90
```

<210> 27395
<211> 153
<212> PRT
<213> A.fumigatus

<400> 27395

```
Arg Trp Ile Ile Trp Glu Thr Gly Pro Ile Ser Lys Ser Asn Thr His
1               5                   10                  15
Thr Ala Arg Leu Ser Gly Ser Lys Glu Leu Gly Leu Thr Phe His Ser
            20                  25                  30
Ala Phe Phe Asn Gly Ile Thr Tyr Val Met Pro Lys Val Pro Thr Leu
        35                  40                  45
Tyr Ser Val Leu Thr Thr Gly Ser Ala Ala Thr Asp Pro Ala Val Tyr
    50                  55                  60
Gly Tyr Asn Thr His Pro Ile Val Leu Lys Arg Gly Asp Ile Val Asp
65                  70                  75                  80
Ile Val Leu Asn Asn Asp Asp Ala Gly Lys His Pro Phe His Leu His
                85                  90                  95
Gly His Thr Phe Gln Val Ile Ala Arg Ser Glu Glu Asn Ala Gly His
            100                 105                 110
Tyr Asp Pro Ser Asn His Thr Thr Phe Pro Ser Ile Pro Met Arg Arg
        115                 120                 125
Asp Thr Val Ile Val Arg Pro Gln Gly Asn Phe Val Leu Arg Phe Gln
    130                 135                 140
Ala Asp Asn Pro Gly Met Cys Leu Val
145                 150
```

<210> 27396
<211> 241
<212> PRT
<213> A.fumigatus

<400> 27396

```
Ser Ile Arg Leu Ala Asn Thr Lys Asp Arg Gly Phe Trp Leu Phe Gly
1               5                   10                  15
Arg Leu Tyr Trp Asp Val Asp Pro Tyr Ser Tyr Leu Ala Leu Arg Val
            20                  25                  30
Lys Ser Asp Gly Arg Arg Tyr Thr Val Asn Ile Gln Thr Asp Ser Ile
        35                  40                  45
Val Glu Thr Asp Ile His Gln His Arg Leu Tyr Thr Arg His His Arg
    50                  55                  60
Val Arg Asn Gln Thr Ser Arg Asp Asp Leu Pro Ser Tyr Pro Ser Gln
65                  70                  75                  80
Ala Val Glu Ser Pro Glu Leu Ala Glu Thr Leu Phe Pro Arg Gly Ile
                85                  90                  95
Pro Ser Ser Leu Ser Asp Val Pro Pro Glu Ser Thr Ile Met Tyr Ser
            100                 105                 110
Ser Ala Thr Thr Ser Gly Gly Thr Gly Trp Glu Thr Ile Leu Leu Pro
        115                 120                 125
Phe His Ser Phe Val Arg Thr Asn His Gly Leu Val Val Glu Pro Gln
    130                 135                 140
```

```
Thr Ser Leu Leu Arg Gln Arg Val Lys Ser Val Gly Ile Gly Leu Thr
145                 150                 155                 160
Asp Arg Val Asp Gly Pro Tyr Asp Leu Arg Ile His Arg Ile Trp Ala
                165                 170                 175
Thr Asn Gly Ile Ser Glu Glu Glu Phe Glu Asp Glu Lys Arg Ile Cys
            180                 185                 190
Gly Ala Asp Ala Leu Pro Ile Asp Glu Gly Val Arg Thr Gly Trp Arg
        195                 200                 205
Gly Asp Ser Pro Ser Asp His Pro Glu Asp Lys Gly Ser Gln Pro Gly
    210                 215                 220
Gly Gly Gly Lys Thr Lys Gly Leu Lys Gly Leu Arg Ser Glu Trp Glu
225                 230                 235                 240
Gln
```

<210> 27397
<211> 393
<212> PRT
<213> A.fumigatus

<400> 27397

```
Val Ala Leu Ala Ile Val Val Thr Phe Leu Tyr Leu Gly Ala Ser Tyr
1               5                   10                  15
Phe Gly Met Lys Tyr Leu Arg Arg Met Gly Cys Ser Pro Lys Tyr Leu
            20                  25                  30
Pro Gly Lys Tyr Leu Lys Asp Lys Trp Asn Arg Trp Asp Pro Gly Lys
        35                  40                  45
Phe Tyr Asn Gln Val Ser Asn Asp Ile Arg Asn Gly Ser Ala Thr Gly
    50                  55                  60
Ala Glu Ala Thr Glu Met Ile Thr Ala Arg Thr Thr Asn Pro Ile His
65                  70                  75                  80
Arg Asp Ala Ser Ile Arg Ser Val Ala Thr Leu Pro Ala Tyr Ser Ala
                85                  90                  95
Asn Pro Lys Pro Glu Glu Arg Val Ile Ala Arg Glu Gly Glu Arg Asp
            100                 105                 110
Gly Met Asp Thr Val Ile Glu Phe Pro Glu Thr Ala Glu Glu Glu Glu
        115                 120                 125
Ala Arg Arg Glu Glu Leu Met Ala Ser Leu Tyr Glu Ile Arg Gln Arg
    130                 135                 140
Arg Arg Glu Glu Leu Ala Glu Arg Glu Ala Arg Arg Gln Ala Arg Arg
145                 150                 155                 160
Glu Ala Arg Glu Arg Gly Asp Arg Ala Gln Leu Glu Leu Leu Arg Gln
                165                 170                 175
Gln Asp Arg Leu Arg Ala Arg Gln Arg Ala Arg Ser Arg Ser Ser Thr
            180                 185                 190
Asn Ala Ser Asn Ser Ala Ser Asn Leu Ala Thr Ala Leu Ala Glu His
        195                 200                 205
Gln Ser Arg Gly Arg Gly Arg Arg Ile Ala Ser Val Asn Tyr Ala Asp
    210                 215                 220
Val Gly Tyr Val Arg His Asp Gly Ser Arg Val Arg Ala Thr Ser Pro
225                 230                 235                 240
Asp Ser Asp Arg Arg Pro Leu Leu Ser Asn Gly Pro Ser Gly Ser Phe
                245                 250                 255
Asp Ala Ser Asn Arg Ser Ser Met Val Asp Thr Pro Ser Ile His Ser
            260                 265                 270
Arg Gly Glu Ser Tyr Ser Ser Ala Ser Thr Gly Thr Val Asp Pro Ser
```

```
        275                 280                 285
Ala Leu Thr Arg Val His Ser Gln Thr His Ser Thr Ala Ser Thr Leu
    290                 295                 300
Pro Ser Thr Pro Gly Ala Glu Glu Ala Asp Val Gly Val Leu Ser Ile
305                 310                 315                 320
Pro Pro Pro Glu Tyr Asp His Leu Asp Trp Gly Glu Ala Pro Pro Tyr
                325                 330                 335
Gln Ser Pro Val Glu Glu Arg Asn Glu Asn Thr Ala Pro Leu Arg Glu
            340                 345                 350
Leu Thr Val Val Pro Thr Ile His Ile Asp Ala Ala Ser Pro Ile Ser
        355                 360                 365
Asp Asn Phe Pro Ala Ala Ala Pro His Glu Ser Arg Glu Gln His Asp
    370                 375                 380
Ser Arg Ala Val Pro Ser Val Thr Arg
385                 390
```

<210> 27398
<211> 79
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (26),(33)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27398

```
Met Leu Ala Ala Arg Ser Leu Val Val Val Leu His Met Val Asp Lys
1               5                   10                  15
Asn Cys Leu Gly Gly His Ser Asn Ser Xaa Ser Thr Arg Ser Ser Lys
            20                  25                  30
Xaa Ile His Asn Ser Ser Ser Leu Leu Phe Phe Arg Pro Ala Glu Phe
        35                  40                  45
Lys Leu Thr Ser Asp His Gln Pro His Tyr Phe Ala Ala Asp Gly Asn
    50                  55                  60
Asn Leu Asp Phe Ile Asn Cys Ile Pro Ser Ser Met Ala Leu Arg
65                  70                  75
```

<210> 27399
<211> 181
<212> PRT
<213> A.fumigatus

<400> 27399

```
Tyr His His Arg Ile Leu Ile Ile Leu Asp Leu Glu Val Leu Gln Glu
1               5                   10                  15
Leu Gly Glu Ala Glu Lys Ile Gly Glu Pro Arg Pro Leu Glu Asn Lys
            20                  25                  30
Leu Glu Glu Asp Glu Lys Pro Gln Pro Thr Thr Ile Ser Gly Gly Gly
        35                  40                  45
Phe Tyr Gly Ser Lys Val Gln Asn Gln Arg Gly Glu Pro Arg Val Gln
    50                  55                  60
Pro Ala Arg Ser Ser Leu Thr Ser Ser His Ala Thr Ile Tyr Pro Ile
65                  70                  75                  80
Glu Ala Ile Ser Pro Tyr Ser His Lys Trp Thr Ile Lys Ala Arg Cys
                85                  90                  95
```

```
Thr Ser Lys Ser Ala Ile Lys Thr Trp His Asn Arg Asn Ser Glu Gly
            100                 105                 110
Arg Leu Phe Ser Val Asn Leu Leu Asp Asp Ser Gly Glu Ile Arg Ala
        115                 120                 125
Thr Gly Phe Asn Glu Gln Cys Asp Leu Leu Tyr Asp Val Phe His Glu
    130                 135                 140
Gly Gly Val Tyr Tyr Ile Ser Ser Pro Cys Arg Val Gln Ile Ala Lys
145                 150                 155                 160
Lys Gln Phe Thr Asn Leu Asn Asn Asp Tyr Glu Leu Thr Phe Glu Lys
                165                 170                 175
Asp Thr Val Val Asp
            180
```

<210> 27400
<211> 88
<212> PRT
<213> A.fumigatus

<400> 27400

```
Lys Asn Ser Asn Gln Tyr Gly Gly Tyr Val Phe Pro Cys Ser Thr Lys
1               5                   10                  15
Leu Pro Ser Phe Thr Thr Val Ile Gly Gly Tyr Asn Ala Val Val Pro
            20                  25                  30
Gly Glu Tyr Ile Asn Tyr Ala Pro Val Thr Asp Gly Ser Ser Thr Cys
        35                  40                  45
Tyr Gly Gly Ile Gln Ser Asn Ser Gly Leu Gly Phe Ser Ile Phe Gly
    50                  55                  60
Asp Ile Phe Leu Lys Ser Gln Tyr Val Val Phe Asp Ser Gln Gly Pro
65                  70                  75                  80
Arg Leu Gly Phe Ala Pro Gln Ala
                85
```

<210> 27401
<211> 71
<212> PRT
<213> A.fumigatus

<400> 27401

```
Leu Leu His Leu Thr Arg Cys Ala Asn Leu Thr Arg Glu Met Val Glu
1               5                   10                  15
Lys Val Leu Gln Tyr Asp Asn Gln Ser Ser Thr Asp Tyr Ser Thr Pro
            20                  25                  30
Val Val Asp Ser Leu Ser Glu Asp Gly Arg Glu Ile Glu Pro Lys Leu
        35                  40                  45
Arg Arg Lys Leu Asp Ile Arg Ile Met Pro Val Ile Ile Leu Met Tyr
    50                  55                  60
Leu Leu Asn Phe Ile Asp Arg
65                  70
```

<210> 27402
<211> 116
<212> PRT
<213> A.fumigatus

<400> 27402

```
Ser His Pro Gln Ser Tyr Gly Arg Phe Lys Leu Thr Leu Ala Arg Ser
```

```
1               5                   10                  15
Asn Tyr Thr Ala Ala Arg Leu Gln Gly Leu Glu Ser Asp Leu His Leu
            20                  25                  30
Ser Gly Ser Glu Tyr Gln Val Gly Leu Ser Val Phe Phe Val Gly Tyr
        35                  40                  45
Val Leu Gly Pro Ile Pro Ser Asn Leu Leu Leu Asn Tyr Leu Gly Arg
    50                  55                  60
Pro Ser Ala Tyr Ile Gly Leu Phe Gly Ala Ala Trp Gly Leu Val Thr
65                  70                  75                  80
Leu Leu Thr Ser Gln Val Lys Gly Tyr Gly Ser Leu Ala Ala Cys Arg
                85                  90                  95
Phe Ile Leu Gly Val Val Gly Lys Pro Arg Val Phe Leu Leu Gly Asp
            100                 105                 110
Trp Gly Leu Asp
        115
```

<210> 27403
<211> 101
<212> PRT
<213> A.fumigatus

<400> 27403

```
Pro Thr Gln Lys Trp Tyr Thr Gln Arg Glu Leu Gly Val Arg Met Thr
1               5                   10                  15
Ile Phe Phe Ser Ala Ala His Ile Ala Asn Ala Phe Gly Ser Leu Ile
            20                  25                  30
Ala Ala Gly Ile Leu Asn Gly Leu Asp Gly Asn Arg Gly Leu Ser Ala
        35                  40                  45
Trp Arg Trp Leu Tyr Ile Ile Glu Gly Ala Ser Lys Tyr Thr Cys Ser
    50                  55                  60
Asp Asp Arg Ser Thr Leu Thr Asn His Gly Glu Ser Pro Ser Ser Ser
65                  70                  75                  80
Ala Ser Ser Pro Gly Thr Tyr Cys Gln Thr Phe Gln Arg Thr Gly Val
                85                  90                  95
His Tyr Pro Pro Arg
            100
```

<210> 27404
<211> 60
<212> PRT
<213> A.fumigatus

<400> 27404

```
Ile Ser Leu Gly Lys Gly Phe Lys Ile Met Arg Lys Thr Thr His Ser
1               5                   10                  15
Cys Tyr Leu Ile Ile Leu Pro Phe Ile Val Gln Val Thr Gly Ala Val
            20                  25                  30
Asn Leu Tyr Ser Ala Met Asn Asn Leu Ser Asp Ser Ile Ile Arg Gln
        35                  40                  45
Pro Arg Leu Leu Ser Thr Ile Cys Tyr Leu Leu Cys
    50                  55                  60
```

<210> 27405
<211> 65
<212> PRT
<213> A.fumigatus

<400> 27405
Gln Gly Leu Thr His Thr Ala Val Thr Pro Leu Asp Leu Val Lys Cys
1 5 10 15
Arg Arg Gln Val Asp Ser Gln Leu Tyr Lys Ser Asn Met Glu Ala Phe
20 25 30
Arg Val Ile Arg Asn Ala Glu Gly Ile Arg Gly Val Phe Thr Gly Trp
35 40 45
Ser Pro Thr Phe Phe Gly Tyr Ser Val Ser Arg Trp Phe Met Ala Arg
50 55 60
Phe
65

<210> 27406
<211> 151
<212> PRT
<213> A.fumigatus

<400> 27406
Ser Gln His Ser Leu Tyr Lys Gly Leu Tyr Pro Leu Trp Gly Arg Gln
1 5 10 15
Ile Pro Tyr Thr Met Met Lys Phe Ala Ser Phe Glu Thr Ile Val Glu
20 25 30
Ala Ile Tyr Lys Lys Leu Pro Arg Lys Lys Glu Glu Tyr Gly Lys Gly
35 40 45
Ala Gln Thr Ala Val Ala Phe Thr Gly Gly Tyr Leu Ala Gly Ile Leu
50 55 60
Cys Ala Val Val Ser His Pro Ala Asp Val Met Val Ser Lys Leu Asn
65 70 75 80
Ala Asn Arg Leu Pro Gly Glu Ala Phe Gly Ala Ala Ile Gly Arg Ile
85 90 95
Tyr Lys Asp Ile Gly Phe Met Gly Leu Trp Asn Gly Leu Pro Val Arg
100 105 110
Ile Val Met Ile Gly Thr Leu Val Gly Pro Pro Phe Ala Arg Val Cys
115 120 125
Gly His Glu Leu Thr Thr Phe Cys Thr Asp Trp Ile Ala Met Asp Asp
130 135 140
Val Ser Phe Ser Leu Gln Val
145 150

<210> 27407
<211> 115
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (6)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27407
Ser Ile Pro Asn Trp Xaa Thr Met Phe Pro Phe Asp Ser Val Ile Leu
1 5 10 15
Glu Ala Phe Asn Ala Gln Asn Leu Leu Asn Arg Pro Lys Glu Pro Lys
20 25 30
Gln Ala Gly Ser Ala Ala Leu Ile Arg Arg Glu Pro Phe Pro Ala Trp

```
        35                  40                  45
Ser Val Ile Asp Glu Ser Lys Arg Lys Ala Asp Ala Phe Ala Lys Glu
    50                  55                  60
Ala Ala Arg Glu Phe Asp Val Val Ser Gln Lys Ala Gln Ala Lys Thr
65                  70                  75                  80
Gly Lys Ile Glu Pro Trp Thr Pro Lys Tyr Tyr Ala Ala Cys Thr Val
                85                  90                  95
Gly Gly Leu Leu Ala Cys Val Gly Leu Arg Ser Asp Ile Val Tyr Leu
            100                 105                 110
Ile Tyr Ile
        115
```

<210> 27408
<211> 89
<212> PRT
<213> A.fumigatus

<400> 27408

```
Gln Gly Ala Lys Ala Gln Gly Ala Phe Lys Tyr Gly Gly Tyr Glu Phe
1               5                   10                  15
Phe Lys Lys Phe Tyr Ser Asp Leu Val Gly Pro Glu Arg Ala His Lys
            20                  25                  30
Trp Lys Thr Ser Val Tyr Leu Ala Ala Ser Ala Ser Ala Glu Phe Ile
        35                  40                  45
Ala Asp Val Ala Leu Cys Pro Phe Glu Ala Val Lys Val Arg Thr Gln
    50                  55                  60
Thr Thr Ile Pro Pro Glu Phe Lys Gly Thr Phe Ser Gly Ile Ser Gln
65                  70                  75                  80
Val Ile Gly Lys Glu Gly Val Ala Gly
                85
```

<210> 27409
<211> 125
<212> PRT
<213> A.fumigatus

<400> 27409

```
Leu Phe Ile Val Gly Thr Cys Gly Cys Phe Gly Ser Asp Glu Thr Leu
1               5                   10                  15
Ala Cys Phe Val Ala Gly Asn Ala Leu Asn Trp Asp Gly Leu Tyr His
            20                  25                  30
Ala Glu Leu Gln Ala Arg His Asp Ala Phe Asn Ser Thr Leu Glu Thr
        35                  40                  45
Leu Leu Asn Phe Gly Ile Cys Met Tyr Leu Gly Ala Val Met Pro Trp
    50                  55                  60
Asp Gln Phe His Met Pro Asp Thr Thr Gly Ile Thr Val Trp Arg Leu
65                  70                  75                  80
Ile Val Leu Gly Phe Leu Ile Leu Leu Phe Arg Arg Met Pro Ala Ile
                85                  90                  95
Leu Leu Gly Tyr Arg Phe Met Pro Lys Val Cys Arg Asn Trp Arg Glu
            100                 105                 110
Ala Leu Phe Met Gly Tyr Phe Gly Pro Ile Gly Glu Ser
        115                 120                 125
```

<210> 27410
<211> 136

<212> PRT
<213> A.fumigatus

<400> 27410
Cys Cys Ser Thr Phe Pro Phe Leu Asp Asn His Gly Met Lys Leu Ile
1 5 10 15
Val Arg Ser Met Gln Tyr His Gln Ile Val Ile Phe Thr His Arg Pro
20 25 30
Trp Val Ser Lys Asn Tyr Ile Gln Pro Arg Ser Pro Arg Gln Gly Pro
35 40 45
Gly Tyr His His Ala Arg Arg Met Cys Ile Glu Ser Ser Thr Ala Ile
50 55 60
Ala Arg Ile Leu His Ile Tyr Glu Lys His Tyr Thr Phe Arg Arg Met
65 70 75 80
Asn Asn Gln Val Val Ala Ile Ile Phe Ser Ala Ala Leu Met Pro Pro
85 90 95
Tyr Met Asn Leu Leu Glu His Ile Leu His Pro Ala Lys Asn Arg Cys
100 105 110
Glu Lys Phe Pro Thr Ala Thr Ala Gly Asn Gly Trp Arg Ser Leu Lys
115 120 125
Leu Arg Leu Leu Pro Leu Trp Glu
130 135

<210> 27411
<211> 85
<212> PRT
<213> A.fumigatus

<400> 27411
Gln Asn His Arg Cys Ala Val Gly Ser Ala Phe Glu Ala Arg Tyr His
1 5 10 15
Pro Thr Phe Ile Thr Phe Pro Lys Ser Leu Ser Glu Phe Phe Ala Asp
20 25 30
Arg Ala Lys Ala Leu Leu Glu Ile Glu Leu Asp Thr Pro Cys Val Ala
35 40 45
Thr Val Gln Ala Leu Val Ile Leu Ser Cys His Glu Gly Ala Ser Asn
50 55 60
Arg Asp Ala Arg Gly Trp Leu Tyr Ser Gly Met Trp Gly Thr Lys Gln
65 70 75 80
Met Asp Gly Arg Ser
85

<210> 27412
<211> 101
<212> PRT
<213> A.fumigatus

<400> 27412
Asn Val Thr Leu Asn Glu Ile Ala Thr Thr Thr Tyr Gly Glu Asn Val
1 5 10 15
Tyr Ile Val Gly Ser Ile Ser Glu Leu Gly Asn Trp Asp Thr Ser Lys
20 25 30
Ala Val Ala Leu Ser Ala Ser Lys Tyr Thr Ser Ser Asn Asn Leu Trp
35 40 45
Tyr Val Ser Val Thr Leu Pro Ala Gly Thr Thr Phe Glu Tyr Lys Tyr
50 55 60

```
Ile Arg Lys Glu Ser Asp Gly Ser Ile Val Trp Glu Ser Asp Pro Asn
65                  70                  75                  80
Arg Ser Tyr Thr Val Pro Ala Ala Cys Gly Val Ser Thr Ala Thr Glu
                85                  90                  95
Asn Asp Thr Trp Arg
            100
```

<210> 27413
<211> 79
<212> PRT
<213> A.fumigatus

<400> 27413
```
Ser Lys Val Trp Pro Ser Arg Cys Gly Gly Gly Ile Tyr Trp Asp Tyr
1               5                  10                  15
Thr His Thr Tyr Val Asn Ala Ile Ala Asn Glu Leu Phe Leu Ser Leu
            20                  25                  30
Ala Ala His Leu Ala Asn Arg Ala Ser Asp Lys Glu Tyr Tyr Val Asp
        35                  40                  45
Trp Ala Pro Thr Arg Val Gly Leu Val Pro Arg Gln Arg Asp Asp Gln
    50                  55                  60
Arg Glu Pro His His Gln Arg Arg Ala Asp Arg Lys Leu Arg Glu
65                  70                  75
```

<210> 27414
<211> 152
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (138)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27414
```
Pro Asp Ser Trp Thr Tyr Asn Gln Gly Val Ile Leu Gly Gly Leu Ala
1               5                  10                  15
Glu Leu Tyr Arg Ala Cys Pro Asn Ala Thr Phe Leu Glu Ser Ala Gly
            20                  25                  30
Glu Ile Ala Arg Ala Ala Ile Ala Ala Leu Ser Asp Ser Asp Gly Val
        35                  40                  45
Met His Glu Pro Cys Glu Pro Ser Ser Cys Thr Gly Asp Ser Thr Gln
    50                  55                  60
Phe Lys Gly Ile Phe Ile Arg Asn Leu Arg Leu Leu His Ser Val Ala
65                  70                  75                  80
Pro Asp Glu Glu Tyr Ser Arg Val Ile Thr Ala Ser Ala Asp Ser Ile
                85                  90                  95
Trp Val Asn Asp Arg Asp Ala Asn Asn Gln Met Gly Val Asn Trp Ala
            100                 105                 110
Gly Pro Ile Glu Arg Val Asp Ala Ser Ser His Asn Ser Ala Thr Asp
        115                 120                 125
Ala Leu Val Ala Ala Ile Gly Leu Ser Xaa Pro Val Trp Trp Arg Pro
    130                 135                 140
Trp Glu Arg Gln Arg Cys Phe Glu
145                 150
```

<210> 27415
<211> 319
<212> PRT
<213> A.fumigatus

<400> 27415
Pro Tyr Val Val Cys Pro Leu Phe Ser Gln Leu Ser Val Ser Pro Ser
1 5 10 15
Leu Met Val Trp Phe Ala Leu Ile Ile Pro Leu Pro Trp Asn Gln Ser
20 25 30
His Ser Arg Trp Ser Pro Val Asn Ile Ile Leu Leu Val Arg Ser Ala
35 40 45
Ile Arg Gln Val Cys Cys Glu Arg Glu Lys Gln Leu Val Cys Asn Arg
50 55 60
Val Asp Val Cys Met Arg Val Val Pro Val Asp Ala Ser Pro Ala Ser
65 70 75 80
Arg Arg Pro His Leu Thr Leu Asn Pro Val Ile Lys Trp His Ser Thr
85 90 95
Asp His Arg Ala Thr His Gln Phe Val Glu His Ser Leu Arg Lys Ile
100 105 110
Lys Ile Leu Arg Ser Ala Ser Asp Ile Glu Arg Arg Asp Pro Arg Gln
115 120 125
Arg Pro Pro Gly Ile Val Val Val Arg Ala Ile Gln Pro Leu Arg Asn
130 135 140
Ile Asn Pro Cys Ala Pro Pro Thr His Arg Leu Arg Ala Met Met Leu
145 150 155 160
Asn His Pro Val Val Arg Val Ile Pro Pro Ser Arg Arg Gly Val Arg
165 170 175
Ser Arg Gly His Arg Lys Arg Ile Leu Lys Asp Pro Asp Arg Asn Leu
180 185 190
Ala His Arg Val Val His Val Arg Gln Val Arg Asn Asn Gly His Thr
195 200 205
Ala Gly Pro Val Pro Pro Ala Ala Gly Ile Pro Asp Ala Ala Gly Gly
210 215 220
Val Val Pro Gly Leu Gln Arg Phe Glu Gly Arg Phe Arg Ala Cys Cys
225 230 235 240
Arg Arg Tyr Ser Arg Asp Arg Gly Arg Glu Asp Trp Lys Asp Glu Ser
245 250 255
Gly Ala His Phe Val Cys Val Cys Val Cys Val Cys Val Cys Val Ile
260 265 270
Val Asp Leu Gln Gly Arg Ala Ser Ser Phe Lys Tyr Thr Thr Arg Asn
275 280 285
Ala Asp Asp Val Ser Leu Arg Lys Lys Gly Ser Glu Cys Thr Thr Asp
290 295 300
Thr Cys Gln Gly Trp Gly His Ser Phe Leu Glu Arg Tyr Val Pro
305 310 315

<210> 27416
<211> 76
<212> PRT
<213> A.fumigatus

<400> 27416
Gly Ala Pro Arg Asn Ala Val Pro Ser Ser Pro Gly Val Asn Ser Val
1 5 10 15
Ser His Asp Ser Thr Gly Leu Ser Glu Gly Ala Gln Arg Cys Val Pro

```
            20                  25                  30
Ala Gly Ile Trp Ala Ser Glu Arg Gly Val Thr Tyr His Leu Phe Arg
        35                  40                  45
Gly Ala Gly His Ser Val Phe Ile Lys Lys Pro Arg Glu Met Phe Ala
    50                  55                  60
Tyr Val Arg Asp Val Val Val Ala Gln Ala Ser Gly
65                  70                  75
```

<210> 27417
<211> 62
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (39)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27417

```
Asn Ile Phe Ser Lys Met Arg Ser Ser Ser Ile Ser Ser Lys Pro Val
1               5                   10                  15
Ser Gly Leu Ile Arg Gly Thr Thr Asp Val Gly Met Gly Gly Asn Val
            20                  25                  30
Ser Pro Glu Arg Gly Val Xaa Ser Asp Glu Gly Thr Asp Glu Leu Ile
        35                  40                  45
Arg Leu Asp Leu Leu Leu Asp Arg Leu Arg Val Pro Gln Leu
    50                  55                  60
```

<210> 27418
<211> 82
<212> PRT
<213> A.fumigatus

<400> 27418

```
Phe Leu Val Arg Trp Val Tyr Leu Gly Gly Pro Ile Ile Phe Ile Cys
1               5                   10                  15
Arg Asp Phe Ser Pro Tyr Ala Pro Gly Glu Ser Lys Tyr Val Gln Pro
            20                  25                  30
His Ser Arg His Ser Ser Lys Val Tyr Glu Leu Val Arg Leu Cys Asp
        35                  40                  45
Ser Ser Arg Ser Thr Tyr Ile Thr Ile Thr Ile Phe Val Ser Lys Arg
    50                  55                  60
Pro Arg Leu Ala Asn Thr Arg Ile Thr Leu Ala Gln Arg Ser Gln His
65                  70                  75                  80
Lys Asp
```

<210> 27419
<211> 93
<212> PRT
<213> A.fumigatus

<400> 27419

```
Leu Thr Lys Arg Cys Leu Asp His His Gly Leu Leu Asp Thr His Ile
1               5                   10                  15
Pro Asn His Arg Met Gln Tyr Thr Asn Val Pro Gln Asp Ser Pro Thr
```

```
            20                  25                  30
Leu Ile Leu Lys Ile Met Thr Ser Cys Pro Val Tyr Leu Arg Ile Thr
        35                  40                  45
Cys Ser Ala Tyr Glu Gln Leu Pro Phe Thr His Ala Thr Gly Val Lys
    50                  55                  60
Ile Pro Val Arg Val Leu Pro Val Arg Cys Ala Thr Gly Leu Val Pro
65                  70                  75                  80
Gly Ser Leu Gln Glu Asp Val Ala Phe Asp Thr Ile Ile
                85                  90
```

<210> 27420
<211> 235
<212> PRT
<213> A.fumigatus

<400> 27420

```
Arg Gln Ala Trp Trp Pro Ser Met Pro Ser Arg Val Pro Arg Gln Pro
1               5                   10                  15
Ser Tyr Gln His Val Val Ser Ser Pro Ala Pro Gln Arg Ser Ile Gln
            20                  25                  30
Ser Asn Asn Gln His Asp Leu Met Gln Gly Gly Leu Met Ile Gln Phe
        35                  40                  45
Asp Ser Ser Phe Asp Gly Ser Thr Ser Ala Asp Pro Ser Phe Ser Ser
    50                  55                  60
Val Val Thr Ser Ala Pro Met Pro Gln Glu Asn Gln Asn Met Tyr Ser
65                  70                  75                  80
His Ile Pro Val Thr Pro Gln Lys Tyr Met Asn Leu Ser Ala Tyr Ala
                85                  90                  95
Thr Pro Pro Val Gln His Thr Ser Arg Ser Pro Ser Leu Ser Pro Arg
            100                 105                 110
Gly Arg Gly Ser Pro Thr Gln Gly Ser Pro Leu Arg Asn Glu Ala Ser
        115                 120                 125
Thr Lys Thr Ser Pro His Arg Arg Gly Tyr His Gly Arg Lys Leu Ser
    130                 135                 140
Ser Gln Ser Met Asn Thr Pro Lys Pro Val Lys Gly Pro Asn Ser Ser
145                 150                 155                 160
Ser Pro Gly Ser Gly Ser Asn Lys Ser Leu Thr Val Ser Phe Val Asn
                165                 170                 175
Phe Thr Pro Asn Asp Ser Lys Lys Ile Leu Thr Gly Val Ala Pro Ser
            180                 185                 190
Gly Ser Ser Lys Thr Lys Ala Arg Arg Glu Gln Glu Ala Arg Asp Arg
        195                 200                 205
Arg Arg Lys Leu Ser Glu Ala Ala Ile Asn Ala Val Arg Lys Ala Gly
    210                 215                 220
Gly Asp Val Glu Ala Leu Glu Ala Val Leu Cys
225                 230                 235
```

<210> 27421
<211> 156
<212> PRT
<213> A.fumigatus

<400> 27421

```
Gly Pro Ser Ser Pro Val Val Lys Thr Leu Gly Lys Leu Thr Glu Arg
1               5                   10                  15
Phe Thr Ala Gln Trp His Gln Trp Leu Arg Tyr Val Arg Ala Asp Pro
```

```
            20                  25                  30
Pro Ser Leu Glu Glu Gln Gln Gln Asp Val Ile Arg Gln Ile Gln Ile
        35                  40                  45
Lys Lys Leu Ala Gln Leu Ala Asp Met Arg Trp Ala Ser Lys Pro Ser
    50                  55                  60
Tyr Leu Asp Lys Pro Gln Thr Gln Gln Pro Gly Pro Ala Thr Arg Thr
65                  70                  75                  80
Ser Asp Ala Thr Leu His Pro Pro Met Gly Ala Val Gly Glu Gly Pro
                85                  90                  95
Lys Ser His Asn Ala Ile Ser Gly Ala Glu Ala Thr Lys Thr Thr Gly
            100                 105                 110
Thr Thr Thr Ser Ala Pro Thr Pro Thr Pro Asp Val Thr Ser Arg Ala
        115                 120                 125
Lys Glu Asp Pro Trp Ala Lys Ala Arg Thr Ser Asp Gly Glu Asn Trp
    130                 135                 140
Gln Pro Glu Ser Trp Thr Pro Ser Ser Ser Arg Arg
145                 150                 155
```

<210> 27422
<211> 184
<212> PRT
<213> A.fumigatus

<400> 27422

```
Arg Pro Glu Ala Gln Ile Lys Glu Leu Gln Asn Leu Leu Ala Lys Thr
1               5                   10                  15
Lys Phe Ser Ser Thr Met Trp Ser Arg Lys Gly Phe Lys Thr Arg Thr
            20                  25                  30
Asp Ser Ser Val Arg Ser Ala Leu Asp Leu Leu Cys Leu Asp Gly Val
        35                  40                  45
Asp Ile Asp Thr Leu Ile Pro His Ile Glu Ser Pro Ser Gly Met Ala
    50                  55                  60
Tyr Thr Pro Ser Ser Phe Asp Pro Ile Ile Arg Thr Arg Val Ser Ile
65                  70                  75                  80
Glu Gly Arg Tyr Ala Pro Tyr Val Lys Arg Gln Glu Ala Met Ala Arg
                85                  90                  95
Lys Phe Leu Gln Asp Glu Ser Leu Ile Leu Pro Pro Asp Leu Asp Tyr
            100                 105                 110
Ser Lys Val Gln Gly Ile Ser Thr Glu Glu Arg Gln Ala Leu Glu Arg
        115                 120                 125
Val Arg Pro Val Ser Val Gly Met Ala Arg Arg Ile Glu Gly Val Thr
    130                 135                 140
Pro Ala Gly Ala Leu Arg Leu Leu Met His Val Arg Arg Ala Met Asp
145                 150                 155                 160
Ala Ser Lys Glu Ser Ser Leu Asp Ala Asp Ala Leu Glu Gly Ser Ala
                165                 170                 175
Glu Ser Val Leu Arg Gly Ser Val
            180
```

<210> 27423
<211> 354
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE

<222> (4),(5),(13)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27423

```
Phe Phe Thr Xaa Xaa Asp Gly Ala Ala Met Arg Lys Xaa Pro Ala Asn
1               5                  10                  15
Ala Arg Leu Ala Ala Glu Ile Ser Glu Asn Val Met Val Val Asp Glu
            20                  25                  30
Ser Leu Val Pro Pro Trp Glu Ser Ala Pro Leu Asn Pro Gly Thr Gln
        35                  40                  45
Pro Glu Asn Ala Leu Tyr Cys Val Phe Thr Ser Gly Ser Thr Gly Lys
    50                  55                  60
Pro Lys Gly Phe Leu Met Asp His Arg Ala Phe Cys Thr Cys Ala Leu
65                  70                  75                  80
Gly Val Gly Glu Leu Leu Gly Leu Asn Gly Ala Ser Arg Leu Ile Gln
                85                  90                  95
Phe Ser Ala Asn Ser Phe Asp Leu Ala Thr Phe Asp His Ile Leu Pro
            100                 105                 110
Phe Leu Cys Gly Ala Cys Leu Cys Ile Pro Ser Glu Glu Glu Arg Lys
        115                 120                 125
Gly Asp Leu Thr Arg Ala Phe Asn Arg Tyr Arg Ala Thr His Ala Val
    130                 135                 140
Leu Thr Pro Thr Val Ser Arg Leu Leu Glu Pro Glu Lys Leu Thr Thr
145                 150                 155                 160
Leu Gln Val Leu Leu Leu Ala Gly Glu Ala Pro Ser Arg Glu Asp Ile
                165                 170                 175
Arg Arg Trp Ala Ser Thr Val Gly Leu Leu Asn Gly Tyr Ser Pro Ala
            180                 185                 190
Glu Ala Gly Cys Ile Thr Ile Val Asn Pro Ser Leu Gln Glu Ser His
        195                 200                 205
Pro Ser Lys Ile Gly Phe Pro Val Ser Val Val Pro Trp Val Val Asp
    210                 215                 220
Pro Asp Asp Cys Asn Arg Leu Val Pro Ala Gly Glu Val Gly Glu Leu
225                 230                 235                 240
Val Leu Gln Gly His Thr Leu Ala Arg Gly Tyr Phe Gly Arg Pro Asp
                245                 250                 255
Gln Ser Lys Ala Ala Phe Ile Pro Thr Pro Ala Trp Val Arg Gln Phe
            260                 265                 270
Gly Tyr Glu Thr Tyr Gly Arg Leu Tyr Arg Thr Gly Asp Leu Val Arg
        275                 280                 285
Phe Asp Ala Glu Asp Glu Ser Leu Val Tyr Ile Ala Arg Lys Asp Ser
    290                 295                 300
Gln Val Lys Ile Arg Gly Gln Arg Leu Glu Leu Gly Glu Val Glu His
305                 310                 315                 320
Ala Leu Gln Gln Phe Phe Pro Arg Pro Gln Ile Val Val Val Glu Leu
                325                 330                 335
Leu Thr Ala Glu Gly Gly His His Gly Pro Lys Asp Pro Pro Ser Val
            340                 345                 350
Pro Ala
```

<210> 27424
<211> 207
<212> PRT
<213> A.fumigatus

<400> 27424
Leu Asn Gly Trp Asp Ile Asp Val Leu Gln Asp Ala Ile Asn Thr Cys
1 5 10 15
His Asp Gly Gly Gly Asp Ile Thr Lys Cys Glu Pro Ile Thr Leu Gln
20 25 30
Pro Asp Trp Val Thr Asp Gly Cys Ile Leu Glu Arg Ser Ile Asn Glu
35 40 45
Arg Ile Asp Gly Trp Leu Asp Glu Leu Pro Gly Cys Asn Pro Ile Gln
50 55 60
Pro Gly Pro Asp Asp Ala Arg Pro Val Thr Gly Cys Gly Ala Pro Thr
65 70 75 80
Thr Ile Gly Glu Pro Leu His Tyr Tyr Thr Asp Leu Thr Gly Ser His
85 90 95
Gly Trp Glu Trp Val Gly Cys Thr Arg Asp Asn Val Gly Gly His Arg
100 105 110
Val Leu Val Gly Ser Thr Ala Glu Ile Ser Asp Leu Thr Pro Ala Gln
115 120 125
Cys Val Glu Lys Cys Ser Ala Glu Gly Tyr Gln Tyr Ala Gly Val Glu
130 135 140
Asn Ala His Glu Cys Phe Cys Gly Asn Ser Val Asp Gln Asp Asp Met
145 150 155 160
Pro Arg Val Thr Pro Met Gly Asn Cys Leu Trp Pro Cys Ala Gly Asp
165 170 175
Ser Leu Gln Asn Cys Gly Gly Tyr Gly Phe Ile Gly Leu Tyr Arg Arg
180 185 190
Arg Gln Gly Gly Cys Lys Asn Leu Glu Tyr Pro Ile Val Pro His
195 200 205

<210> 27425
<211> 137
<212> PRT
<213> A.fumigatus

<400> 27425
Ile Asn Thr Met Leu Pro Thr Trp Leu Leu Ser Gln Thr Lys Glu Thr
1 5 10 15
Ala Ala Ser Ser Leu Ile Leu Gln Ile Pro Gln Thr Glu Ser Leu Thr
20 25 30
Gly Arg Tyr Phe Ile Gln Ser His Asn Ile Pro Asp Gly Asn Asp Ser
35 40 45
Gln Glu Trp Leu Cys Pro Cys Arg Leu Ser Phe Leu Gln Ala Thr Pro
50 55 60
Asp Ala Ser Asp Asp Val Ala Glu Ser Thr Gly Ala Arg Lys Glu Arg
65 70 75 80
Ile Pro Ser Arg Glu Met Phe Asn Leu Ala Leu Gly Arg His Val Phe
85 90 95
Ala Gly Phe Gly Arg Thr Gly Ala Asn Met Ala Ala Asn Ser Pro Asn
100 105 110
Ser Pro Gln Leu Val Leu Val Asn Arg Gly Val Ser Cys Glu Ile Phe
115 120 125
Thr Thr Gly Leu Glu Gly Asn Ala Leu
130 135

<210> 27426
<211> 242
<212> PRT

<213> A.fumigatus

<400> 27426
Ala His Ser Cys His Arg Gly Leu Pro Ser Gln Ser Leu Thr Ser His
1 5 10 15
Leu Ala His Ser Phe Ser Ile Ala His Leu Ile His Met Ala Thr Lys
20 25 30
Met Gly Met Gly His Thr Val Lys Cys Ala Phe Arg Leu Thr Ser Leu
35 40 45
Leu Lys Lys Ala Glu Arg Ser Phe His Gln Lys Gly Lys Ala Val Asp
50 55 60
His Ser His Pro Ala Val Pro Ser Leu Thr Leu Pro Asp Ile Asp Cys
65 70 75 80
Ser Asp His Gly Leu Arg Pro Leu Cys Lys Glu Met Gly Met Asp Ala
85 90 95
Tyr Asn Lys Asp Thr Phe Ser Asp Ser Asp Ser Asp Ser Asp Thr Asn
100 105 110
Thr Asp Thr Asp Thr Asp Thr Ser Ser Val Phe Ile Pro Asp Leu Ala
115 120 125
Val Arg Ala Lys Pro Val Asp Ala Asp Ala Asp Ala Asp Ala Val Ala
130 135 140
Gly Ser Ser Ser Asn His Pro His Asn Gly Asn Arg Lys Arg Leu Val
145 150 155 160
Arg Ile Val Ser Phe Lys Ser Ile Ala His Asn Arg Ser Arg Trp Ser
165 170 175
Ser Ser Gln Glu Arg Glu Leu Ala Ile Ala Gln His Glu Leu Ala Arg
180 185 190
Cys Gln Lys Ala Trp Ser Ser Glu Gln Glu Leu Trp Leu Glu Tyr Val
195 200 205
Gly Tyr Gln Leu Thr Ser Asp Thr Val Val Asn Ser His Leu Pro Phe
210 215 220
Phe Phe Phe Leu Phe Thr Ser Trp Pro Thr Ser Ser Arg His Gly Ala
225 230 235 240
Asp Asp

<210> 27427
<211> 87
<212> PRT
<213> A.fumigatus

<400> 27427
Tyr Thr Leu Ser Val Gly Leu Ser Ala Arg Val Val Arg Pro Ala Thr
1 5 10 15
Val Val Glu Glu Asp His Arg Gly His Glu Gln Glu Arg Ala Gly Pro
20 25 30
Gln Gln His Pro Met Pro Cys Ile Ala Lys His Ile Pro Ala Arg Leu
35 40 45
Arg Ala Pro Val Gln Leu Pro Arg Asp Leu Leu Val Ala Pro Asp His
50 55 60
Asn Lys Arg Pro Val Ala Arg Arg Asp His Asp Ile Thr Arg Arg Asn
65 70 75 80
Leu Gly Val Gly Arg Pro Val
85

<210> 27428

<211> 488
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (461)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27428

```
Gly Pro Ser Gly Ser Leu Leu Cys Gln Val Gly Val Asp Ser Phe Gln
1               5                  10                  15
Pro Thr Val Ser Thr Thr Gln Trp Glu Asp Ser Gly Arg Arg Gln Leu
            20                  25                  30
Ser Thr Tyr Thr Ser Asp Gln Ile Pro Thr Phe Arg Arg Arg Val Ala
        35                  40                  45
Lys Gly Leu Cys Arg Ile Asp Leu His Ala Ser Arg Leu Arg Leu Gly
    50                  55                  60
Arg Gln Asp Thr Arg Arg Gly Arg Leu Ser Ser Asn Lys Arg Val Leu
65                  70                  75                  80
Gln Val His Met Leu Thr Leu Met Val Asp Ser Gln Arg Ile Pro Pro
                85                  90                  95
Gln Leu Thr Ile Pro Leu Leu Glu Val Cys Asp His Leu Glu Leu Pro
            100                 105                 110
Pro Val Ala Thr Tyr Ala Ala Val Cys Leu Trp Asn Tyr Lys Pro Ile
        115                 120                 125
Phe Pro Asp Glu Pro Pro Tyr Asp Leu Asp Asn Leu Ala Cys Ile Asn
    130                 135                 140
Thr Leu Thr Gly Ser Leu Asp Glu Arg Trp Phe Tyr Leu Val Ser Val
145                 150                 155                 160
Gly Ile Glu Ala Arg Gly Ala Pro Ala Ile Pro Leu Val Leu Gln Ala
                165                 170                 175
Ile Ser Ala Ala Arg Thr Gly Asn Ser Arg Val Val Thr Glu Cys Leu
            180                 185                 190
Gln Ser Ile Ala Glu Ile Leu Asp Gln Ile Gly Val Leu Leu Glu Arg
        195                 200                 205
Met Tyr Glu His Cys Asp Pro Tyr Val Phe Tyr His Arg Ile Arg Pro
    210                 215                 220
Tyr Leu Ala Gly Ser Lys Asn Met Ala Asp Ala Gly Leu Pro Asn Gly
225                 230                 235                 240
Leu Leu Tyr Asp Asp Gly Ser Glu Glu Pro Glu Tyr Arg Gln Tyr Gly
                245                 250                 255
Gly Gly Ser Asn Ala Gln Ser Ser Leu Ile Gln Phe Phe Asp Ile Ala
            260                 265                 270
Leu Gly Ile Glu His Arg Pro Thr Gly Glu Thr Arg Pro Ala Ser Thr
        275                 280                 285
Pro Ser Glu Asp Glu Lys Glu Gly Val Thr Gly Ala Pro Arg His Gly
    290                 295                 300
Phe Ile Gln Glu Met Arg Thr Tyr Met Pro Gly Pro His Arg Arg Phe
305                 310                 315                 320
Leu Glu His Val Ser Ala Val Ala Asn Ile Arg Glu Tyr Val Glu Pro
                325                 330                 335
Arg Arg Ser Asp Lys Ala Leu Cys Leu Ala Tyr Asp Ala Cys Leu Ala
            340                 345                 350
Met Leu Arg Ala Met Arg Asp Lys His Ile Gln Met Val Ser Arg Tyr
        355                 360                 365
```

```
Ile Ile Ile Pro Ala Arg Asp Ala Arg Asn Arg Thr Pro Glu Thr Ser
    370                 375                 380
Asn Ala Arg Arg Pro Ser Ile Thr Met Asn Leu Ala Asn Val Arg Pro
385                 390                 395                 400
Gly Arg Lys Lys Leu Arg Gly Thr Gly Gly Thr Ala Leu Ile Pro Val
                405                 410                 415
Leu Lys His Ala Leu His Glu Thr Gly Glu Pro Ala Ile Asp Pro Trp
            420                 425                 430
Ala Arg Pro Met Leu Val Asn Gly Pro Ala Glu Pro Ser Phe Pro Ala
        435                 440                 445
Leu Ser Pro Trp Ala Ser Ile Arg Asn Gly Pro Leu Xaa Leu Val Gly
    450                 455                 460
Leu Ser Arg Glu Leu His Arg Phe Met Ile Leu Thr Glu Gly Thr Ala
465                 470                 475                 480
Asn Trp Tyr Pro Asp Ser Gly Phe
                485
```

<210> 27429
<211> 115
<212> PRT
<213> A.fumigatus

```
<400> 27429
Ile Leu Pro Thr Met Leu Pro Pro Ile Pro Ala Leu Ala Asp Tyr Gly
1               5                   10                  15
Val Ser Pro Asp His Gly Phe Leu Pro Pro Glu Pro Pro Leu Glu Ala
            20                  25                  30
Leu Pro Asp Pro Tyr Tyr Ala Lys Trp Glu Trp Ile Ala Ser Asn Leu
        35                  40                  45
Gln Ser Leu Leu His Ser Gly Arg Ile Arg Asp Val Val Asn Cys Leu
    50                  55                  60
Pro Ile Leu Gln Thr Arg Tyr Leu His Ser Glu Asp Glu Trp Arg Arg
65                  70                  75                  80
Ala Tyr Val Val Leu Thr Phe Met Leu His Gly Tyr Val Trp Gly Gly
                85                  90                  95
Lys Thr Pro Glu Glu Val Gly Phe Leu Leu Thr Ser Glu Ser Cys Arg
            100                 105                 110
Cys Thr Cys
        115
```

<210> 27430
<211> 87
<212> PRT
<213> A.fumigatus

```
<400> 27430
Trp Arg Gly Ser Phe Gln Pro Arg Gly Glu Asp Pro Thr Asp Val Arg
1               5                   10                  15
Ser Gly Tyr Asp Gly Ser Leu Trp Ala Glu Ser Ser Val Val Ile Gly
            20                  25                  30
Glu Pro Leu Leu Glu Leu Ser Ser Glu Leu Thr Ala Asn Ser Phe Phe
        35                  40                  45
Gly Thr Val Gln Ser Val Val Asp Ala Gly Ser Arg Lys Ser Tyr Pro
    50                  55                  60
Leu Pro His Gly Gly Lys Cys Pro Pro Arg Gly Glu Phe Leu Leu Phe
65                  70                  75                  80
```

Ile Leu Gln Gln Ser Thr Glu
85

<210> 27431
<211> 138
<212> PRT
<213> A.fumigatus

<400> 27431
Gly Glu Lys Val Gln Ala Val Gly Val Cys Cys Asp Lys Val Ile Val
1 5 10 15
Val Gln Arg Leu Pro Ala Ser Pro Asn Pro Ile Ile Pro Gly Arg Asn
20 25 30
Gly Pro Gln Pro Pro Gly Arg Ser Ser Leu Ser Thr Arg Pro Phe Pro
35 40 45
Pro Ser Ser Leu Pro Arg Pro Gly Ser His Pro Gly Pro Ala Pro Gly
50 55 60
Pro Ile Pro Ser Ser Phe Thr Arg Thr Thr Trp Ser Arg Ser Lys Ser
65 70 75 80
Arg Ala Lys Ser His Lys Met Ile Ser Asn Pro Ala Ser Ile Arg Ile
85 90 95
Thr Pro Ser Ile Arg Ser Ser His Ser Ser Leu Ala Ile Arg Gln Ile
100 105 110
Val Ser Ala Arg Arg Phe Ser Ser Arg Ile Arg Ser Pro Phe Pro Ser
115 120 125
Ser Ser Ala Ser Arg Ser Lys Met Arg Ser
130 135

<210> 27432
<211> 146
<212> PRT
<213> A.fumigatus

<400> 27432
Arg Gln Lys Asp Lys Glu Pro Glu Leu Gly Gly Trp Leu His Thr Tyr
1 5 10 15
Val Ala Ala Lys Asp Leu Arg Leu Val Tyr Ile Asp Gly Met Ser Ala
20 25 30
Ala Lys Ser Ser Asn Gly Thr Leu Asp Ser Gln Asp Arg Ile Leu Leu
35 40 45
Arg Asp Ala Leu Asp Asp Gly Asn Gly Asp Leu Met Arg Asp Glu Lys
50 55 60
Arg Arg Ala Glu Thr Ile Cys Arg Met Ala Arg Glu Glu Trp Glu Asp
65 70 75 80
Arg Ile Asp Gly Val Ile Arg Met Glu Ala Gly Phe Glu Ile Ile Leu
85 90 95
Cys Asp Phe Ala Arg Asp Leu Asp Leu Leu His Val Val Arg Val Lys
100 105 110
Leu Asp Gly Ile Gly Pro Gly Ala Gly Pro Gly Cys Glu Pro Gly Arg
115 120 125
Gly Lys Glu Asp Gly Gly Lys Gly Leu Val Glu Arg Leu Asp Arg Pro
130 135 140
Gly Gly
145

<210> 27433

<211> 320
<212> PRT
<213> A.fumigatus

<400> 27433
Ala Leu Val Ile Leu Ser Gly Asp Thr Ser Ile Ala Val Cys Phe Leu
1 5 10 15
Ile Ser Pro Leu Phe Phe Cys Leu Ala Tyr Leu Leu Thr Val Lys Val
20 25 30
Met Tyr Gln Ala Tyr Ala Val Arg Pro Ile Gly Glu Glu Phe Leu Phe
35 40 45
Asn Glu Gly Gly Phe Tyr Asp Ser Ser Phe Ala Leu Pro Asn Trp Ala
50 55 60
Gly Lys Lys Tyr Ala Thr Asp Ala Tyr Trp Glu His Ala Gly His Phe
65 70 75 80
Lys Ala Thr Asn Phe Tyr Gln Asp Leu Phe Asp Arg Gly Leu Val Asp
85 90 95
Cys Thr Tyr Gly Pro Pro Leu Thr Ser Phe Pro Phe Tyr Glu Thr Val
100 105 110
Ala Pro Met Val Glu Ala Ile Glu Glu Phe Thr Arg Ala Phe Val Glu
115 120 125
Ala Tyr Tyr Pro Asp Lys Thr Leu Met Asp Val Asp Asn Glu Leu Gln
130 135 140
Asp Trp Ile Ile Glu Ala Thr Glu Ala Ala Lys Val Ile Asp Phe Val
145 150 155 160
Pro Ala Pro Met Arg Glu Pro Glu Gln Leu Ile Ser Val Leu Ser His
165 170 175
Met Ala Phe Leu Ala Gly Ile Ala His His Ala Leu Asn Gly Ala Thr
180 185 190
Val Gly Glu Ala Ser Gly Val Leu Pro Leu His Pro Ser Ser Phe Asn
195 200 205
Arg Pro Leu Pro Glu Ala Lys Gly Ser Ile Asp Ser Leu Leu Pro Trp
210 215 220
Leu His Asn Glu Thr Glu Ala Leu Lys Gln Ala Ser Leu Leu Val Arg
225 230 235 240
Phe Asn Arg Pro Leu Leu Asp Glu Gln Glu Gly Ser Leu Pro Tyr Met
245 250 255
Phe Ser Gly Ser Ser Phe Leu Ala Arg Thr Gly Ala Pro Ile His Asp
260 265 270
Ala Asp Arg Arg Phe Arg Glu Lys Met Trp Ala Ile Ser Asp Glu Ile
275 280 285
Arg Met Arg Gln Phe Asp Glu Arg Gly Leu Ser Gln Gly Met Pro Phe
290 295 300
Leu Trp Arg Ser Ile Asp Pro Arg Lys Ile Pro Tyr Tyr Leu Cys Val
305 310 315 320

<210> 27434
<211> 206
<212> PRT
<213> A.fumigatus

<400> 27434
Leu Asn Lys Ala Gly Gly Ile Gln Ser Leu Ser Ser Tyr Ala Val Ile
1 5 10 15
Tyr Glu Asn Gln Trp Ala Thr Thr Leu Pro Asp Gly Val Ala Ser Gly
20 25 30

```
Met Leu Thr Asn Trp Thr Gln Asp Leu Leu Phe Ser Met Glu Arg Leu
        35                  40                  45
Ser Ile Asn Pro Tyr Val Val Arg Arg Leu His Pro Arg Lys Asp Arg
    50                  55                  60
Leu Pro Phe Ala Val Asp Asp Arg Val Val Gln His Leu Ala Ala Gly
65                  70                  75                  80
Ser Thr Leu Glu Ala Leu His Arg Asp Gly Arg Leu Phe Phe Ala Asn
                85                  90                  95
His Ser Tyr Gln Ala Pro Tyr Pro Lys Thr Pro Gly Arg Trp Thr Ala
            100                 105                 110
Ala Cys Thr Ala Tyr Phe Phe Ile His Pro Arg Ser Gly Ala Phe Leu
        115                 120                 125
Pro Leu Ala Ile Lys Thr Asn Met Gly Ser Asp Leu Thr Tyr Thr Pro
    130                 135                 140
Met Asp Glu Thr Asn Asp Trp Leu Phe Ala Lys Met Ala Phe Glu Met
145                 150                 155                 160
Asn Asp Leu Phe His Ser Gln Leu Tyr His Leu Ala Asn Thr His Asp
                165                 170                 175
Val Ala Glu Pro Val His Gln Ala Ala Leu Arg Thr Met Ser Ala Arg
            180                 185                 190
His Pro Val Arg Gly Tyr Leu Asp Arg Arg Met Phe Ser His
        195                 200                 205
```

<210> 27435
<211> 593
<212> PRT
<213> A.fumigatus

<400> 27435

```
Ser Gly Gln Gly Arg Ala Ser Ile Glu Phe Gly Arg Ser Cys Ala Pro
1               5                   10                  15
Gly Phe Pro Ile Arg Gln Leu Asn Val Ala Asn Val His Cys Phe Gln
            20                  25                  30
Lys Arg Asn Gly Pro Met Glu Leu Glu Pro Gly Gly Gly Ile Arg Val
        35                  40                  45
Lys Leu Gly Ala Thr Pro Ala Glu Lys Leu Asp Ser Gly Glu Pro Gly
    50                  55                  60
Ala Gln Ala Gly Gly Gly Pro Leu Ala Val Thr Thr Val Lys Val Pro
65                  70                  75                  80
Leu Lys Asp Ala Glu Asp His Ala Gly Gln Ser Pro Lys Arg Arg Arg
                85                  90                  95
Gly Asp Pro Arg Lys Ser Asp Ile Arg Glu Gln Asp Ala Thr Pro Thr
            100                 105                 110
Ala Gly Ser Pro Gly His Thr Pro Gly Pro Ala Gly Ala Ser Gly Gln
        115                 120                 125
Lys Arg Lys Arg Gly Arg Pro Arg Lys Gln Ser Leu Asn Pro Asp Thr
    130                 135                 140
Val Gly Gly Asp Lys Gln Val Ala Asp Ser Ala Asp Tyr Gln Asp Thr
145                 150                 155                 160
Arg Pro Val Glu Pro Glu Met Glu Ala Glu Gln Arg Trp Ser Pro Leu
                165                 170                 175
Asn Leu Ala Gly Asp Val Asp Ser Asp Asp Asp Ala Leu Pro Glu Gly
            180                 185                 190
Phe Met Pro Ala Asp Asn Phe Pro Glu Asp Asn Asn Met Gly Gln Pro
        195                 200                 205
Asp Ala Ala Ala Trp Asp Arg Ser Ser Pro Arg Ile His Asn Glu Arg
```

```
    210                 215                 220
Thr Tyr Asp Thr Pro Asp Val Thr Ala Val Asp Gln Ile Tyr Gly Gln
225                 230                 235                 240
Asn His Asp Glu Glu Pro Gln Ser Thr Pro Ser Lys Met Pro Ser Pro
                245                 250                 255
Ser Arg Glu Ser Gln Gly Phe Ser Pro Glu Asn Thr Leu His Ala Gly
            260                 265                 270
His Thr Pro Arg Pro Pro Arg Ser Tyr Pro Ser Pro Thr Ser Ser Ser
        275                 280                 285
Leu Gly Asp Asp Asp Arg Ala Val Gln Val Ala Ser Arg Ala His Pro
    290                 295                 300
Glu Gly Ser Gly Gln Glu Gln Asn Thr Thr Arg Pro Thr Asn Asp Pro
305                 310                 315                 320
Thr Asp Glu His Arg Glu Phe Asp Ser Ile Met Glu Ser Glu Gly Phe
                325                 330                 335
Ser Met Val Ser Leu Asp Thr Leu Pro Ser Val Lys Gln His Gly Leu
            340                 345                 350
Ser Ile Asn Ser Gln Ser Gly Asn Gly Ala Leu Lys Pro Phe Leu Ser
        355                 360                 365
Arg Glu Lys Met Ala Asn Pro Glu Lys Ser Lys Arg Lys Val Ser Ser
    370                 375                 380
Leu Asn Leu Asn Pro Arg Lys His Ser Pro Asp Val Glu Val Gly Lys
385                 390                 395                 400
Glu Ser Arg Phe Gln Ala Ile Glu Pro Gln Ala Leu Pro Val Ser Ala
                405                 410                 415
Glu Lys Arg Gln Ser Ala Pro Leu Leu Arg Glu Ser Pro Val Pro Ala
            420                 425                 430
Phe Val Pro Lys Gln Arg Lys Pro Leu Ser Arg Leu Ala Arg Ile Ile
        435                 440                 445
Arg Ala Gly Val Ala Leu Glu Gly Ala Leu Arg Arg Pro Tyr Glu Gly
    450                 455                 460
Ala Pro Val Pro Thr Pro Gly Thr Pro Asp Leu Arg Glu Gln Ile Ser
465                 470                 475                 480
Ser Leu Glu Ala Pro Lys Arg Arg Leu Glu Leu Leu Phe Ser Asp Leu
                485                 490                 495
His Pro Arg Leu Arg Arg Glu Leu Arg Ala Gly Leu Gly Phe Ala Gln
            500                 505                 510
Glu Leu Ala Lys Arg Arg Arg Lys Thr Glu Ile Glu Arg Ala Arg Gln
        515                 520                 525
Thr Ala Ser Val Glu Thr Arg Leu Thr Gly Asn Ala Arg Gly Ala Thr
    530                 535                 540
Thr Thr Pro Gln Gln Ile His Ser Gly Thr Ala Val Lys Asp Thr Pro
545                 550                 555                 560
Ser Thr Glu Met Lys Arg Arg Leu Glu Glu Trp Gln Arg Glu Arg Glu
                565                 570                 575
Ala Arg Ser Pro Gly Asp Pro Asp Gly Glu Cys Gln Ser Ser His Cys
            580                 585                 590
Asp
```

<210> 27436
<211> 212
<212> PRT
<213> A.fumigatus

<400> 27436

```
Lys Asp Lys Ala Asp Tyr Leu Tyr Leu Leu Leu Gly Arg Ala Ile
1               5                  10                  15
Ala Met Ala Ala Thr Gln Asp Met His Pro Leu Asp Leu Pro Glu Val
            20                  25                  30
Lys Tyr Ile Trp Gly Asp Phe His Asp Leu Asp Ile Asn Asn Pro Ser
        35                  40                  45
Asn Ser Asp Asp Pro Thr Ala Thr Leu Pro Phe Ser Phe Gln Leu Asn
    50                  55                  60
Ile Leu Gln Pro Met Arg Ile Leu Glu Glu Met Glu Leu Asp Pro Tyr
65                  70                  75                  80
Ala Asn Leu Ala Arg Tyr Asp Thr Trp Val Leu Asn Thr Leu Tyr Ala
                85                  90                  95
Lys Phe Arg Gly Thr Ala Ser Gly Arg Leu Ser Thr Trp Asp Gly Gly
            100                 105                 110
Pro Glu Leu Cys Ala Val His Pro Leu Trp Cys Leu Ala Asn His Ser
        115                 120                 125
Cys Asp Pro Asn Val Arg Trp Glu Trp Gly Gly Glu Ile Thr Phe Arg
    130                 135                 140
Ala Arg Thr Glu Ala Glu Arg Ala Val Trp Lys Gly Glu Gly Ala Pro
145                 150                 155                 160
Val Arg Arg Ser Gly Glu Gly Ile Lys Ala Asp Glu Glu Ile Leu Asn
                165                 170                 175
His Tyr Cys Asp Ile Gly Leu Asp Val Lys Glu Arg Arg Glu Trp Ala
            180                 185                 190
Arg Gly Ala Leu Gly Gly Leu Cys Gln Cys Glu Arg Cys Val Trp Glu
        195                 200                 205
Ala Ala Thr Ala
    210
```

<210> 27437
<211> 210
<212> PRT
<213> A.fumigatus

<400> 27437

```
Ser Arg Gly Arg Arg Arg Ser Ile Ser Arg Gly Arg Ser Tyr Ser Arg
1               5                  10                  15
Ser Val Ser Gly Ser Ser Arg Gly Arg Ser Tyr Thr Pro Ser Tyr Ser
            20                  25                  30
Arg Ser Arg Ser Pro Val Pro Lys Ser Arg Arg Arg Ser Val Ser Tyr
        35                  40                  45
Ser Arg Ser Arg Ser Pro Ala Gly Arg Arg Arg Ser Ser Val Ser Arg
    50                  55                  60
Thr Pro Pro Arg Arg Val Arg Gly Lys Ser Tyr Asp Ser Arg Ser Pro
65                  70                  75                  80
Ser Arg Ser Val Thr Pro Pro Arg Arg Arg Thr Ser Tyr Ser Arg Arg
                85                  90                  95
Asp Arg Ser Tyr Ser Arg Ser Leu Ser Arg Ser Val Thr Pro Pro Leu
            100                 105                 110
Arg Ala Val Asp Ala Arg Ala Arg Gly Arg Arg Tyr Ser Ser Gln Ser
        115                 120                 125
Leu Ser Pro Pro Arg Arg Arg Ala Glu Arg Ser Val Ser Pro Gln Arg
    130                 135                 140
Pro Pro Pro Gly Arg Arg Pro Arg Gly Asp Ser Leu Ser Arg Ser Pro
145                 150                 155                 160
Ser Pro Pro Pro Arg Tyr Ala Arg Glu Gln Arg Arg Arg Gly Asn Ser
```

```
                165                 170                 175
Ser Ser Ala Ser Ala Ser Arg Ser Pro Pro His Arg Asp Ser Asn Arg
            180                 185                 190
Arg Arg Ser Leu Ser Arg Thr Pro Pro Arg Arg Gly Arg Ala Ser Asp
        195                 200                 205
Tyr Leu
    210
```

<210> 27438
<211> 274
<212> PRT
<213> A.fumigatus

<400> 27438

```
Ile Glu Thr Asp Leu Arg Arg Pro Phe Gln Pro Arg Gly Glu Asp Tyr
1               5                   10                  15
Asp Glu Phe Leu Gln Gly Val Pro Arg Arg Glu Thr Glu Ala Ile Ala
            20                  25                  30
Ala Thr Ile Thr Arg His Ala Asn Arg Val Arg Pro His Ala Ser Tyr
        35                  40                  45
Asp Gly Arg Gly Val Glu Cys Ile Ile Val Gly Gly Tyr Arg Arg Gly
    50                  55                  60
Lys Glu Leu Ser Gly Asp Val Asp Leu Val Leu Ser His Arg Asp Glu
65                  70                  75                  80
Ser Val Thr Lys Asn Leu Val Val Asp Leu Val Ala Ser Leu Glu Ala
                85                  90                  95
Glu Gly Trp Ile Thr His Thr Leu Ala Leu His Met Thr Thr Ser Asn
            100                 105                 110
Arg Glu Gln Gln Pro Leu Pro Phe Gln Gly Asp Asp Asp Ser Gly Arg
        115                 120                 125
His Phe Asp Thr Leu Asp Lys Ala Leu Val Val Trp Gln Asp Pro His
    130                 135                 140
Phe Glu Asp Gly Asp Asp Asp Asp Asp Asp Asp Asp Ala Glu Thr Thr
145                 150                 155                 160
Ala Ala Gly Gly Gly Ala Asp Thr Pro Glu Glu Gly Ala Arg Gln Arg
                165                 170                 175
Arg Lys Arg Asn Pro Asn Val His Arg Arg Val Asp Ile Ile Ile Ser
            180                 185                 190
Pro Trp Arg Thr Val Gly Cys Ala Val Leu Gly Trp Ser Gly Asp Thr
        195                 200                 205
Thr Phe Glu Arg Asp Leu Arg Arg Tyr Ala Lys Lys Ala His Gly Trp
    210                 215                 220
Lys Phe Asp Ser Ser Gly Val Arg Glu Arg Thr Ser Gly Gly Gln Val
225                 230                 235                 240
Ile Asp Leu Glu Arg Gly Gly Glu Thr Trp Glu Glu Arg Glu Arg Leu
                245                 250                 255
Val Leu Glu Gly Leu Gly Val Gly Trp Arg Pro Pro Gln Glu Arg Cys
            260                 265                 270
Thr Arg
```

<210> 27439
<211> 119
<212> PRT
<213> A.fumigatus

<400> 27439
Tyr Gly Thr Ile Pro Arg Leu Phe Thr Ser Pro Ile Phe Tyr Leu Met
1 5 10 15
Ala Val Val Leu Pro Cys Ile Cys Leu Leu Arg Asp Tyr Ala Trp Lys
20 25 30
Tyr Ala Lys Arg Met Tyr Tyr Pro Gln His Tyr His His Val Gln Glu
35 40 45
Ile Gln Lys Tyr Asn Val Gln Asp Tyr Arg Pro Arg Met Glu Gln Phe
50 55 60
Gln Lys Ala Ile Arg Lys Val Arg Gln Val Gln Arg Met Arg Lys Gln
65 70 75 80
Arg Gly Tyr Ala Phe Ser Gln Ala Asp Glu Gly Gly Gln Met Arg Val
85 90 95
Val Asn Ala Tyr Asp Thr Thr Arg Gly Arg Gly Arg Tyr Gly Glu Met
100 105 110
Thr Ser Ser Arg Thr Leu Val
115

<210> 27440
<211> 79
<212> PRT
<213> A.fumigatus

<400> 27440
Cys Leu Pro Gly Gly Gly His Trp Gly Cys Val Phe Cys Ala Val Leu
1 5 10 15
Arg Leu Leu Pro Gly Cys Leu Leu His Pro Pro Arg Leu Ser Ser Arg
20 25 30
His His His His His His His His Arg Arg Pro Arg Asn Ala Asp Pro
35 40 45
Ala Arg Arg Gln Val Pro Tyr Pro Gly Cys Arg Ser Val Cys Pro Ser
50 55 60
His His Arg Pro Gly Lys Val Glu Ala Ala Val Arg Gly Ser Arg
65 70 75

<210> 27441
<211> 181
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (7),(12)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27441
Arg Pro Leu Leu Val Leu Xaa Cys Arg Phe Phe Xaa Asp Met Leu Arg
1 5 10 15
Ser Phe Tyr Leu Ile Ala Ser Arg Ala Gly Pro Leu Leu Met Gly Asp
20 25 30
Ile Met Ala Val Leu Ala Glu Cys Arg Asn Arg Gln Asp Cys Gly Ile
35 40 45
Asp Arg Trp Gly Gly Ile Arg His Tyr Thr Gly Glu Leu Val Arg Trp
50 55 60
Glu Glu Glu Lys Trp Glu Pro Tyr His Trp Ala Ala Leu Asp Arg Met
65 70 75 80

```
Pro Asp Asp Val Ser Ile Asn Val Ala Ile Glu Met Pro Trp Gly Tyr
                85                  90                  95
Gly Gly Cys Pro Ala Phe Ser Leu Arg Arg Val Tyr Gly Thr Glu Arg
            100                 105                 110
Phe Leu His Glu Met Ile Leu His Glu Met Ile Met Asp Gln Gly Arg
        115                 120                 125
Glu Tyr Gln Trp Ala Glu Thr Ser Ser Gly Pro Gln Tyr Arg Pro Val
    130                 135                 140
Asn Lys Ser Lys Tyr Arg Ala Asn Leu Leu Ala Val Lys Glu His Arg
145                 150                 155                 160
Gly Arg Tyr Leu Ser Thr Cys Ser Thr Val Phe Arg Leu Leu Ser Glu
                165                 170                 175
Val Asn Gln Pro Gly
            180
```

<210> 27442
<211> 61
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (24),(34),(36),(42),(52),(61)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27442

```
Glu Gly Ile Asp Val Pro Glu Asp Arg Val Arg Glu Arg Trp Ile Tyr
1               5                   10                  15
Ser Pro Ser Gly Leu Val Phe Xaa Arg Val Gly Tyr Thr Gly Glu Ile
            20                  25                  30
Gly Xaa Asp Xaa Arg Asn Ser Arg Leu Xaa Arg Ala Asp Gly Val Glu
        35                  40                  45
Ala Cys Val Xaa Thr Ala Asn Tyr Cys Glu Ala Thr Xaa
    50                  55                  60
```

<210> 27443
<211> 156
<212> PRT
<213> A.fumigatus

<400> 27443

```
Glu Trp Ala Tyr Tyr Val Phe Leu Val Ala Gly Trp Phe Val Ala Gly
1               5                   10                  15
Thr Trp Gly Val Gly Tyr Leu Leu Gln Leu Leu Leu Gly Ser Thr Glu
            20                  25                  30
Tyr Val Ser Cys Asn Gln Phe Thr Val Asn Gly Met Tyr Gln Cys Leu
        35                  40                  45
Ile Val Cys Val Cys Ile Val Phe Thr Ser Thr Asn Gln Lys Tyr His
    50                  55                  60
Cys Lys Thr Met Lys Pro Thr Ser Gln Thr Ser Leu Asn Ser Ala Glu
65                  70                  75                  80
Ile Tyr Asn Ser Lys Lys Ser His Ala Ala Ile Asn Pro Phe Thr Leu
                85                  90                  95
Ala Leu Lys Lys Gln Gln Leu Gly Gly Thr Ile Pro Gly Tyr Trp Ile
            100                 105                 110
Phe Trp His Val Glu Gly Phe His Asn Leu Pro Ile Lys Ile Val Ile
```

```
        115                 120                 125
Val Phe Cys Tyr Cys Tyr Ser Pro Arg Ala Gly Arg Met Asp Leu Gln
    130                 135                 140
Ala Leu Tyr Thr Glu Lys Gly Lys Arg Lys Asp Tyr
145                 150                 155
```

<210> 27444
<211> 63
<212> PRT
<213> A.fumigatus

<400> 27444

```
Thr Phe Ile Asp His Phe Leu Asp Leu Leu Asn Ile Arg Gln Gly Phe
1               5                   10                  15
Phe Asp Tyr Leu Gln Phe Leu Phe Asn Val Ala Arg Val Gly Leu Gly
            20                  25                  30
Ile Lys Lys Cys Leu Trp Tyr Thr Arg Thr Glu Lys Phe Ala Ile Ile
        35                  40                  45
Leu Val Gln Leu Tyr Leu Ser Ile Pro Asn Ser Glu Leu Cys Arg
    50                  55                  60
```

<210> 27445
<211> 120
<212> PRT
<213> A.fumigatus

<400> 27445

```
Gln Gly Cys Ser Thr Thr Thr Gly Arg Ser Pro Gln Pro Ala Glu Ser
1               5                   10                  15
Arg Arg Thr Ser Pro Ser Trp Tyr Asn Pro Asn Ser Gly Gly Glu Asn
            20                  25                  30
Gln Lys Arg Cys Phe Gly Ala Thr Trp Cys His Pro Gln Val Lys Ser
        35                  40                  45
Glu Trp Thr Leu Leu Cys Ala Thr Glu Asn Leu Thr Cys Gly Val Ser
    50                  55                  60
Thr Met Val Ser Arg Gln Gly Val Val Asn Ala Lys Gln Tyr Gln Leu
65                  70                  75                  80
Leu Val Cys Leu His Val Val Arg Pro Thr Ser Ile Thr Ala Ser Tyr
                85                  90                  95
Ser Asp Tyr Leu Ala Met Met Val Ile Asn Arg Leu Leu Trp Ala Asn
            100                 105                 110
Thr Pro Asp Thr Phe Gly Phe Phe
        115                 120
```

<210> 27446
<211> 86
<212> PRT
<213> A.fumigatus

<400> 27446

```
Ala Glu Lys Ala Arg Leu Asn Ala Asp Lys Ala Phe Lys Lys Glu Leu
1               5                   10                  15
Tyr His Tyr Leu Arg Trp Ala Leu Ser Ala Gly Ala Pro Gly Pro Gly
            20                  25                  30
Ile Pro Glu Thr Met Glu Ile Leu Gly Arg Ala Glu Ser Leu Arg Arg
        35                  40                  45
```

```
Leu Gln Glu Ala Arg Glu Leu Thr Ala Glu Ala Ser Ser Val Arg Val
    50                  55                  60
Pro Lys Arg Thr Gln Ser Gln Gln Ser Glu Asp Thr Thr Trp Met Gly
65                  70                  75                  80
Ser Leu Ala Pro Arg Pro
                85
```

<210> 27447
<211> 64
<212> PRT
<213> A.fumigatus

<400> 27447

```
Ala Gly Asn Ile Arg Leu Pro Met Lys His Gln Lys Gln Met Arg Arg
1               5                   10                  15
Phe Leu Gln Ser Arg Pro Pro Arg Ala Ile Asp Ile Met Leu Ser His
            20                  25                  30
Val Lys Gln Arg Asn Ser Lys Ile Leu Arg Val Phe Glu Ala Ala Gly
        35                  40                  45
Asp Ala Val Thr Gln Asp Lys Asp Phe Leu Gly Leu Thr Lys Glu Trp
    50                  55                  60
```

<210> 27448
<211> 447
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (109)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27448

```
Lys Phe His Glu Ser Lys His Ile Trp Tyr Ser Pro Lys Ala Val Tyr
1               5                   10                  15
Ser Gly Ile Leu Thr Asp Phe Phe Leu Gln Tyr Gly Val Leu Ile Cys
            20                  25                  30
Ile Thr Cys His Asp Tyr Arg Lys Gln Asp Val Val Leu Gly Ser Ile
        35                  40                  45
Leu Phe Ala Leu Val Pro Cys His Leu Phe Leu Ala Tyr Ile Ile Glu
    50                  55                  60
Leu Val Ala Ala Gln Gln Ser Lys Lys Thr Val Gly Arg Gln Lys Lys
65                  70                  75                  80
Asp Leu Ser Thr Glu Glu Arg Glu Arg Glu Gln Gln Ala Phe Arg Ser
                85                  90                  95
Thr Trp Arg Tyr Thr Ala Phe Phe His Thr Val Asn Xaa Thr Leu Cys
            100                 105                 110
Leu Ala Val Thr Ser Phe Val Val Tyr Phe Tyr Ile Asn His Pro Gly
        115                 120                 125
Ile Gly Thr Ile Cys Glu Leu His Ala Ile Ile Val Trp Leu Lys Asn
    130                 135                 140
Cys Ser Tyr Ala Phe Thr Asn Arg Asp Leu Arg Gln Ala Met Val Asp
145                 150                 155                 160
Pro Ser Ala Glu Ser Ala Leu Pro Glu Ile Tyr Ser Thr Cys Pro Tyr
                165                 170                 175
Pro Arg Asn Ile Thr Leu Gly Asn Leu Thr Tyr Phe Trp Leu Ala Pro
```

```
            180                 185                 190
Thr Leu Val Tyr Gln Pro Val Tyr Pro Arg Ser Ser His Ile Arg Trp
        195                 200                 205
Ser Phe Val Ala Lys Arg Leu Ala Glu Phe Phe Gly Leu Ala Val Phe
    210                 215                 220
Ile Trp Leu Leu Ser Ala Gln Tyr Ala Ala Pro Val Leu Arg Asn Ser
225                 230                 235                 240
Ile Asp Lys Ile Ala Val Met Asp Ile Ala Ser Ile Leu Glu Arg Val
                245                 250                 255
Met Lys Leu Ser Thr Ile Ser Leu Val Ile Trp Leu Ala Gly Phe Phe
            260                 265                 270
Ala Leu Phe Gln Ser Leu Leu Asn Ala Leu Ala Glu Val Met Arg Phe
        275                 280                 285
Gly Asp Arg Glu Phe Tyr Thr Asp Trp Trp Asn Ser Pro Ser Leu Gly
    290                 295                 300
Ala Tyr Trp Arg Ser Trp Asn Arg Pro Val Tyr Leu Phe Met Lys Arg
305                 310                 315                 320
His Val Phe Ser Pro Leu Val Gly Arg Gly Trp Ser Pro Phe Ala Ala
                325                 330                 335
Ser Phe Met Val Phe Ser Leu Ser Ala Val Leu His Glu Met Leu Val
            340                 345                 350
Gly Ile Pro Thr His Asn Leu Ile Gly Glu Asn Leu Ile Leu Phe Ala
        355                 360                 365
Asn Asp Lys Ser Gly Ile Thr Asp Gly His Ile Gly Val Ala Phe Ala
    370                 375                 380
Gly Met Met Phe Gln Leu Pro Leu Ile Ala Val Thr Ala Pro Phe Glu
385                 390                 395                 400
Lys Val Asn Asp Ala Leu Gly Lys Ile Val Gly Asn Ser Ile Phe Trp
                405                 410                 415
Val Ser Phe Cys Leu Val Gly Gln Pro Leu Gly Ala Leu Leu Tyr Phe
            420                 425                 430
Phe Ala Trp Gln Ala Lys Tyr Gly Ser Val Ser Lys Ile His Val
        435                 440                 445
```

<210> 27449
<211> 73
<212> PRT
<213> A.fumigatus

<400> 27449

```
Leu Ser Leu Phe Lys Ser Leu Val Met Pro Phe Arg Leu Thr Glu Ala
1               5                   10                  15
Pro Ile Thr Phe Gln Gln Phe Ile Asn Asn Thr Leu Gln Asp Tyr Leu
            20                  25                  30
Asn Val Phe Tyr Thr Thr Tyr Leu Asn Asn Ile Leu Ile Tyr Ser Lys
        35                  40                  45
Thr Cys Thr Lys Tyr Ile Thr Tyr Ile His Ser Ile Leu Gln Lys Leu
    50                  55                  60
Arg Glu Ala Ser Ile Tyr Thr Lys Ile
65                  70
```

<210> 27450
<211> 161
<212> PRT
<213> A.fumigatus

<400> 27450
Lys Thr Asp Gln Ile Trp Tyr Leu Asp Ala Leu Thr Thr Gln Lys Gly
1 5 10 15
Ala Pro Trp Gly Leu Gly Ser Ile Ser His Lys Gly Gln Ala Ser Thr
20 25 30
Asp Tyr Ile Tyr Asp Thr Ser Ala Gly Ala Gly Thr Tyr Ala Tyr Val
35 40 45
Val Asp Ser Gly Ile Asn Val Asn His Val Glu Phe Glu Ser Arg Ala
50 55 60
Ser Leu Ala Tyr Asn Ala Ala Gly Gly Ser His Val Asp Ser Ile Gly
65 70 75 80
His Gly Thr His Val Ala Gly Thr Ile Gly Gly Lys Thr Tyr Gly Val
85 90 95
Ala Lys Lys Thr Asn Leu Leu Ser Val Lys Val Phe Gln Gly Glu Ser
100 105 110
Ser Ser Thr Ser Ile Ile Leu Asp Gly Phe Asn Trp Ala Val Asn Asp
115 120 125
Ile Val Ser Lys Gly Arg Thr Lys Lys Ala Ala Ile Asn Met Ser Leu
130 135 140
Gly Lys Ile Asp Pro Ser Cys Ser Phe Asn Trp Thr Glu Ser Asn Gly
145 150 155 160
Gly

<210> 27451
<211> 175
<212> PRT
<213> A.fumigatus

<400> 27451
Trp Ile Met Thr Gly Gly Gly Tyr Ser Tyr Ala Phe Asn Asn Ala Val
1 5 10 15
Glu Asn Ala Phe Asp Glu Gly Val Leu Ser Val Val Ala Ala Gly Asn
20 25 30
Glu Asn Val Cys Ile Pro Arg Phe Arg Lys Val Thr Asn Glu His Cys
35 40 45
Arg Phe Gly Arg Thr Asn Met Leu Cys Gln Ser Asp Ala Ser Asn Thr
50 55 60
Ser Pro Ala Ser Ala Pro Asn Ala Leu Thr Val Ala Ala Ile Asn Lys
65 70 75 80
Ser Asn Ala Arg Ala Ser Phe Ser Asn Tyr Gly Ser Val Val Asp Ile
85 90 95
Phe Ala Pro Gly Gln Asp Ile Leu Ser Ala Trp Ile Gly Ser Thr Thr
100 105 110
Ala Thr Asn Thr Ile Ser Gly Thr Ser Met Ala Thr Pro His Ile Val
115 120 125
Gly Leu Ser Val Tyr Leu Met Gly Leu Glu Asn Leu Ser Gly Pro Ala
130 135 140
Ala Val Thr Ala Arg Ile Lys Glu Leu Ala Thr Asn Gly Val Val Thr
145 150 155 160
Asn Val Lys Gly Ser Pro Asn Lys Leu Ala Tyr Asn Gly Asn Ala
165 170 175

<210> 27452
<211> 191
<212> PRT

<213> A.fumigatus

<400> 27452

```
Ile Leu Gly Val Phe Trp Arg Leu Thr Pro Phe Trp Ala Ile Ser Cys
1               5                  10                  15
Gln Ser Phe Ser Pro Ser Pro Ser Pro Pro Pro Tyr Tyr Ser Ala Asn
            20                  25                  30
Met Pro Ser Asp Ser Glu Asp Val Phe Glu Glu Asn His Val Asp Gly
        35                  40                  45
Thr Thr Ser Glu Glu Glu Glu Asp Gly Pro Ser Gly Pro Pro Val Ala
    50                  55                  60
Thr Asp Leu Tyr Glu Val Leu Gly Val Lys Glu Asp Ala Thr Gln Asp
65                  70                  75                  80
Glu Ile Lys Ser Ala Tyr Arg Lys Leu Ala Leu Lys His His Pro Gly
                85                  90                  95
Asn Leu Leu Glu Ile Ser Ala Gln Thr Thr Thr Gly Asp Tyr Trp Ile
            100                 105                 110
Val Ser Leu Ile Glu Ser Thr Lys Thr Arg Leu Leu Pro Thr Arg Lys
        115                 120                 125
Ile Lys Arg Ile Pro Ser Phe Ser Arg Leu Pro Ser Leu Met Arg Ser
    130                 135                 140
Cys Arg Thr Lys Ser Ala Ala Gly Gly Leu Ile Ala Pro Ala Ala Leu
145                 150                 155                 160
Arg Lys Arg Pro Pro Ala Thr Lys Ile Ser Thr Gly Arg Asn Ser Thr
                165                 170                 175
Glu Thr Tyr Thr Arg Thr Arg Ser Ile Arg Arg Arg Leu Thr Asn
            180                 185                 190
```

<210> 27453
<211> 157
<212> PRT
<213> A.fumigatus

<400> 27453

```
Ile Asn Lys Asp Lys Ala Pro Ala Asp Gln Lys Asp Gln Ala His Ser
1               5                  10                  15
Lys Phe Gln Gln Ile Ala Phe Ala Tyr Ala Ile Leu Ser Asp Glu Lys
            20                  25                  30
Arg Arg Arg Arg Phe Asp Arg Thr Gly Ser Thr Ala Glu Ala Ala Ala
        35                  40                  45
Gly Asp Glu Asp Phe Asp Trp Thr Glu Phe Tyr Arg Asp Leu Tyr Ser
    50                  55                  60
Asn Ser Val Asp Thr Glu Ala Ile Asp Lys Leu Lys Lys Glu Tyr Gln
65                  70                  75                  80
Gly Ser Ala Glu Glu Glu Lys Asp Ile Leu Glu Ala Phe Asp Arg His
                85                  90                  95
Arg Gly Asp Met Asp Arg Val Tyr Glu Ser Val Met Leu Ser Asn Val
            100                 105                 110
Leu Asp Asp Asp Glu Arg Phe Arg Ala Thr Ile Asp Lys Ala Ile Ala
        115                 120                 125
Glu Gly Lys Val Glu Ala Tyr Lys Lys Tyr Thr Asp Glu Pro Ala Lys
    130                 135                 140
Lys Val Phe Thr Thr Gly Leu Lys Gly Ser Cys Lys Pro
145                 150                 155
```

<210> 27454

<211> 69
<212> PRT
<213> A.fumigatus

<400> 27454
Phe His Arg Leu Glu Ser Leu Thr His Ile Ala Lys Gln Thr Tyr His
1 5 10 15
Gln Gln Leu Phe Ile Ile Pro Ala Ala His Cys Thr Ile Ile Tyr Leu
20 25 30
Ser Thr Ile Leu Leu Ile Val Lys Pro Tyr Leu Thr Ser Ser Gln Ile
35 40 45
Asn Cys Ser Leu Pro Thr Thr Arg Gly Met Thr Ala Ser Pro His Leu
50 55 60
Asp Tyr Leu Arg Gln
65

<210> 27455
<211> 135
<212> PRT
<213> A.fumigatus

<400> 27455
Tyr Asp Leu Arg Met Ile Arg His Ile Glu Val Asp Ala Gln Asn Asn
1 5 10 15
Gly Asn Leu Phe Phe Trp His Tyr Gln Asn Arg His Ile Ala Asn Arg
20 25 30
Gln Arg Thr Val Ile Trp Leu Asn Gly Gly Pro Gly Cys Ser Ser Met
35 40 45
Asp Gly Ala Leu Met Glu Ile Gly Pro Tyr Arg Leu Lys Asp Asn His
50 55 60
Thr Leu Glu Tyr Asn Asn Gly Ser Trp Asp Glu Phe Ala Asn Leu Leu
65 70 75 80
Phe Val Asp Gln Pro Val Gly Thr Gly Phe Ser Tyr Val Asn Thr Asn
85 90 95
Ser Tyr Ile His Glu Leu Asp Glu Met Ser Ala Gln Phe Ile Thr Phe
100 105 110
Leu Glu Lys Trp Phe Gln Leu Phe Pro Glu Tyr Glu Gly Asp Asp Val
115 120 125
Gly Ala Leu Ile Phe Ser Ala
130 135

<210> 27456
<211> 69
<212> PRT
<213> A.fumigatus

<400> 27456
Val Pro Ser Phe Ser Val Pro Asp Asp Leu Gly Ala Asn Leu Leu Thr
1 5 10 15
Cys His Gln Ile Tyr Ile Ala Gly Glu Ser Tyr Ala Gly Gln His Ile
20 25 30
Pro Tyr Ile Ala Lys Ala Ile Gln Glu Arg Asn Asn Lys Ile Gln Asn
35 40 45
Asp Gln Ser Ile Arg Trp Asn Leu Arg Gly Ile Val Ile Gly Asn Gly
50 55 60
Trp Ile Ser Pro Ala

65

<210> 27457
<211> 512
<212> PRT
<213> A.fumigatus

<400> 27457

```
Arg Arg Gly Trp Thr Arg Thr Ile Thr Val His Ile Thr Pro Gly Gly
1               5                  10                  15
His Lys Ser Asn Arg Ala Cys Cys Met Val Lys Val Arg Thr Ala Glu
            20                  25                  30
Asp Gln Asp Ser Val Thr Gln Ile Gly Asn Lys Leu Leu Val Asn Ala
        35                  40                  45
Gln Asp Ala Leu Ile Leu Ile Ser Ala Gln Thr Thr Tyr Arg Cys Asp
    50                  55                  60
Asp Ile Asp Lys Lys Ala Ser Ser Asp Leu Glu Thr Ala Leu Leu His
65                  70                  75                  80
Ser Thr Asp Glu Ile Trp Glu Arg His Val Asn Asp Tyr Arg Ser Leu
                85                  90                  95
Tyr Gly Arg Met Glu Leu His Leu Ser Pro Ser Asn Cys Asp Met Pro
            100                 105                 110
Thr Asp Lys Arg Ile Lys Asn Ser Arg Asp Pro Gly Leu Ile Ala Leu
        115                 120                 125
Tyr His Asn Tyr Cys Arg Tyr Leu Leu Ile Ser Cys Ser Arg Asn Gly
    130                 135                 140
Asp Lys Ala Leu Pro Ala Thr Leu Gln Gly Ile Trp Asn Pro Ser Phe
145                 150                 155                 160
His Pro Ala Trp Gly Cys Lys Tyr Thr Ile Asn Ile Asn Leu Gln Met
                165                 170                 175
Asn Tyr Trp Pro Ala Asn Ile Cys Asn Leu Ser Asp Cys Glu Met Pro
            180                 185                 190
Leu Phe Ser Leu Leu Glu Arg Val Ala Lys Ser Gly Glu Glu Thr Ala
        195                 200                 205
Gln Lys Met Tyr Gly Cys Arg Gly Trp Val Ala His His Cys Thr Asp
    210                 215                 220
Ile Trp Ala Asp Thr Ser Pro Gly Asp Thr Trp Met Pro Ala Thr Leu
225                 230                 235                 240
Trp Pro Leu Gly Gly Ala Trp Leu Cys Val His Ile Trp Asp His Phe
                245                 250                 255
Arg Phe Thr Arg Asp Lys Glu Phe Leu Glu Arg Met Phe Pro Ile Leu
            260                 265                 270
Gln Gly Cys Val Gln Phe Leu Leu Asp Phe Leu Val Glu Asp Ala Ser
        275                 280                 285
Gly Glu Tyr Leu Val Thr Asn Pro Ser Leu Ser Pro Glu Asn Thr Phe
    290                 295                 300
Tyr Glu Lys Asn Gly Glu Arg Gly Val Leu Cys Glu Gly Ser Thr Ile
305                 310                 315                 320
Asp Ile Gln Ile Val Asn Ala Val Leu Ser Ala Tyr Leu Lys Ser Val
                325                 330                 335
Glu Glu Leu Glu Ile Val Asp Lys Leu Ala Pro Ala Ala Leu Asp Ala
            340                 345                 350
Leu His Arg Leu Pro Pro Leu Arg Ile Gly Ser Phe Gly Gln Leu Gln
        355                 360                 365
Glu Trp Ala Ser Asp Tyr Ala Glu Val Glu Pro Gly His Arg His Val
    370                 375                 380
```

```
Ser His Leu Trp Ala Leu Tyr Pro Gly Asp Thr Ile Ser Pro Glu Thr
385                 390                 395                 400
Thr Pro Lys Ile Ala Asp Ala Cys Ser Val Thr Leu His Arg Arg Glu
                405                 410                 415
Ala His Gly Ser Gly His Thr Gly Trp Ser Arg Ala Trp Leu Ile Asn
            420                 425                 430
Leu His Ala Arg Leu Leu Ala Ala Glu Glu Cys Ala Lys His Ile Asp
        435                 440                 445
Leu Leu Leu Ala Gln Ser Thr Leu Pro Asn Leu Leu Asp Thr His Pro
    450                 455                 460
Pro Phe Gln Ile Asp Gly Asn Phe Gly Ala Gly Ala Cys Ile Leu Glu
465                 470                 475                 480
Met Leu Leu Gln Ser His Glu Glu Gly Ile Ile Arg Leu Leu Ser Ala
                485                 490                 495
Cys Pro Arg Ala Trp Ser Phe Gly Ser Leu Arg Asn Ile Cys Ala Arg
            500                 505                 510

<210> 27458
<211> 130
<212> PRT
<213> A.fumigatus

<400> 27458
Pro Arg Leu Ala Arg Ser Cys Leu Lys Thr Phe Leu Asp Pro Ser Lys
1               5                   10                  15
Pro Phe Gly Ala His Tyr Gly Ala Ile Ile Gly Leu His Ala Val Gly
            20                  25                  30
Gly Thr Glu Ala Val Arg Val Leu Ile Leu Pro Asn Leu Ser Thr Tyr
        35                  40                  45
Ala Thr Leu Leu Ala Asp Gly Met Ala Glu Asp Asn Pro Arg Arg Pro
    50                  55                  60
Glu Ala Glu Lys Val Leu Gly Ala Leu Leu Ala Val Leu Ser Thr Leu
65                  70                  75                  80
Arg Glu Gly Arg Lys Thr Leu Ala Asn Gly His Gly Ala Ile Val Thr
                85                  90                  95
Asp Glu Leu Arg Glu Arg Leu Asn Ala Lys Val Gly Asp Ile Ile Ala
            100                 105                 110
Ser Arg Ile Ala Asp Ala Gly Glu Val Gln Met Val Tyr Ala Ile Leu
        115                 120                 125
Glu Ala
    130

<210> 27459
<211> 72
<212> PRT
<213> A.fumigatus

<400> 27459
Gln Ser Thr Gly Pro Glu Lys Leu Leu Glu Val Trp Phe Ala Pro Ser
1               5                   10                  15
Ala Gln Glu Leu Gly Pro Ala Gln Pro Ala Gly Leu Lys Ala Val Pro
            20                  25                  30
Glu Glu Ile Trp Lys Asp Met Leu Asp Leu Val Asn Cys Gln Val Leu
        35                  40                  45
Ser Ile Val Ser Ser Glu Asp Val Asp Ala Tyr Leu Leu Ser Ser Leu
    50                  55                  60
```

```
Asn Ala Gly Met Glu Gly Met Arg
65                  70

<210> 27460
<211> 64
<212> PRT
<213> A.fumigatus

<400> 27460
Thr Asn Tyr Gln Asn Arg Asn Ser Arg Met Ser Gln Thr Pro Ser Tyr
1               5                   10                  15
Ala Tyr Lys Leu Asp Thr Gln Gly Ala Asn Ile Gly Leu Lys Met His
            20                  25                  30
Ala Lys Asn Gln Thr Arg Thr Arg Met Pro Met Pro Val Tyr Ser Thr
        35                  40                  45
Arg Cys Pro Asn Thr Gln Ser Gly Gly Arg Gln Gln Glu Met Lys Lys
    50                  55                  60

<210> 27461
<211> 151
<212> PRT
<213> A.fumigatus

<400> 27461
Ser Ala Ser Tyr Ser Ser Thr Ala Gly Ala Leu Pro Thr Pro Ile Ser
1               5                   10                  15
Ser Thr Phe Ala Gly Asn Gly Ala Thr Ser Asp Ser Gly Thr Glu Pro
            20                  25                  30
Tyr Ala Ala Ala Ser Pro Gln Ser Val Ser Asp Ala Ala Pro Ser Ser
        35                  40                  45
Ser Tyr Cys His Ser Ile Ala Thr Pro Ala Tyr Ser Pro Pro Thr Gly
    50                  55                  60
Ser Ser Gly Pro His Met Thr Gly Thr Val Glu Leu Arg Ala Val Leu
65                  70                  75                  80
Pro Ala Val Thr Gln Pro Tyr His Ser Met Ala Ser Gly Tyr Ala Tyr
                85                  90                  95
Pro Thr Val Cys Gln Gln Gln Gly Gln Leu Ser Leu Thr Ala Pro Val
            100                 105                 110
Ser Arg Pro Ser Trp Asn Pro Asn Ser Leu Ala His Gln Pro Ser Ala
        115                 120                 125
Ser Ala Ala Pro Ser Tyr Ser Tyr Leu Ala Pro Leu Pro Tyr Ser Leu
    130                 135                 140
Pro Asp Pro Ser His Gly Cys
145                 150

<210> 27462
<211> 278
<212> PRT
<213> A.fumigatus

<400> 27462
Ile Arg Arg Phe Met Ser Thr Lys Thr Gly Trp Ser Arg Arg Pro Glu
1               5                   10                  15
Gly Pro Pro Gly Gly Lys Tyr Ala Ala Asn Gly Lys His Arg Lys Ser
            20                  25                  30
Arg Lys Ser Ala Pro Tyr Ser Thr Asp Ile Gln Arg Ala Ser Ser Pro
```

```
        35                  40                  45
Tyr Ser Ser Ile Pro Lys Leu Arg Thr Pro Ser Ser Pro Arg Ser Asn
    50                  55                  60
Phe Asn Arg Ser Pro Leu Ser Ser Ser Ile Ser Thr Gln Gly Ser Leu
65                  70                  75                  80
Arg Phe Ala Ser Gly Gly Arg Ser Pro Ala Ser Pro Glu Lys Ser Leu
                85                  90                  95
Arg Arg Thr Ile Ser Ile Ala Ala Phe Pro Gln Pro Pro Lys Val Asn
            100                 105                 110
Gly Arg Ser Ser Val Ala Ser Thr Ile Ser Gly Ser Asn Asn Ile Pro
        115                 120                 125
Leu Gly Ser Ala Arg Val Lys Ser Gly Ser Arg Leu Ser Ser Gly Thr
    130                 135                 140
Thr Ser Ser Tyr Arg Ser Ser Arg Pro Pro Ser Leu Leu Asn Gly Asn
145                 150                 155                 160
Gly Asp Ser Arg Asn Gly Ala Ser Leu Asp Ser Arg Glu Gln Glu Ala
                165                 170                 175
Ser Pro Thr Gln Ser Arg Ser Ser Ser Ala Gln Gly Ser Tyr Ser Thr
            180                 185                 190
Ser Ala Thr Thr Cys Glu Asp Pro Asp Asp Ala Thr Gly Ile Ala Lys
        195                 200                 205
Ser Asn Ser Arg Thr Lys Gln Val Lys Gly Asn Val Ile Val Ser Val
    210                 215                 220
Arg Val Arg Pro Asn Leu Thr Gly Thr Asp Ser Ser Ala Ser Asp Ser
225                 230                 235                 240
Asp Trp Val Val Asp Gly Arg Arg Gly Leu Ile Ser Tyr Lys Gly Lys
                245                 250                 255
Glu Gly Gly Val Asp Tyr Leu Tyr Gly Val His Pro Asp Lys Asp Leu
            260                 265                 270
Ser Asn Asp Ser His Gly
        275
```

<210> 27463
<211> 212
<212> PRT
<213> A.fumigatus

<400> 27463

```
Arg Phe Ala Trp Leu Ile Asp Gln Ser Thr Ser Thr Thr Asp Asn Val
1               5                   10                  15
Phe Pro Pro His Glu His Asn Ala Lys Val Tyr Asp Ala Ala Ala Lys
            20                  25                  30
Arg Leu Val Arg Arg Val Met Glu Gly Tyr His Gly Thr Val Phe Ala
        35                  40                  45
Tyr Gly Met Thr Gly Thr Gly Lys Thr Phe Ser Met Gln Gly Thr Ala
    50                  55                  60
Thr Ser Pro Gly Val Ile Pro Leu Ala Ile Thr Asp Ile Phe Ser Phe
65                  70                  75                  80
Ile Arg Glu Thr Pro His Arg Glu Phe Leu Leu Arg Val Ser Tyr Leu
                85                  90                  95
Glu Ile Tyr Asn Glu Lys Ile His Asp Leu Leu Ser Ala Ser Gly Ser
            100                 105                 110
Thr Gly Leu Gly Asn Ser Gln Gln Glu Glu Ile Lys Leu Arg Glu Asp
        115                 120                 125
Ser Lys Arg Gly Val Tyr Ala Thr Pro Leu Lys Glu Glu Ile Val Gln
    130                 135                 140
```

```
Ser Pro Thr Gln Leu Leu Arg Val Ile Ala Arg Gly Asp Leu Ala Arg
145                 150                 155                 160
Arg Thr Gly Ser Thr Gln Phe Asn Ala Arg Ser Ser Arg Ser His Ala
                165                 170                 175
Val Val Gln Ile Val Val Glu Ser Arg Glu Arg Ala Pro Thr Ser Lys
            180                 185                 190
Pro Ser Gln Glu Arg Arg Ser Cys Met Ala Pro Gly Gly Val Arg Val
        195                 200                 205
Ser Thr Pro Thr
    210
```

<210> 27464
<211> 254
<212> PRT
<213> A.fumigatus

<400> 27464

```
Pro Arg Lys Gln Ile Tyr His Val Lys Ala Ala Ala Asn Thr Ala Ser
1               5                   10                  15
Glu Asp Leu Asp Leu Asn Arg Ala Gln Asp Glu Gln Phe Pro Pro Glu
            20                  25                  30
Lys Leu Arg Ile Thr Ile Glu Arg Phe Tyr Thr Ser Val Val Val Glu
        35                  40                  45
Leu Val Gly Phe Cys Arg His Ile Ala Arg Leu Arg Ser Trp Lys Glu
    50                  55                  60
Pro Arg Arg Thr Ala Val Phe Cys Ala Val Ser Tyr Asp Thr Glu Phe
65                  70                  75                  80
Leu Met Ser Glu Leu Asp Leu Met Arg Ala Val Gln Gly Tyr Phe Ile
                85                  90                  95
Ala Trp Leu Leu Asp Val Val Ile Phe Thr Leu Ser Gly Leu Leu Ile
            100                 105                 110
Ala Leu Ile Leu Cys Pro Pro Leu Arg Arg Ala Leu Phe Pro Gly Ala
        115                 120                 125
Ser Pro Ala Ser Thr Asp Leu Glu Asn Ser Thr Pro Gly Asp Pro Arg
    130                 135                 140
Thr Gln Asp Ser Ile Ile Trp Thr Ser Glu Arg His Lys Gly Glu Ala
145                 150                 155                 160
Ala Glu Arg Glu Ala Gln Asn Leu Val Asn Asn Val Ala Thr Ile Ala
                165                 170                 175
Met Lys Ser Ala Thr Gly Lys Tyr Gly Gln Ala Val Pro Glu Asp Ala
            180                 185                 190
Glu Glu Val Ala Glu Pro Glu Ser Leu Ala Asp Val Val Asp Ala Ala
        195                 200                 205
Glu Gly Leu Asp Glu Ser Val Thr Ala Glu Ser Gln Lys Pro Met Lys
    210                 215                 220
Arg Lys Val Ala Asn Ala Thr Asp Glu Ile Met Arg Thr Met Asn Asp
225                 230                 235                 240
Ile Thr Asp Thr Tyr Glu Lys Phe Cys Lys Tyr Val Ser Arg
                245                 250
```

<210> 27465
<211> 66
<212> PRT
<213> A.fumigatus

<220>

<221> UNSURE
<222> (40)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27465
Tyr Arg Ser Ser Pro Gly Glu Met Thr Val Gln Asn Asn Gln Ile Pro
1 5 10 15
Ala Ile Tyr Ala Arg Ala Ile Glu Lys Tyr Lys Asp Ile Thr Lys Glu
20 25 30
Asp Leu Arg Cys Arg Pro Cys Xaa Cys Lys Leu Gln Thr Val Asp Asp
35 40 45
Leu Ala Lys Glu Ile Asp Glu His Leu Thr Asp Ala Ala Gly Arg Thr
50 55 60
Arg Ala
65

<210> 27466
<211> 203
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (9),(13),(15),(25),(43),(45),(95)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27466
Pro Trp Pro Ser Val Ser Asp Phe Xaa Thr Cys Ser Xaa Asp Xaa Gly
1 5 10 15
Pro Asp Gln Thr Leu Thr Asn Glu Xaa Pro Ser Val Val Phe Ala Ser
20 25 30
Ala Tyr Arg Phe Ser Val Phe Phe Leu Tyr Xaa Ser Xaa Asp Ser Leu
35 40 45
Tyr Thr Phe Ala Pro Thr Val Gly Trp Thr Ala Ile Glu Met Ser Ala
50 55 60
Gly Ile Val Ser Ala Cys Phe Pro Thr Phe Arg Pro Ala Phe Gln Ala
65 70 75 80
Ile Val Arg Leu Leu Gly Ile Gln Gly Ala Leu Pro Ala Leu Xaa Arg
85 90 95
Ser Arg Thr Thr Pro Met Ser Lys Thr Gly Gln Ser Asn Pro Ser Gln
100 105 110
Asn Glu Leu Thr Lys Gly His Pro Gly Ser Gly Val Gly His Ser Ala
115 120 125
His Ser Arg Arg His Ser Phe Tyr Tyr Leu Pro Asp Glu Ala Asp Ser
130 135 140
Ala Gly Gly Gln Pro Met Thr Pro Glu Arg Leu Asp Ala Ser Leu Arg
145 150 155 160
Pro Glu Tyr Asp His Gly His Met Val Thr Asn Val Leu Gly Ala Lys
165 170 175
Gly Arg Asn Val Asp Asn Ala Ser Asp Glu Ile Pro Leu His Gly Ile
180 185 190
Arg Val Gln Lys Asp Phe Thr Gln Val Lys Glu
195 200

<210> 27467
<211> 62

<212> PRT
<213> A.fumigatus

<400> 27467
Tyr Gly Val Ala Leu Asp Cys Ser Ser Pro Ser Phe Asn Ser Arg Arg
1 5 10 15
Ile Pro Ala Arg Leu Ser Ser Ala Ala Leu His Leu Leu Thr Phe Ala
20 25 30
Pro Val Ser Met Lys Arg Gly Val Tyr Lys Leu His Ala Ala Thr Val
35 40 45
Lys Ser Leu Val Val Thr Ser His Cys Leu Val Leu Gly Arg
50 55 60

<210> 27468
<211> 277
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (35)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27468
Met Ser Gly Pro Arg Ser Leu Phe Leu Phe Leu Gly Val Thr Ser Trp
1 5 10 15
Ala Leu Lys Ala Gln Thr Pro Leu Arg Ile Arg Lys Phe Glu Ser Val
20 25 30
Thr Ser Xaa Glu Cys Leu Asp Val Phe Thr Ala Asn Glu Ile Val Glu
35 40 45
Leu Ser Cys Pro Ser Cys Gly Asn Ser Asn Gly Phe Ser Lys Arg Ser
50 55 60
Ser Phe Arg Thr Met Pro Gln Glu Leu Val Leu Asn Ala Arg Arg Phe
65 70 75 80
Glu Val Val Asn Trp Val Pro Arg Lys Leu Asp Ile Pro Val Asn Val
85 90 95
Ser Asp Glu Pro Leu Asp Phe Ser Pro Tyr Val Gly Ser Met Lys Glu
100 105 110
Glu Gly Glu Lys Leu Leu Pro Glu Asp Asp Pro Ser Val Ser Gly Phe
115 120 125
Ser Pro Asp Gln Asn Ile Leu Asn Gln Leu Leu Ala Met Gly Phe Pro
130 135 140
Lys Ile Arg Cys Glu Lys Ala Leu His Ala Thr Gly Asn Ser Asp Thr
145 150 155 160
Glu Ala Ala Met Asn Trp Leu Phe Ser His Met Asp Asp Pro Asp Ile
165 170 175
Asp Ile Pro Leu Val Val Ser Lys Val Thr Gly Pro Ala Asn Met Ala
180 185 190
Leu Gln Asp Pro Ser Lys Val Ser Gln Leu Ile Glu Met Gly Ile Asp
195 200 205
Glu Asp Arg Ala Gln Arg Ala Leu Ala Ala Thr Gly Gly Asp Val Asp
210 215 220
Arg Ala Leu Asp Trp Val Phe Ser His Pro Asp Glu Arg Pro Glu Tyr
225 230 235 240
Lys Ser Gly Asp Cys Asp Ser Gly Ser Arg Leu Pro Gly Phe Asn Glu
245 250 255

```
Thr Pro Ala Ile Tyr Gln Leu Arg Ala Ile Val Cys His Lys Gly Thr
            260                 265                 270
Ser Val His Ala Gly
        275
```

<210> 27469
<211> 68
<212> PRT
<213> A.fumigatus

<400> 27469

```
Val Arg Asn Leu Asn Leu Ser Asp Tyr Arg Ile Ala Lys Gln Leu Arg
1               5                  10                  15
Thr Asn Arg His Tyr Val Ala Phe Val Arg Lys Thr Leu Pro Gly Gln
            20                  25                  30
Asp Asn Pro Ser Trp Val Met Phe Asn Asp Glu Lys Val Val Gly Val
        35                  40                  45
Asp Asp Ile Gln Asp Met Lys Lys Phe Ala Tyr Leu Tyr Phe Phe Ser
    50                  55                  60
Arg Val Glu Ala
65
```

<210> 27470
<211> 187
<212> PRT
<213> A.fumigatus

<400> 27470

```
Gly Arg Leu Leu Ser Thr Leu Lys Asp Glu Arg Phe Lys Val Val Tyr
1               5                  10                  15
Gln Ala Pro Thr Lys Ser Leu Cys Ser Glu Arg Phe Arg Asp Trp Ser
            20                  25                  30
Arg Lys Phe Met Ser Leu Gly Leu Gln Cys Ala Glu Leu Thr Gly Asp
        35                  40                  45
Thr Asp His Thr Gln Leu Arg Ser Val Gln Asn Ser Gln Ile Ile Val
    50                  55                  60
Thr Thr Pro Glu Lys Trp Asp Ser Met Thr Arg Lys Trp Lys Asp His
65                  70                  75                  80
Ala Arg Leu Met Gln Leu Val Lys Leu Phe Leu Ile Asp Glu Val His
                85                  90                  95
Ile Leu Lys Glu Ala Arg Gly Ala Thr Leu Glu Ala Val Val Ser Arg
            100                 105                 110
Met Lys Thr Phe Gly Ser Asn Val Arg Phe Val Ala Leu Ser Ala Thr
        115                 120                 125
Val Pro Asn Ser Glu Asp Ile Ala Cys Trp Leu Gly Lys Asp Ala Met
    130                 135                 140
Asn Gln His Val Pro Ala His Arg Glu His Phe Gly Glu Asp Phe Arg
145                 150                 155                 160
Pro Val Lys Leu Gln Lys Phe Val Tyr Gly Tyr Gln Ser Tyr Ser Asn
                165                 170                 175
Asp Phe Ala Phe Asp Lys Leu Cys Gly Ser Lys
            180                 185
```

<210> 27471
<211> 284
<212> PRT

<213> A.fumigatus

<400> 27471

```
Leu Asp Gly Thr Ala Thr Leu Met Ala Gly Val Ala Phe His His Ala
1               5                  10                  15
Gly Leu Asp Pro Ala Asp Arg His Thr Val Glu Ser Gly Tyr Leu Gln
            20                  25                  30
Gly His Ile Ala Val Ile Cys Cys Thr Ser Thr Leu Ala Val Gly Val
        35                  40                  45
Asn Leu Pro Cys Tyr Leu Val Ile Ile Lys Gly Thr Val Gly Trp Gln
    50                  55                  60
Asp Gly Gly Cys Lys Glu Tyr Ser Asp Leu Glu Met Met Gln Met Leu
65                  70                  75                  80
Gly Arg Ala Gly Arg Pro Gln Phe Asp Asp Ser Ala Ile Ala Val Ile
                85                  90                  95
Met Thr Arg Lys Asp Arg Val Gln His Tyr Glu Lys Leu Ile Ser Gly
            100                 105                 110
Cys Lys Thr Leu Glu Ser Cys Leu His Leu Asn Leu Ile Asp His Leu
        115                 120                 125
Asn Ala Glu Ile Gly Leu Gly Thr Val Val Asp Val Asp Ser Ala Val
    130                 135                 140
Arg Trp Leu Ala Gly Thr Phe Leu Phe Ile Arg Leu Arg Arg Asn Pro
145                 150                 155                 160
Lys His Tyr Gln Leu Lys Glu Arg Ala Thr Lys Asp Asp Glu Asp Glu
                165                 170                 175
Ile Leu Arg Gln Ile Cys Glu Arg Asn Ile Lys Leu Leu Gln Glu Thr
            180                 185                 190
Gly Leu Val Ala Ser Asp His Leu Gln Ser Thr Pro Phe Gly Asp Ala
        195                 200                 205
Met Ala Arg Tyr Tyr Val Gln Phe Asp Thr Met Lys Thr Leu Leu Ala
    210                 215                 220
Leu Lys Pro His Ala Thr Val Ser Gln Val Val Gly Gln Pro Val Leu
225                 230                 235                 240
Cys Leu Thr Ile Gly Glu Thr Leu Met Ala Leu Phe Ser Tyr Leu Gln
                245                 250                 255
Leu Arg Arg Gln Lys Asn Ser Val Arg Tyr Gly Ser Arg Gln Ala Arg
            260                 265                 270
Ser His Cys Ile Lys Asn Ser Thr Gly Pro Met Ala
        275                 280
```

<210> 27472
<211> 223
<212> PRT
<213> A.fumigatus

<400> 27472

```
Leu Arg Arg Ser Ser Leu Val Ala His Val Met Ser Ile Asp Val Asn
1               5                  10                  15
Trp Arg Phe Ala Thr Ser Gly Pro Asp Gly Glu Ala Leu Ala Glu Arg
            20                  25                  30
Ile Arg Ser Phe Ile His Asp Arg Phe Gln Gln Val Ala Leu Pro Arg
        35                  40                  45
Phe Ile Arg Ser Val Gln Val His Ala Phe Asp Phe Gly Thr Ile Pro
    50                  55                  60
Pro Glu Leu Glu Ile Lys Asp Phe Cys Glu Pro Phe Ala Asp Phe Tyr
65                  70                  75                  80
```

```
Glu Glu Asp Asp Asp Asp His Thr Ser Asp Ala Ser Glu Glu Arg Gly
                85                  90                  95
Glu Glu His Ser Ser Arg Trp Asn Ser Thr His Pro Glu Leu Asn Glu
            100                 105                 110
Pro Ser Tyr Arg Glu Asp Thr Ala Val Asn His Ser Leu Arg Asp Pro
        115                 120                 125
Phe Pro Asp Gly Phe Pro Thr Ser Pro Leu Arg Ser Pro Leu Gly Glu
    130                 135                 140
His Leu Asn Pro His Phe Leu Pro Arg Ala Ser Thr Pro Gly Ile Pro
145                 150                 155                 160
Gly Gly Thr Ser Thr Leu Gly Tyr His Leu Met Ser Leu Gly Gly Leu
                165                 170                 175
Ser Gly Thr Gln Thr Pro Leu Ala Ala Val Ala Gly Gly Asn Pro Phe
            180                 185                 190
Ala Ser Gly Trp Ser Asp Ser Gly Met Gly Pro Gly Asn Arg Gly Arg
        195                 200                 205
Ser Glu Thr His Ala Gly Met Gln His Pro Arg Ala Glu Pro Glu
    210                 215                 220
```

<210> 27473
<211> 69
<212> PRT
<213> A.fumigatus

<400> 27473

```
Gln Thr Gly Pro Gln Ala Trp Glu Leu Thr Met Asp Ser Asn Gly Leu
1               5                   10                  15
Ala Gly His Asp Asn Arg Arg Arg Arg Gly Ala Leu Ala Cys Asn Thr
            20                  25                  30
Cys Arg Gly Arg Arg Thr Lys Cys Asp Gly Gln Arg Pro Lys Cys Ser
        35                  40                  45
Phe Cys Ala Arg Arg Gly Lys Glu Cys Leu Tyr Gln Glu Val Gln Gly
    50                  55                  60
Leu Pro Pro Ser Pro
65
```

<210> 27474
<211> 73
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (64)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27474

```
Lys Glu Leu Leu Ser Thr Ser Val Arg Ser Ser Ala Arg Leu Thr Cys
1               5                   10                  15
Tyr Ile Gln Asp Ser Arg Val Asp Cys Ala Ser Leu Phe Pro Gly Lys
            20                  25                  30
Gly Arg Pro Gly Ser Asp Leu Thr Tyr Thr Tyr Lys Gly Ala Ser His
        35                  40                  45
Leu Met Phe Glu Gln Val Ser Ala Ile Glu Glu Gln Tyr Thr Ser Xaa
    50                  55                  60
Trp Phe Gly Arg Ile Ser Lys Thr His
```

65 70

<210> 27475
<211> 80
<212> PRT
<213> A.fumigatus

<400> 27475
Gln Glu Leu Phe Leu Val Ser Gln Cys Gln Ala Ile His Ala Arg Ser
1 5 10 15
Ile Phe Pro Cys Gln Asp Thr Pro Asp Val Lys Cys Thr Leu Asp Phe
20 25 30
Asn Ile Thr Ser Pro Leu Pro Val Ile Ala Ser Gly Leu Pro Val Arg
35 40 45
Gly Ser Ser Glu Ala Pro Lys Ser Asp Gly Lys Thr Leu Tyr Lys Phe
50 55 60
His Gln Lys Val Pro Ile Pro Ser Tyr Leu Phe Ala Leu Ala Ser Gly
65 70 75 80

<210> 27476
<211> 89
<212> PRT
<213> A.fumigatus

<400> 27476
Ala Ser Trp Leu Arg Val Thr Asn Gly Tyr Ser His Gly Glu Pro Tyr
1 5 10 15
Arg His Phe Ser Ala Ile Ile Gly Trp Lys Ala Leu Thr Asp Ser Val
20 25 30
Glu His Phe Gly Pro Glu His Asp Phe Thr Lys Leu Ile Thr Asn Leu
35 40 45
Lys Gly Met Asp Pro Asp Asp Ala Phe Ser Ser Ile Pro Tyr Glu Lys
50 55 60
Gly Phe Asn Phe Leu Phe His Leu Glu Asn Leu Val Gly Lys Ser Lys
65 70 75 80
Phe Asp Arg Phe Ile Pro His Val Cys
85

<210> 27477
<211> 83
<212> PRT
<213> A.fumigatus

<400> 27477
Gln Ser Cys Leu Asp Glu Gly Lys Ser Ala Asn His Val Gln Tyr Phe
1 5 10 15
Asn Lys Tyr Lys Gly Lys Ser Leu Asp Ser Tyr Glu Phe Lys Ser Thr
20 25 30
Ile Leu Asp Phe Phe Lys Asp Asp Ser Asp Ala Ser Thr Ala Leu Asn
35 40 45
Glu Leu Asp Trp Asp Ser Trp Leu Tyr Ala Leu Val Ser Leu Arg Ser
50 55 60
Arg Ile Cys Leu His Arg Pro Gly Leu Glu Gly His Ala Leu Trp Lys
65 70 75 80
Glu Pro Arg

<210> 27478
<211> 487
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (293)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27478
Gly Thr Pro Met Arg Arg His Val Leu Trp Ile Gly Gln Phe Arg Arg
1 5 10 15
Phe Leu Asp Glu Asp Glu Ile Phe Ile Cys Lys Tyr Gly Leu Asp Cys
20 25 30
Tyr Leu Phe Leu Arg Leu Leu His Thr Ala Leu Lys Leu Leu Phe Pro
35 40 45
Met Ala Leu Leu Val Leu Pro Val Leu Leu Pro Val Asn Tyr Thr Ser
50 55 60
Arg Ser Gln Ser Thr Ser Gly Leu Asp Arg Phe Ser Ile Ala Asn Val
65 70 75 80
Thr Asn Gly Glu Asn Cys Arg Tyr Trp Ile Thr Ala Leu Val Ala Thr
85 90 95
Leu Ala Asn Val His Leu Cys Tyr Val Leu Phe Arg Glu Phe Lys Val
100 105 110
Ile Val Arg Ile Arg Gln Ala His Leu His Arg Ser Ser Arg Leu Gln
115 120 125
Ala Val Thr Ser Val Leu Val Thr Glu Leu Pro Pro Asp Leu Trp Asn
130 135 140
Gly Glu Leu Leu Ala His Leu Tyr Ser Arg Phe Asn Glu Gly Pro Thr
145 150 155 160
Glu Val Ile Leu Pro Gly Glu Asp Met His Ala Ala Arg Lys Thr Glu
165 170 175
Leu Glu Leu Leu Leu Lys Lys Arg Asp Asp Leu Ala Arg Asn Thr Ala
180 185 190
Ile Gln Arg Arg Arg Leu Pro Ile Ser His Leu Lys Ser Cys Ile Gln
195 200 205
Val Leu Val Ser Ser Ala His Leu Arg Trp Gln Val Ile Arg Val Arg
210 215 220
Ala Glu Val Arg Lys Leu Arg Ser Val Ala Ile Ile Arg Phe Ser Ser
225 230 235 240
Leu Phe Thr Ala His Leu Val Leu Gln Ala Thr Thr Ser Ser Glu Pro
245 250 255
Phe Lys Met Lys Ala His Ile Leu Ser Asp Lys Ala Tyr Asp Gly Arg
260 265 270
Arg His Ile Phe Lys Ser Arg Leu Glu Arg Ser Ile His Ser Ile Ser
275 280 285
Ile Thr Val Ile Xaa Asn Val Leu Glu Ile Val Trp Ala Val Pro Ile
290 295 300
Ala Met Thr Gly Leu Leu Ser Gln Leu Ser Tyr Leu Asp Thr Ile Ser
305 310 315 320
Ile Asp Leu Ala Asp Leu Ser Glu Trp Gln Val Ser Ala Ile Gln Gly
325 330 335
Leu Ala Pro Gln Ala Ala Leu Ser Leu Leu Met Tyr Cys Phe Pro Tyr
340 345 350

```
Ile Ile Cys Ala Leu Ser Asn Phe Phe Val His Phe Glu Gly Ser Ser
        355                 360                 365
Val Glu Thr Leu Ile Gln Arg His Tyr Phe Thr Phe Leu Tyr Val Gln
    370                 375                 380
Leu Phe Leu Val Val Ser Ile Ser Ser Gly Ile Thr Thr Met Ile Pro
385                 390                 395                 400
Asp Leu Val Ser Gly Phe Gln Ser Ile Pro Leu Ile Leu Ala Arg Asn
                405                 410                 415
Leu Pro Lys Ser Ser Asn Tyr Phe Phe Ser Tyr Leu Ile Leu Gln Ala
            420                 425                 430
Val Val Gln Thr Ser Thr Ile Leu Phe Gln Leu Pro Asp Gly Leu Trp
        435                 440                 445
Arg Gly Leu Arg Arg Gly Gln Ala Lys His Ser Met Lys Arg Val Arg
    450                 455                 460
Trp Ser Leu Val Tyr Pro Val Phe Ala Asn Leu Ile Cys Ile Cys Ala
465                 470                 475                 480
Tyr Ile Met Lys Asp Phe Asn
                485
```

<210> 27479
<211> 92
<212> PRT
<213> A.fumigatus

<400> 27479

```
Arg Pro Trp Ala Thr Ile Leu Ala Ser Ser Leu Ile Arg Thr Gln Phe
1               5                   10                  15
Gln His Pro Phe Val Thr Thr Tyr Pro Met Val Val Leu Ala Ile Ala
            20                  25                  30
Met Asn Leu Ser Ala Ile Asn Glu Thr Val Thr His Ala Ala Gly Lys
        35                  40                  45
Ala Gln Arg Glu Arg Gly Leu Ser Ser Gln Ser Phe Leu Leu Thr Leu
    50                  55                  60
Leu Val Tyr Gly Ser Val Ser Ile Leu Ser Val Cys Leu Phe Ser Tyr
65                  70                  75                  80
Leu Lys Asp Lys Asn Leu Asn Leu Leu Trp Val Met
                85                  90
```

<210> 27480
<211> 127
<212> PRT
<213> A.fumigatus

<400> 27480

```
Arg Thr Ser Thr Glu His Trp Lys Leu Cys Gly Leu Arg Ala Lys Cys
1               5                   10                  15
Asp Ala Gly Ile Ile Phe Ser Leu Leu Ser Pro Leu Ile Leu Pro Ile
            20                  25                  30
Gly Leu Leu Thr Phe Lys Val Phe Leu Ile Leu Tyr Ser Tyr Gln Ala
        35                  40                  45
Thr Tyr Val Leu Glu Ser Asp Lys Glu Thr Ser Gly Leu Leu Tyr Trp
    50                  55                  60
Glu Ala Val Asn Tyr Leu Phe Val Gly Ile Tyr Thr Met Asp Leu Cys
65                  70                  75                  80
Leu Ile Gly Leu Phe Ala Leu Gln Asn Ala Val Gly Pro Thr Ile Met
                85                  90                  95
```

```
Ala Ala Thr Leu Leu Leu Gly Val Ala Met Val His Lys His Leu Arg
            100                 105                 110
Ser Asn Phe Ser Pro Leu Ile His Tyr Ile Ser Cys Lys Ser Pro
        115                 120                 125
```

<210> 27481
<211> 69
<212> PRT
<213> A.fumigatus

<400> 27481

```
Val Leu Ile Met Gly Leu Arg Val Ile Ile Thr Gly Gly Ser Gly Lys
1               5                   10                  15
Ala Gly Gln His Val Ile Ala Glu Leu Leu Lys Ala Gly His Thr Ile
            20                  25                  30
Leu Asn Leu Asp Leu Leu Pro Cys Pro Asn Asp Lys Val Cys Thr Leu
        35                  40                  45
Arg Thr Asp Leu Thr Gln Ser Gly Gln Val Phe Asn Ala Met Ser Gly
    50                  55                  60
Gln Phe Ala Leu Asn
65
```

<210> 27482
<211> 284
<212> PRT
<213> A.fumigatus

<400> 27482

```
Gly Thr Leu Ser Leu Gly Lys Glu Thr Ile Leu Gln Leu Ala Tyr His
1               5                   10                  15
Arg Pro Ser Arg Ile Tyr Met Gly Ala Arg Asn Ala Thr Lys Ala Arg
            20                  25                  30
Asp Ala Ile Thr Asp Ile Gln Arg Gln Leu Ser Thr Pro Val Asp Ile
        35                  40                  45
Arg His Ile Pro Leu Asp Leu Ala Ser Phe Ala Ser Ile Arg Ser Ala
    50                  55                  60
Ala Ala Lys Phe Thr Ser Glu Cys Asp Arg Leu Asp Ile Leu Ile Leu
65                  70                  75                  80
Asn Ala Gly Thr Met Gly Asn Pro Pro Thr Thr Thr Glu Glu Gly Phe
                85                  90                  95
Glu Val Gln Phe Gly Thr Asn His Ile Gly His Phe Leu Leu Thr Lys
            100                 105                 110
Leu Leu Leu Pro Val Leu Gln Lys Thr Ala Ala Ser Pro Ala Ser Thr
        115                 120                 125
Asp Val Arg Val Val Thr Leu Ala Ser Leu Ala Asn Cys Ala Ala Pro
    130                 135                 140
Ser Tyr Asp Val Met Thr Ser Thr Gly Ala Leu Leu Ala Ala Ser Thr
145                 150                 155                 160
Trp Thr Arg Tyr Ala Ala Ser Lys Ala Ala Asn Ile Leu Phe Ala Ser
                165                 170                 175
Glu Leu Ala Arg Arg Tyr Pro Asn Ile Leu Ser Val Ser Val His Pro
            180                 185                 190
Gly Thr Val Thr Ser Asn Leu Tyr Glu His Ala Lys Ala Ser Ser Pro
        195                 200                 205
Val Ser Lys Tyr Ser Val Ala Ala Leu Ser Leu Phe Phe Arg Ser Val
    210                 215                 220
```

```
Arg Ser Gly Ala Leu Asn Gln Leu Trp Ala Ala Gly Ala Lys Arg Glu
225                 230                 235                 240
Leu Leu Thr Asn Gly Ala Tyr Tyr Ile Pro Ile Gly Asn His Ala Lys
                245                 250                 255
Asn Asn Lys Tyr Ala Thr Asp Ala Asp Met Ala Lys Arg Leu Trp Glu
            260                 265                 270
Trp Thr Glu Ala Gln Ile Ser Glu Lys Phe Val Pro
        275                 280
```

<210> 27483
<211> 173
<212> PRT
<213> A.fumigatus

<400> 27483

```
Thr Gly Ala Ala Gly Pro Ile Ile Val Arg Pro Ser Ile Leu Arg Ile
1               5                   10                  15
Asp Arg Asn Gln His His Thr Leu Val Thr Met Thr Thr Glu Ile Ala
            20                  25                  30
Ala Gly Thr Pro Leu Ala Glu Ala Leu Ser Asn Ala Ile Gln Pro Lys
        35                  40                  45
Leu Val Glu Met Gly Trp Thr Ser Asp Gly Gly Asp Asp Ser Ala Leu
    50                  55                  60
Ile Glu Tyr Ile Ile Leu Met Leu Val Asn Gly Lys Ser Gln Glu Gln
65                  70                  75                  80
Ile Ala Asp Glu Leu Ser Asn Asp Leu Leu Gly Leu Gly Ser Glu Gly
                85                  90                  95
Asp Thr Gln Ala Leu Asp Phe Ser Arg Trp Leu Phe Glu Gln Val Glu
            100                 105                 110
Val Leu Asn Arg Gln Ile Asn Gly Gly Gly Ala Pro Val Ala Asn Glu
        115                 120                 125
Thr Ala His Thr Ile Pro Ser Ser Asn Asp Gln Thr Ala Thr Ser Gln
    130                 135                 140
Glu Gly Asn Asp Gly Gly Asp Gln Asp Ala Thr Met Asn Met Ala Asp
145                 150                 155                 160
Gly Ser His Met Asp Asp Ser Met Trp Val Pro Ala Leu
                165                 170
```

<210> 27484
<211> 101
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (59)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27484

```
Leu Gly Thr Tyr Ser Ser Val Ser Thr Pro Pro Ser Met Glu Phe Leu
1               5                   10                  15
Thr Leu Pro Gln Thr Ile Lys Val Leu Glu Asp Ala Gly Tyr Val Ile
            20                  25                  30
Asp Ser Tyr Asn Met Lys Leu Cys Cys Thr Phe Glu Asn Pro Glu Arg
        35                  40                  45
Leu Trp Val Ala Leu Glu Glu Leu Asp Lys Xaa Ser Gln Leu Ser Leu
```

```
    50                  55                  60
Ala Thr Leu Ala Asp Thr Lys Leu Ala Arg Pro Lys Ser Asp Lys Lys
65                  70                  75                  80
Thr Arg Asp Glu Leu Leu Asp Gln Gly Leu Gln Arg Leu Arg Glu Lys
                85                  90                  95
Leu Lys Pro Lys Leu
            100
```

<210> 27485
<211> 477
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (471),(474),(476)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27485

```
Lys Gly Ala Arg Thr Thr Pro Ser Val Val Ala Phe Ala Gln Asp Gly
1               5                   10                  15
Glu Arg Leu Val Gly Ile Ala Ala Lys Arg Gln Ala Val Val Asn Pro
            20                  25                  30
Glu Asn Thr Leu Phe Ala Thr Lys Arg Leu Ile Gly Arg Lys Phe Thr
        35                  40                  45
Asp Pro Glu Val Gln Arg Asp Ile Lys Glu Val Pro Tyr Lys Ile Val
    50                  55                  60
Gln His Thr Asn Gly Asp Ala Trp Val Glu Ala Arg Gly Gln Lys Tyr
65                  70                  75                  80
Ser Pro Ser Gln Ile Gly Gly Phe Ile Leu Gln Lys Met Lys Glu Thr
                85                  90                  95
Ala Glu Asn Tyr Leu Ser Lys Pro Val Lys Asn Ala Val Val Thr Val
            100                 105                 110
Pro Ala Tyr Phe Asn Asp Ser Gln Arg Gln Ala Thr Lys Asp Ala Gly
        115                 120                 125
Gln Ile Ala Gly Leu Asn Val Leu Arg Val Val Asn Glu Pro Thr Ala
    130                 135                 140
Ala Ala Leu Ala Tyr Gly Leu Glu Lys Glu Ala Asp Arg Val Val Ala
145                 150                 155                 160
Val Tyr Asp Leu Gly Gly Gly Thr Phe Asp Ile Ser Val Leu Glu Ile
                165                 170                 175
Gln Lys Gly Val Phe Glu Val Lys Ser Thr Asn Gly Asp Thr His Leu
            180                 185                 190
Gly Gly Glu Asp Phe Asp Ile His Leu Val Arg His Ile Val Gln Gln
        195                 200                 205
Phe Lys Lys Asp Ser Gly Leu Asp Leu Ser Asn Asp Arg Met Ala Ile
    210                 215                 220
Gln Arg Ile Arg Glu Ala Ala Glu Lys Ala Lys Ile Glu Leu Ser Ser
225                 230                 235                 240
Ser Leu Gln Thr Glu Ile Asn Leu Pro Phe Ile Thr Ala Asp Ala Ser
                245                 250                 255
Gly Ala Lys His Ile Asn Leu Lys Met Thr Arg Ser Gln Leu Glu Ser
            260                 265                 270
Leu Val Glu Pro Leu Ile Asn Arg Thr Val Glu Pro Val Arg Lys Ala
        275                 280                 285
Leu Lys Asp Ala Asn Leu Gln Ala Ser Asp Ile Gln Asp Ile Ile Leu
```

```
    290                 295                 300
Val Gly Gly Met Thr Arg Met Pro Lys Val Ala Glu Ser Val Lys Ser
305                 310                 315                 320
Met Phe Gly Arg Asp Pro Ala Lys Ser Val Asn Pro Asp Glu Ala Val
                325                 330                 335
Ala Ile Gly Ala Ala Ile Gln Gly Ala Val Leu Ala Gly Glu Val Thr
            340                 345                 350
Asp Val Leu Leu Leu Asp Val Thr Pro Leu Ser Leu Gly Ile Glu Thr
        355                 360                 365
Leu Gly Gly Val Phe Thr Arg Leu Ile Asn Arg Asn Thr Thr Ile Pro
    370                 375                 380
Thr Lys Lys Ser Gln Thr Phe Ser Thr Ala Ala Asp Phe Gln Thr Ala
385                 390                 395                 400
Val Glu Ile Lys Val Phe Gln Gly Glu Arg Glu Leu Val Lys Asp Asn
                405                 410                 415
Lys Leu Leu Gly Asn Phe Gln Leu Val Gly Ile Pro Pro Ala His Arg
            420                 425                 430
Gly Val Pro Gln Ile Glu Val Thr Phe Asp Ile Asp Ala Asp Ser Ile
        435                 440                 445
Val His Val Ala Ala Lys Asp Lys Ser Ser Leu His His Gly Ala Gly
    450                 455                 460
Ser Ile Asp Ser Val Leu Xaa Leu Asn Xaa His Xaa Ala
465                 470                 475
```

<210> 27486
<211> 228
<212> PRT
<213> A.fumigatus

<400> 27486

```
Asn Thr Val Asp Thr Ser Ser Pro Val Val Lys Thr Gly Leu Val Leu
1               5                   10                  15
Gly Gly Asn Val Asp Asn Gly Val Gly Ile Asn Val Glu Gly Asp Leu
            20                  25                  30
Asp Leu Gly Asn Thr Thr Val Gly Arg Arg Asn Thr Asn Glu Leu Glu
        35                  40                  45
Val Ser Lys Gln Phe Val Val Leu Asp Lys Leu Thr Leu Thr Leu Glu
    50                  55                  60
His Leu Asp Leu Asp Gly Ser Leu Glu Val Ser Gly Gly Arg Glu Cys
65                  70                  75                  80
Leu Gly Leu Leu Ser Gly Asp Gly Gly Ile Ala Val Asp Gln Thr Ser
                85                  90                  95
Glu Asp Thr Ala Glu Ser Leu Asp Thr Glu Gly Lys Gly Ser Asp Ile
            100                 105                 110
Glu Gln Gln Asn Val Ser Asn Leu Thr Ser Gln Asp Ser Thr Leu Asp
        115                 120                 125
Ser Ser Thr Asp Gly Asp Ser Leu Ile Arg Val Asp Arg Leu Gly Trp
    130                 135                 140
Val Thr Thr Lys His Gly Leu Asp Gly Leu Gly Asn Leu Gly His Thr
145                 150                 155                 160
Gly His Thr Thr Asn Gln Asp Asp Val Leu Asp Val Ala Gly Leu Glu
                165                 170                 175
Val Gly Val Leu Glu Gly Leu Ala Asp Gly Phe Asn Ser Ala Val Asp
            180                 185                 190
Gln Gly Phe Asp Glu Gly Leu Lys Leu Arg Ala Ser His Leu Glu Val
        195                 200                 205
```

```
Asp Val Leu Ser Ala Ala Ser Ile Gly Gly Asp Glu Gly Gln Val Asn
    210                 215                 220
Leu Gly Leu Lys
225
```

<210> 27487
<211> 204
<212> PRT
<213> A.fumigatus

<400> 27487

```
Arg Arg Lys Phe Asn Leu Ser Leu Leu Ser Gly Leu Thr Asp Thr Leu
1               5                  10                  15
Asp Ser His Ala Val Val Gly Glu Ile Lys Ala Arg Ile Leu Leu Glu
            20                  25                  30
Leu Leu Asp Asn Val Ala Asp Gln Val Asp Ile Lys Val Leu Thr Thr
        35                  40                  45
Lys Val Gly Val Thr Val Gly Gly Leu Asp Leu Glu His Thr Leu Leu
    50                  55                  60
Asp Leu Gln Asp Gly Asp Ile Glu Ser Thr Thr Thr Lys Ile Val Asp
65                  70                  75                  80
Gly Asp Asn Thr Val Gly Leu Leu Leu Gln Thr Val Ser Lys Gly Ser
                85                  90                  95
Ser Gly Gly Phe Val Asn Asn Thr Glu Asn Val Gln Thr Ser Asp Leu
            100                 105                 110
Thr Ser Val Leu Gly Ser Leu Thr Leu Gly Val Val Glu Ile Ser Arg
        115                 120                 125
His Ser Asp Asp Gly Val Leu Asn Gly Leu Ala Glu Val Val Leu Gly
    130                 135                 140
Ser Leu Leu His Leu Leu Lys Asp Glu Thr Thr Asp Leu Arg Arg Arg
145                 150                 155                 160
Val Leu Leu Thr Ala Ser Leu Asn Pro Gly Ile Ala Val Gly Val Leu
                165                 170                 175
Asn Asn Leu Val Gly Asp Leu Leu Asp Val Thr Leu Asn Leu Arg Ile
            180                 185                 190
Gly Glu Leu Ala Thr Asp Glu Thr Leu Gly Gly Glu
        195                 200
```

<210> 27488
<211> 190
<212> PRT
<213> A.fumigatus

<400> 27488

```
Arg Leu Asp Leu Ser Leu Ala Ala Thr Trp Thr Met Glu Ser Ala Ser
1               5                  10                  15
Met Ser Lys Val Thr Ser Ile Trp Gly Thr Pro Arg Trp Ala Gly Gly
            20                  25                  30
Ile Pro Thr Ser Trp Lys Phe Pro Ser Ser Leu Leu Ser Leu Thr Ser
        35                  40                  45
Ser Arg Ser Pro Trp Asn Thr Leu Ile Ser Thr Ala Val Trp Lys Ser
    50                  55                  60
Ala Ala Val Glu Asn Val Trp Asp Phe Leu Val Gly Met Val Val Leu
65                  70                  75                  80
Arg Leu Ile Arg Arg Val Lys Thr Pro Pro Arg Val Ser Ile Pro Arg
                85                  90                  95
```

```
Glu Arg Gly Val Thr Ser Ser Ser Arg Thr Ser Val Thr Ser Pro Ala
            100                 105                 110
Arg Thr Ala Pro Trp Ile Ala Ala Pro Met Ala Thr Ala Ser Ser Gly
        115                 120                 125
Leu Thr Asp Leu Ala Gly Ser Arg Pro Asn Met Asp Leu Thr Asp Ser
    130                 135                 140
Ala Thr Leu Gly Ile Arg Val Ile Pro Pro Thr Arg Met Met Ser Trp
145                 150                 155                 160
Met Ser Leu Ala Trp Arg Leu Ala Ser Leu Arg Ala Leu Arg Thr Gly
                165                 170                 175
Ser Thr Val Arg Leu Ile Arg Gly Ser Thr Arg Asp Ser Ser
            180                 185                 190
```

<210> 27489
<211> 62
<212> PRT
<213> A.fumigatus

<400> 27489

```
Val Leu Gln Tyr Asn Lys Met Arg Thr Met Ala Cys Leu Arg Leu Thr
1               5                   10                  15
Gln Glu Asn Val Ile Leu Ala Ser Leu Val Pro Glu Ser Ser Ala Gln
            20                  25                  30
Pro Gly Asn Leu Ala Phe Pro Leu Leu Pro Val Tyr Phe Ser Gly Ser
        35                  40                  45
Ser Cys Gly Ile Ser Leu Ile Val Ala Phe Gln His Leu Val
    50                  55                  60
```

<210> 27490
<211> 193
<212> PRT
<213> A.fumigatus

<400> 27490

```
Glu Arg Val Ser Phe Gln Pro Arg Arg Cys Lys Thr Leu Ser Ser Ala
1               5                   10                  15
Arg Arg Asp Asp Met Glu Ser Leu Gly Tyr Val Met Leu Tyr Phe Cys
            20                  25                  30
Arg Gly Thr Leu Pro Trp Gln Gly Leu Lys Ala Ala Thr Lys Lys Gln
        35                  40                  45
Lys Tyr Asp Arg Ile Met Glu Lys Lys Met Thr Thr Pro Thr Glu Val
    50                  55                  60
Leu Cys Arg Gly Phe Pro Asn Glu Phe Ser Ile Tyr Leu Asn Tyr Thr
65                  70                  75                  80
Arg Ser Leu Arg Phe Asp Asp Lys Pro Asp Tyr Ser Tyr Leu Arg Lys
                85                  90                  95
Ile Phe Arg Asp Leu Phe Val Arg Glu Ser Tyr Gln Tyr Asp Tyr Val
            100                 105                 110
Phe Asp Trp Thr Val Tyr Lys Tyr Gln Lys Asn Ala Ala Met Ile Ala
        115                 120                 125
Asp Ala Thr Asn Asn Lys Lys Asp Lys Glu Ala Asp Gly Arg Gln Asn
    130                 135                 140
Ala Ala Gly Ala Gln Ala Pro Met Ala Thr Thr Ala Thr Ala Ala Lys
145                 150                 155                 160
Pro Gly Ala Ile Ser Ser Gln Arg Arg Lys Val Leu Asp His Asn Thr
                165                 170                 175
```

Leu Asn Asn Thr Pro Asp Thr Asn Arg Ala Met Gly Gly Ser Asp Arg
180 185 190
Met

<210> 27491
<211> 153
<212> PRT
<213> A.fumigatus

<400> 27491
Ala Ala Lys Phe His Cys Asp Gln Arg Tyr Gln Ile Leu Pro Ala Leu
1 5 10 15
Val Leu Ser Ser Val Phe Gln Gly Ser Thr Asn Ser Ser Val Phe Glu
20 25 30
Asn Phe Ile Glu Glu Leu Leu Tyr His Cys Gly Arg Trp Pro Glu Pro
35 40 45
Lys Ser Ser Leu Ile Met Asp Asn Ala Ser Phe His His Ser Thr Thr
50 55 60
Leu Glu Lys Ile Cys Ala Glu Ala Gly Val Ser Leu Val Tyr Leu Pro
65 70 75 80
Pro Phe Pro Leu Asp Leu Asn Pro Ile Gln Glu Leu Phe Ala Glu Leu
85 90 95
Lys Ala Phe Met Arg Gln Tyr Trp Gln Val Tyr Glu Asp Asn Pro Tyr
100 105 110
Gln Gly Phe Asp Ser Ser Leu Asn Gly Ala Leu Leu Gly Lys Trp Pro
115 120 125
Gly Arg Ile His His Gly Gln Arg Met Lys Leu Ser Arg Tyr Arg Val
130 135 140
Glu Val Asn Tyr Val Ser Gln Ile Leu
145 150

<210> 27492
<211> 104
<212> PRT
<213> A.fumigatus

<400> 27492
Arg Leu Gly Leu Tyr Leu Leu Glu Asn Ile Gly Val Asp Gly Gln Gly
1 5 10 15
Tyr Ser Gly Gly Ala Gly Lys Ala Ile Gly Leu Trp Phe Tyr Glu Thr
20 25 30
Trp Val Tyr Thr Val Ile Leu Ser Val Val Tyr Gly Ile Ala Val Gly
35 40 45
Trp Val Ser Arg Glu Leu Leu His Trp Ala Glu Glu Lys Arg Tyr Val
50 55 60
Asp Arg Glu Ser Phe Leu Val Phe Ala Ile Ala Leu Ala Val Arg Leu
65 70 75 80
Ala Pro Leu His Leu Glu Thr Pro Ser Val Ala Asp His Val Tyr Ser
85 90 95
Ser Leu Phe Ser Glu Pro Val Ala
100

<210> 27493
<211> 169
<212> PRT

<213> A.fumigatus

<400> 27493

```
Pro Ala Ser Ser Gln Glu Thr Ser Ser Leu Arg Ser Lys Phe Pro Ala
1               5                  10                  15
Arg Asp Pro Ser Met Leu Tyr Thr His Ala Asn Ser Asp Trp Phe Arg
            20                  25                  30
Leu Glu Thr Met Asp Asp Ser Leu Gln Pro Thr Ile Asp Met Leu Leu
        35                  40                  45
Asn Leu Ala Val Phe Met Trp Phe Gly Ala Val Cys Pro Trp Ser Ser
    50                  55                  60
Phe Val Asn Asn Asp Ile Ile Pro Ile Tyr Arg Leu Ile Cys Leu Gly
65                  70                  75                  80
Ile Leu Ile Leu Leu Val Arg Arg Ile Pro Ile Ile Phe Ala Met His
                85                  90                  95
Lys Tyr Ile His Gln Ile Glu His Leu Phe Gln Ala Gly Phe Val Gly
            100                 105                 110
Phe Phe Gly Pro Ile Gly Val Gly Ala Ile Phe Tyr Leu Ser Val Thr
        115                 120                 125
Arg Glu Tyr Leu Arg Thr Ile Thr Val Glu Gly Thr Val Arg Glu Asp
    130                 135                 140
Ala Gln Arg Val Ser Glu Ala Val Asp Val Val Val Trp Phe Leu Val
145                 150                 155                 160
Ile Cys Ser Ile Val Ser Ser His Pro
                165
```

<210> 27494
<211> 282
<212> PRT
<213> A.fumigatus

<400> 27494

```
Leu Ser Ser Met Leu Thr Leu Leu Cys His Phe Ser Val Ile Gly Val
1               5                  10                  15
Glu Arg Pro Lys Ser Arg Leu Thr Thr Ala Lys Ser Glu Pro Asn Trp
            20                  25                  30
Ala Val Val Ser His Thr Gly Pro Ala Glu Glu Leu Pro Leu Pro Ser
        35                  40                  45
Ser Arg Pro Ala Ser Gln Glu Gly Glu Lys Ile Asp Ala Leu Tyr Val
    50                  55                  60
Ser Ser Ser Arg Gln Val Asp Glu Leu Phe Arg Asp Met Met Pro His
65                  70                  75                  80
Phe Glu Gly Arg Glu Ser Glu Asp Asn Trp Ile Arg Arg Glu Lys Asp
                85                  90                  95
Val Leu Thr Leu Arg Arg Leu Thr His Gly Asn Ala Pro Asp Asp Tyr
            100                 105                 110
Ser Pro Ala Tyr Leu Ala Gly Leu Lys Thr Leu Leu Asp Gly Ile Phe
        115                 120                 125
Lys Val Val Asn Ser Leu Arg Thr Thr Leu Ser Thr Ile Gly Cys Leu
    130                 135                 140
Leu Ile Gln Asp Ile Ala Lys Arg Cys Gly Pro Arg Ile Asp Ser Met
145                 150                 155                 160
Val Glu Ile Met Met Gln Asn Leu Ile Lys Leu Cys Ser Gly Met Lys
                165                 170                 175
Lys Ile Ser Ala Gln Asn Gly Asn Ala Thr Val Asp Ala Leu Ile Glu
            180                 185                 190
```

```
Asn Val Thr Phe Thr Thr Arg Ile Leu Gln His Val Ser Gly Ala Cys
        195                 200                 205
Gln Asp Lys Asn Val Gln Leu Arg Leu Phe Ala Ala Gly Trp Leu Lys
    210                 215                 220
Thr Leu Ile Gln Lys Gln Ser His His Lys Ser Ser Ile Glu His Gly
225                 230                 235                 240
Gly Gly Leu Asp Met Met Glu Lys Ser Val Lys Lys Cys Leu Ala Asp
                245                 250                 255
Ala Asn Pro Gly Val Arg Glu Ala Met Arg Ser Thr Phe Trp Thr Tyr
            260                 265                 270
Tyr Arg Val Trp Pro Asn Arg Ala Asn Glu
        275                 280
```

<210> 27495
<211> 71
<212> PRT
<213> A.fumigatus

<400> 27495

```
Arg Gly Ala Pro His Leu Thr Glu Ser Leu Arg Leu Arg Val Val Gly
1               5                   10                  15
Glu Leu Ser His Leu Glu Ile Phe Ser Glu Ile Cys Asn Phe Val Asn
            20                  25                  30
Val Ile Ala Ile Leu Pro Leu Ala Leu Ile Arg Cys Ala Ile Thr Lys
        35                  40                  45
Tyr Glu Tyr Tyr Ser Thr His Cys Ser Pro Pro Thr Val Leu Lys Lys
    50                  55                  60
Ser Gln Leu Val Cys His Thr
65                  70
```

<210> 27496
<211> 221
<212> PRT
<213> A.fumigatus

<400> 27496

```
Leu Arg Met Ser Gln Phe Ser Pro Thr Tyr Pro Ala Leu Leu Pro Val
1               5                   10                  15
Pro Ser Ser Ile Ser Asp Asn Thr Leu Asn Tyr Ala Ala Arg Tyr Arg
            20                  25                  30
Ser Arg Ala Arg Val Pro Val Leu Thr Tyr Arg His Pro Ile Asn Asn
        35                  40                  45
Cys Ser Ile Thr Thr Ser Ser Gln Ala Leu Val Gly Val Arg Gln Asn
    50                  55                  60
Arg Ser Ile Gln Asp Glu Lys Leu Leu Ala Ala Ile Phe Ser Thr Ser
65                  70                  75                  80
Arg Thr Asp Arg Pro Leu Ala Asn Phe Thr Pro Pro His Ile Glu Asn
                85                  90                  95
Asp Ser Ser Ser Ser Thr Gln Gly Asp Val Ser Ser Gly Gln Met Leu
            100                 105                 110
Thr Asp Leu Thr Asn Ala Glu Glu Leu Glu Asp Glu Met Leu Glu Ser
        115                 120                 125
Phe Arg Gly Asn Pro Glu Glu Arg Pro Gln Ile Tyr Gly Ala Gln Gln
    130                 135                 140
His Asn Leu Ile Val Asp Ala Arg Pro Thr Val Asn Ala Phe Ala Met
145                 150                 155                 160
```

```
Gln Ala Val Gly Leu Gly Ser Glu Asn Met Asp Asn Tyr Lys Phe Ala
                165                 170                 175
Thr Lys Ala Tyr Leu Gly Leu Asp Asn Ile His Val Met Arg Glu Pro
            180                 185                 190
Leu Asn Lys Val Val Asp Ala Leu Lys Glu Ser Asp Val His Pro Leu
        195                 200                 205
Gly Pro Asn Arg Asp Leu Leu Gly Pro Lys Trp Asp Gly
    210                 215                 220
```

<210> 27497
<211> 86
<212> PRT
<213> A.fumigatus

<400> 27497

```
Met Ser Glu Met Asn Arg Trp Tyr Lys Val Trp Lys Ala Ser Lys Cys
1               5                   10                  15
Leu Ile Leu Leu Leu Pro Tyr Thr Leu Phe Pro Ser Leu Phe Val Thr
            20                  25                  30
Phe Leu Leu Pro Tyr Leu Lys Gly Val Leu Ala Glu His Leu Val Gln
        35                  40                  45
Glu Val Cys Gly Ile Phe Val Pro Leu Phe Ala Phe Ser Phe Leu Ile
    50                  55                  60
Phe Pro Tyr Ile Pro Phe Tyr Leu Lys Asp Ile Pro Leu Arg Leu Asp
65                  70                  75                  80
Lys Ile Leu Tyr Arg Arg
                85
```

<210> 27498
<211> 64
<212> PRT
<213> A.fumigatus

<400> 27498

```
Phe Gly Ser Gly Arg Asp Trp Arg Leu Val Met Gly Tyr Leu Leu Leu
1               5                   10                  15
Asn Ala Leu Arg Arg Gly Pro Ser Trp Arg Leu Lys Leu Ile Lys Val
            20                  25                  30
Thr Asp Ala His Ile Ser Glu Gly Phe Leu Glu Gly Arg Leu Met Cys
        35                  40                  45
Thr Leu Tyr Pro Asp Ala Gly Ala His Ala Ser His Gly Thr Arg Leu
    50                  55                  60
```

<210> 27499
<211> 75
<212> PRT
<213> A.fumigatus

<400> 27499

```
Ala Glu Lys Ala Thr Gly Pro Leu Gly Arg Leu Ser Pro Gly Pro Gly
1               5                   10                  15
Pro Val Gly Glu Asn Arg Glu Thr Gly Thr Ser Ala Tyr Leu Ile Ile
            20                  25                  30
Leu Glu Asp Leu His Ser Gly Ser Asn Arg Glu Ser Gln Asp Glu Gly
        35                  40                  45
Cys Arg Arg Trp Arg Gly Leu Gly Thr Gly Ile Leu Phe Gly His Val
```

```
    50                  55                  60
Pro Thr Gly Leu Leu Leu Phe Leu Arg Ile His
65                  70                  75

<210> 27500
<211> 85
<212> PRT
<213> A.fumigatus

<400> 27500
His Phe Asn Ala Tyr Ile Ser Gly Val Pro Leu Thr Asn Thr Pro Leu
1               5                  10                  15
Pro Leu Thr Pro Ala Pro Ala Pro Ala His Gly Pro Ala Ser Phe Pro
            20                  25                  30
Pro Leu Ser Pro Pro Ser Tyr Pro Pro Ser Ser Leu Ala Gln Ser Thr
        35                  40                  45
Tyr Ile Thr Ile Thr Arg Ser Pro Leu Ala Arg Asn Asn Thr Ala Met
    50                  55                  60
Lys Lys Thr Tyr Ser Asn Thr Lys Thr Asp Arg Leu Ala Thr Lys Leu
65                  70                  75                  80
Pro Pro Pro Asp Asn
                85

<210> 27501
<211> 145
<212> PRT
<213> A.fumigatus

<400> 27501
Ser Ala Asp Asp Leu Ser Ser His Gly Asp Trp Val Lys Asp Ile Asn
1               5                  10                  15
Glu Val Ala Ser Thr Thr Val Gln Phe Pro Ile Ile Ala Asp Pro Glu
            20                  25                  30
Arg Lys Val Ala Phe Leu Tyr Asp Met Ile Asp Gln Arg Asp Leu Asp
        35                  40                  45
Asn Ile Ala Glu Lys Gly Ile Pro Phe Thr Ile Arg Ala Val Phe Ile
    50                  55                  60
Ile Asp Pro Ala Lys Lys Ile Arg Leu Thr Met Leu Tyr Pro Ala Ser
65                  70                  75                  80
Thr Gly Arg Asn Ser Ala Glu Val Leu Arg Val Ile Asp Ala Leu Gln
                85                  90                  95
Ala Ala Asp Lys Lys Gly Ile Ala Thr Pro Ile Asp Trp Thr Val Gly
            100                 105                 110
Glu Asp Val Ile Val Pro Pro Ser Val Ser Thr Glu Asp Ala Lys Lys
        115                 120                 125
Lys Phe Gly Asn Val Arg Glu Val Lys Pro Tyr Leu Arg Tyr Thr Lys
    130                 135                 140
Phe
145

<210> 27502
<211> 93
<212> PRT
<213> A.fumigatus

<400> 27502
```

```
Phe Ser Thr Leu Leu Pro Tyr Ile His Thr Tyr Ile His Thr Tyr Ile
1               5                  10                  15
His Thr Tyr Ile His Thr Tyr Ile His Thr Tyr Ile His Thr Ser Ile
            20                  25                  30
His Pro Trp Ser Thr Lys Asp Ile Gly Arg Trp Lys Lys Cys Ser Ala
        35                  40                  45
Ser Gly Met His Ala Ile Pro Ser Gly Phe Pro Asn Met Val Ser Thr
    50                  55                  60
Trp Tyr Cys Arg Ala Pro Pro Met Leu Leu Arg Gln Ser Ser Thr Asp
65                  70                  75                  80
Lys Ser His Arg Arg Tyr Thr Leu Val Ser Ala Leu Asn
                85                  90
```

<210> 27503
<211> 73
<212> PRT
<213> A.fumigatus

<400> 27503

```
His Ile Val Arg Ile Val Ala Pro Asn Phe Lys Ala Gln Thr Thr His
1               5                  10                  15
Gly Glu Ile Asp Phe His Glu Phe Ile Gly Asp Ser Trp Thr Ile Leu
            20                  25                  30
Phe Ser His Pro Ala Asp Phe Thr Pro Val Cys Thr Thr Glu Leu Gly
        35                  40                  45
Ala Phe Ala Lys Leu Lys Gly Glu Phe Asp Lys Arg Gly Val Lys Met
    50                  55                  60
Ile Gly Leu Val Gly Ser Pro Leu Ser
65                  70
```

<210> 27504
<211> 66
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (9)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27504

```
Ile Asp Ala Asp Val Phe Arg Cys Xaa Thr Ser Pro Trp Arg Glu Phe
1               5                  10                  15
Ser Ser Asp Thr Ser Asp Gly Leu Ser Thr Asn Lys Ala Thr Pro Ala
            20                  25                  30
Pro Glu Asn Lys His Phe Thr Ser Pro Val Gly Ser Gln Ser Thr Ser
        35                  40                  45
Lys Arg Ser Ile Ile Ser Pro Lys Pro Thr Phe Leu Tyr Cys Asn Cys
    50                  55                  60
Leu Met
65
```

<210> 27505
<211> 286
<212> PRT
<213> A.fumigatus

<400> 27505
His Lys His Thr Asn Cys Gly Thr Pro Met Val Arg Gly Ile Gly Asn
1 5 10 15
Ile Gly Arg Ile Tyr Ser Phe Glu Leu Leu Leu Asp Gly Ala Glu
20 25 30
Lys Gly Pro Ile Val Ser Thr Ser Lys Pro Ser Thr Leu Leu Cys Gln
35 40 45
Tyr Gly Arg Ala Glu Ala Val Pro Met Gln Gly Tyr Phe Asp Ile Ser
50 55 60
Ala Ala Tyr Asn Gly Asn Leu Ile Val Val Thr Asp Ile Leu Asp Pro
65 70 75 80
Met Tyr Arg Pro Ala Ser Val Gly Ala His Leu Glu Leu Gly Val Ala
85 90 95
Gln Val Gly Leu Asp Leu Ser His Ile Ala Lys Leu Leu Leu Ser Val
100 105 110
Leu Gly Arg Asp Gly Gly Arg Asn Asn Asp Ile Phe Ala Asn Gly Pro
115 120 125
Val Asp Gly Gly Ser Asn Ala Phe Leu Val Cys Cys Leu Gln Ser Val
130 135 140
Asn His Thr Gln Asp Leu Gly Gly Val Thr Thr Ser Gly Ser Arg Val
145 150 155 160
Glu His Cys Gln Thr Asp Leu Leu Arg Gly Ile Asp Asp Glu Asn Arg
165 170 175
Thr Asp Gly Glu Arg Asn Ala Leu Leu Gly Asp Val Val Gln Val Ala
180 185 190
Leu Ile Asp His Val Val Glu Glu Gly Asp Leu Ala Leu Gly Ile Gly
195 200 205
Asn Asp Gly Glu Leu Asn Gly Gly Arg Cys Asp Leu Val Asp Ile Leu
210 215 220
Asp Pro Val Ala Val Arg Ala Glu Ile Val Arg Ala Leu Tyr Ile Ile
225 230 235 240
Asn Glu Tyr Gly Thr Met Ile Gln Leu Arg Gly Leu Pro Thr Arg Pro
245 250 255
Ile Ile Phe Thr Pro Leu Leu Ser Asn Ser Pro Phe Ser Leu Ala Lys
260 265 270
Ala Pro Ser Ser Val Val His Thr Gly Val Lys Ser Ala Gly
275 280 285

<210> 27506
<211> 91
<212> PRT
<213> A.fumigatus

<400> 27506
Val Trp Tyr His Asp Ser Thr Glu Arg Thr Thr His Gln Thr Asp His
1 5 10 15
Leu His Thr Pro Leu Val Lys Phe Thr Leu Gln Leu Gly Lys Gly Thr
20 25 30
Glu Phe Gly Arg Ala Tyr Trp Gly Glu Val Gly Gly Met Arg Glu Glu
35 40 45
Asn Gly Pro Ala Val Ser Asp Glu Leu Val Glu Ile Asn Leu Ala Val
50 55 60
Gly Gly Leu Ser Leu Glu Val Arg Ser Tyr Asn Thr Tyr Asp Met Leu
65 70 75 80
Ala Glu Cys Leu Gln Pro Lys Glu Arg Arg Glu

85 90

<210> 27507
<211> 346
<212> PRT
<213> A.fumigatus

<400> 27507
Val Ala His Leu Pro Thr Val Lys Gly Leu Gly Ala Pro Ile Ser Phe
1 5 10 15
Thr Pro Ala Ala Pro Ala Ser Pro Thr Lys Gly Ser Pro Arg Arg Arg
20 25 30
Lys Val Gly Ala Gly Arg Lys Ser Val Ser Phe Ser Pro Lys Lys Thr
35 40 45
Gln Ala Lys Thr Thr Lys Arg Ser Val Arg Trp Lys Asp Asp Glu Gln
50 55 60
Asp Gly Ala Leu Thr Glu Tyr Gln Lys Thr Pro Gln Lys Pro Leu Thr
65 70 75 80
Glu Thr Ile Pro Glu Glu Pro Pro Ser Glu Glu Pro Gln Leu Pro Arg
85 90 95
Ala Ser Pro Ile Pro Arg Gly Ile Pro Val Pro Ser Arg Asn Ile Ser
100 105 110
Pro Ser Gly Ser Ser Pro Ile Pro Pro Pro Ser Asn Glu Pro Thr Leu
115 120 125
His Val Gln Lys Asn Asn Arg Phe Lys Ala Gly Phe Leu Ser Lys Lys
130 135 140
Ala Gly Ser Ser Pro Val Gly Pro Pro Pro Thr Ser Thr Leu Pro Leu
145 150 155 160
Ser Asp Asn Glu Asn Ser Pro Leu Arg Asp Ile Glu Asn Ser Ser Phe
165 170 175
Leu Asn Arg Ser Ser Met Asp Arg Pro Ser Arg Ile Ala Val Arg Thr
180 185 190
Ser Ser Gly Ser Tyr Ser Ser Ser Pro Leu Pro Asp Ser Arg Asp Ser
195 200 205
Trp Lys Ala Ser Lys Asp Asp Ala Ile Lys Ile Thr Ser Ala Met Arg
210 215 220
Arg Ile Ser Gly Gly Gln Phe Gly Ser Ala Ala Ser Thr Asn Ser Leu
225 230 235 240
Arg Ile Asn Arg Arg Arg Ser Pro Thr Ser Ala Thr Tyr Gly Ser Ser
245 250 255
Pro Ser Glu Asn Thr Met Phe Thr Ala Ser Gln Ala Arg Arg Met Val
260 265 270
Lys Ser Glu Lys Glu Leu Asp Pro Lys Pro Arg Val Leu Ser Pro Arg
275 280 285
Thr Leu Pro Ile Met Lys Ser Thr Ser His Arg Arg Thr Thr Phe Gly
290 295 300
Gly Asp Ile Arg Pro Arg Asp Ile Ser Leu Thr Ser Arg Asp Ala Ile
305 310 315 320
Arg Leu Ser Thr Met Ala Ala Pro Ser Ile Glu Arg Pro Pro Glu Thr
325 330 335
Leu Tyr Pro Ser Ser Gly Ala Gly Trp Arg
340 345

<210> 27508
<211> 306
<212> PRT

<213> A.fumigatus

<400> 27508
Gly Leu Thr Phe Cys Val Cys Arg Ile Ala Leu Tyr Phe Val Cys Arg
1 5 10 15
Ala Ser Val Phe Ser Ser Ser Val Thr Thr Arg Ile Gln Ile Ser Thr
20 25 30
Met Thr Arg Ile Arg Pro Asp Tyr Asp Ala Ile Val Ile Gly Ala Gly
35 40 45
Phe Ser Gly Val Arg Ser Leu Trp Glu Leu Arg Arg Leu Gly Leu Thr
50 55 60
Ala Arg Cys Phe Asp Ala Gly Ser Asp Val Gly Gly Thr Trp Trp Trp
65 70 75 80
Asn Arg Tyr Pro Gly Cys Arg Thr Asp Gly Glu Ala Trp Val Tyr Ala
85 90 95
Leu Lys Phe Leu Pro Glu Leu Leu Glu Glu Trp Asp Phe Thr Glu Arg
100 105 110
Tyr Pro Pro Gln Glu Glu Ile Gln Trp Tyr Leu Ser Arg Val Leu Asp
115 120 125
Arg Tyr Asp Leu Arg Lys Asp Ile Glu Phe Asn Thr Glu Val Lys Ser
130 135 140
Ala His Tyr Ser Asp His Asp Ser Ile Trp Lys Ile Thr Thr Ala Ser
145 150 155 160
Gly Lys Val Ala Thr Ala Arg Tyr Phe Leu Pro Ala Thr Gly Ile Thr
165 170 175
Ser Ile Pro Lys Glu Pro Pro Phe Pro Gly Leu Gln Ser Phe Lys Gly
180 185 190
Glu Val Tyr Gln Thr Ser Thr Trp Pro Ala His Glu Ile Glu Phe Glu
195 200 205
Asn Lys Arg Ile Gly Val Ile Gly Thr Gly Ser Thr Gly Ile Gln Val
210 215 220
Ile Thr Lys Leu Ala Pro Val Ala Glu Gln Leu Ile Val Phe Gln Arg
225 230 235 240
Thr Pro Asn Tyr Val Ile Pro Ala Gln Asn Tyr Pro Leu Asp Glu Lys
245 250 255
Lys Arg Glu Asp Ile Lys Lys Thr Phe Asp Ala Thr Trp Asp Ile Ala
260 265 270
Lys Arg Asn Leu Ala Gly His Ala Val Lys His Ser Gly Arg Met Val
275 280 285
Ala Ser Ala Gly Gly Pro Glu Glu Ile Gln Arg Val Phe Glu Asp Gly
290 295 300
Trp Ala
305

<210> 27509
<211> 106
<212> PRT
<213> A.fumigatus

<400> 27509
Gly Leu Ser Val Ala Thr Cys Asp Ser Pro Met Met Ala Ser Leu Phe
1 5 10 15
Gly Ser Asn Asn Asp Gly Ser Gln Leu Gly Thr Ala Leu Leu Arg Ile
20 25 30
Ser Pro Leu Ile Ile Ser Ser Ala Ser Leu Met Phe Ser Trp Ser Gln
35 40 45

```
Asp Ile Ser Leu Gly Ala Phe Leu His Pro Ser Leu Arg His Asp Ala
    50                  55                  60
Ala His Pro Ser Gly Lys Leu Leu Pro Arg Tyr Leu Pro Ala Phe Met
65                  70                  75                  80
Ser Pro Gly Ile Trp Gly Ile Gly Leu Thr Tyr Pro Pro Ala Val Phe
                85                  90                  95
Tyr His Gly Ala Gly Arg Thr Arg Ala Trp
            100                 105
```

<210> 27510
<211> 144
<212> PRT
<213> A.fumigatus

<400> 27510

```
Gly Thr Asn Thr Leu Pro Arg Pro Tyr Ser Pro Thr Trp Ala Ala Leu
1               5                   10                  15
Met Ser Arg Phe Pro His Ser Leu Val Asp Asn Gln Pro Phe His Lys
            20                  25                  30
Ile Leu Trp His Ala Gly Leu Val Ser Ser Lys Ser Glu Gly His Arg
        35                  40                  45
Ile Val Ala Asn Lys Gly Ala Tyr Val Gly Ser Arg Pro Gly Asp Ser
    50                  55                  60
Gly Pro Met Ser Asp Asp Leu Ala Phe Thr Pro Ile Glu Thr Trp Leu
65                  70                  75                  80
Pro Glu Lys Thr Gln Glu Phe Ile Ile Asn Gly Asp Leu Leu Leu Leu
                85                  90                  95
Lys Leu Gly Lys Trp Lys Phe Arg Met Val Arg Ile Val Ser Asp Glu
            100                 105                 110
Glu Phe Lys Glu Arg Gly Leu Thr Ala Pro Gly Trp Glu Leu Glu Lys
        115                 120                 125
Ser Glu Ser Glu Ser Ala Ala Glu Lys Ala Thr Glu Thr Lys Ser Ala
    130                 135                 140
```

<210> 27511
<211> 185
<212> PRT
<213> A.fumigatus

<400> 27511

```
Pro Arg Thr Leu Glu Thr His Arg Ser Asp Val His Phe Trp His Ala
1               5                   10                  15
Gly Cys Ile Gly Pro Met Ile Val Glu Gly Asp His Ile Leu Gly His
            20                  25                  30
Glu Ser Ala Gly Gln Val Ile Ala Val Ala Pro Asp Val Thr Ser Leu
        35                  40                  45
Lys Pro Gly Asp Arg Val Ala Ile Glu Pro Asn Ile Pro Cys His Ala
    50                  55                  60
Cys Glu Pro Cys Leu Thr Gly Arg Tyr Asn Gly Cys Leu Asn Val Ala
65                  70                  75                  80
Phe Leu Ser Thr Pro Pro Val Asp Gly Leu Leu Arg Arg Tyr Val Asn
                85                  90                  95
His Pro Ala Val Trp Cys His Lys Ile Gly Asp Met Ser Phe Glu Asp
            100                 105                 110
Gly Ala Leu Leu Glu Pro Leu Ser Val Ser Leu Ala Ala Ile Glu Arg
        115                 120                 125
```

```
Ser Gly Leu Arg Leu Gly Asp Pro Cys Leu Ile Thr Gly Ala Gly Pro
    130                 135                 140
Ile Gly Leu Ile Thr Leu Leu Ser Ala Lys Ala Ala Gly Ala Thr Pro
145                 150                 155                 160
Leu Val Ile Thr Asp Ile Asp Glu Gly Arg Leu Gln Phe Ala Lys Ser
                165                 170                 175
Leu Val Pro Glu Val Arg Thr Tyr Lys
            180                 185
```

<210> 27512
<211> 91
<212> PRT
<213> A.fumigatus

<400> 27512

```
Thr Ser Ser His Trp Phe Val Gln Ser Ile Tyr His Glu Ser Asp Ile
1               5                   10                  15
Met Ala Thr Ala Thr Thr Thr Val Leu Glu Lys Pro Asn Ile Gly Val
            20                  25                  30
Tyr Thr Asn Pro Lys His Asp Leu Trp Ile Ala Glu Ser Thr Pro Thr
        35                  40                  45
Leu Glu Asp Val Lys Ser Gly Asn Gly Leu Lys Pro Gly Glu Val Thr
    50                  55                  60
Ile Glu Val Arg Ser Thr Gly Ile Cys Gly Tyr Val Leu Arg Ile Pro
65                  70                  75                  80
Cys Val Arg Pro Phe Val Ser Cys Arg Thr Glu
                85                  90
```

<210> 27513
<211> 187
<212> PRT
<213> A.fumigatus

<400> 27513

```
Trp Leu Asn Leu Arg Thr Leu Ala Val Leu Gly Ala Met Thr Ser Leu
1               5                   10                  15
Thr Thr Lys Gly Thr Arg Arg Phe Thr Thr Pro Leu Lys Leu Pro Leu
            20                  25                  30
Ala Trp Asp Gly Lys Pro Ile Pro Tyr Trp Leu Tyr Lys Leu His Gly
        35                  40                  45
Leu Gly Val Glu Tyr Pro Cys Glu Ile Cys Gly Asn Phe Val Tyr Met
    50                  55                  60
Gly Arg Arg Ala Phe Asp Lys His Phe Ser Glu Ala Leu His Ile Phe
65                  70                  75                  80
Gly Leu Lys Cys Leu Gly Ile Thr Ser Asn Thr Asn Leu Phe Arg Glu
                85                  90                  95
Ile Thr Arg Ile Glu Asp Ala Ile Lys Leu Trp Glu Lys Leu Glu Gln
            100                 105                 110
Asp Arg Lys Lys Glu Arg Glu Ser Arg Glu Asn Val Val Gln Met Glu
        115                 120                 125
Asp Ala Glu Gly Asn Val Met Pro Glu Arg Ile Tyr Leu Glu Tyr Val
    130                 135                 140
Ser Leu Phe Leu Thr Lys Pro Asn Asp Ala Asn Leu Leu Gln Ser Ser
145                 150                 155                 160
Lys Ala Gly Tyr Ser Val Ile Leu Leu Leu Ser Val Pro Phe Leu Pro
                165                 170                 175
```

Cys Phe Gly Pro Phe Arg Val Lys Ala Trp Ser
180 185

<210> 27514
<211> 313
<212> PRT
<213> A.fumigatus

<400> 27514
Arg Gly Thr Phe Gln Pro Gly Pro Glu Asp Pro Asn Glu Pro Val Glu
1 5 10 15
Asn Leu Glu Arg Ala Tyr Lys Arg Arg Gln Pro Gly Glu Gly Glu Pro
20 25 30
Thr Gly Val Glu Ile Asp Thr Met Phe Ser Gly Glu Glu Ala Tyr Gly
35 40 45
Gln Phe Leu Asp Leu Thr Thr Leu His Glu Asp Tyr Leu Asn Leu Pro
50 55 60
Gly Val Lys Arg Leu Thr Tyr Ile Gln Tyr Leu Asp Val Phe Asp Ser
65 70 75 80
Phe Val Pro Pro His Leu Leu Ile Lys Arg Ala Asn Lys Ile Ser Asp
85 90 95
Lys Tyr Phe Lys Tyr Val Gly Glu Leu Ala Gly Tyr Leu Glu Ser Phe
100 105 110
Ile Lys Arg Thr Lys Pro Leu Gln Asp Leu Asp Lys Leu Phe Ala Ser
115 120 125
Phe Asp Glu Asp Phe Glu Lys Gln Trp Ala Ala Asn Gln Val Pro Gly
130 135 140
Trp Thr Glu Glu Asn Val Glu Asn Arg Thr Gln Ala Pro Lys Thr Gln
145 150 155 160
Gly Ser Gly Glu Gly Ile Trp Cys Thr Asp Cys Glu Arg Glu Phe Lys
165 170 175
Asn Glu Asn Val Tyr Lys Asn His Leu Thr Gly Lys Lys His Ile Arg
180 185 190
Ala Ala Glu Ala Arg Lys Ala Val Gly Asp Ser Gly Ala Gly Ala Pro
195 200 205
Pro Ser Val Gly Gly Val Thr Ser Val Ala His Arg Leu Lys Glu Arg
210 215 220
Ala Val Ala Glu Arg Glu His Arg Val Arg Ser Leu Ala Lys Val Leu
225 230 235 240
Asp Ser Glu Arg Gln Ala Thr Arg Ile Asn Val Glu Arg Arg Gln Gly
245 250 255
Met Thr Glu Arg Glu Arg Gln Met Glu Leu Glu Ala Leu Met Ala Glu
260 265 270
Phe Glu Asn Ala Gly Gly Pro Gly Arg Asn Asp Gln Ser Asp Asp Glu
275 280 285
Gly Asp Glu Lys Ile Tyr Asn Pro Thr Gln Ala Ser Leu Gly Met Gly
290 295 300
Arg Gln Ala Tyr Ser Leu Leu Ala Val
305 310

<210> 27515
<211> 127
<212> PRT
<213> A.fumigatus

<400> 27515

```
Val Tyr Leu Ser Leu Pro Asp Ser Thr Phe Gln Arg Ser Trp Gln Ala
1               5                  10                  15
Asn Leu Thr Leu Ser Gln Asn Ala Ala Ile Ser Asn Ala Pro Pro Thr
            20                  25                  30
His Ser His Pro Gly Pro Thr Arg Pro Ser His Pro Thr Pro Asn His
        35                  40                  45
Pro Ala Arg Ala Thr Thr Pro Val Gln Gly Pro Val His His Cys Gln
    50                  55                  60
Asn Asp Pro Thr Leu His Leu Pro Pro Arg Gln Met Ala Val Pro Gln
65                  70                  75                  80
Ser Arg Cys Arg Ser Leu Gln Glu Glu Pro Leu Leu Pro Asn Leu Gly
                85                  90                  95
Pro Pro Arg Pro Arg Pro Leu Asp Gln Ile Arg Ser Pro Arg Pro Pro
            100                 105                 110
Asn Arg Arg Pro Pro Ala Arg Arg Arg Cys Ser Phe Ser Arg Gln
        115                 120                 125
```

<210> 27516
<211> 295
<212> PRT
<213> A.fumigatus

<400> 27516

```
Arg Tyr His Arg Thr Gln Leu Ser Leu Met His Pro Arg Leu Ile His
1               5                  10                  15
Thr Leu Val Leu Leu Asp Pro Val Ile Gln Arg Gln Thr Thr Gln Leu
            20                  25                  30
Glu Pro Arg Pro Leu Ser Lys Asp Gln Phe Ile Ile Ala Lys Thr Thr
        35                  40                  45
Gln Leu Ser Thr Tyr Arg Arg Asp Lys Trp Pro Ser Arg Lys Ala Ala
    50                  55                  60
Ala Glu Ala Phe Lys Lys Asn Pro Phe Tyr Gln Thr Trp Asp Pro Arg
65                  70                  75                  80
Val Leu Asp Arg Trp Ile Lys Tyr Gly Leu Arg Asp Leu Pro Thr Ala
                85                  90                  95
Val His Pro Leu Asp Asp Gly Ala Ala Ser Gln Gly Asn Asp Arg Pro
            100                 105                 110
Val Thr Leu Thr Thr Thr Leu His Gln Glu Val Phe Thr Phe Ser Arg
        115                 120                 125
Pro Asn Tyr Asp Gly Pro Pro Gly Lys Asn Val Pro Ile Asn Arg Val
    130                 135                 140
Thr His Pro Asp Leu Asn Pro Lys His Val Gly Ser Phe Pro Phe Tyr
145                 150                 155                 160
Arg Pro Glu Pro Ser Arg Ile Phe Ala Gln Leu Glu His Leu Arg Pro
                165                 170                 175
Ser Val Leu Tyr Ile Phe Ala Gly Lys Ser Asp Met Cys Leu Pro Glu
            180                 185                 190
Met Met Ala Asp Lys Met Lys Asn Thr Gly Thr Gly Leu Gly Gly Ser
        195                 200                 205
Gly Gly Ala Ala Glu Gly Arg Val Arg Asp Val Tyr Leu Lys Lys Tyr
    210                 215                 220
Gly His Leu Leu Ala Gln Glu Ala Pro Ser Glu Cys Gly Glu Ala Ala
225                 230                 235                 240
Ser Arg Trp Leu Gly Lys Glu Leu Glu Arg Trp Arg Ala Glu Glu Gln
                245                 250                 255
Ala Phe Arg Glu Gln Trp Ser Lys Lys Ser Lys Ile Glu Lys Ala Thr
```

```
            260                 265                 270
Ile Asp Ser Arg Trp Lys Glu His Val Pro Ala Pro Val Arg Pro Lys
        275                 280                 285
Lys Asp Ser Glu Ala Lys Leu
    290                 295
```

<210> 27517
<211> 103
<212> PRT
<213> A.fumigatus

<400> 27517

```
Pro Ile Leu Pro Tyr Ala Pro Gln Met Ala Ser Gly Gly Arg Ala Ser
1               5                   10                  15
Leu Gly Ser Phe Pro Arg Gly Pro Trp Leu Val Val Arg Leu Val Tyr
            20                  25                  30
Glu Ser Ser Pro Arg Leu Phe Ala Asn Phe Ser Cys Arg His Val Met
        35                  40                  45
Thr Gly Ile Gly Ala Tyr Leu Tyr Ile Ile Trp Gly Ile Trp Leu Arg
    50                  55                  60
His Cys Leu Asn Gly Arg Gln Glu Glu Tyr Glu Leu Trp Trp Pro His
65                  70                  75                  80
Phe Trp Asn Phe Pro Glu Ile Val Pro Val Ser Thr Asp Ser Gly Ser
                85                  90                  95
Arg Pro Ala Lys Lys Ser Ile
            100
```

<210> 27518
<211> 200
<212> PRT
<213> A.fumigatus

<400> 27518

```
Ser Tyr Ser Thr Arg Leu Ser Asn Ala Ser Pro Val Thr Lys Lys Glu
1               5                   10                  15
Thr Cys Glu Ile Ala Asp Tyr Leu Leu Asp Pro Met Gln Leu Val Asp
            20                  25                  30
Glu Leu Ser Met Ile Tyr Thr Thr Cys Leu Met Cys Tyr Ala Ser Phe
        35                  40                  45
Ser Tyr Ser Arg Pro Leu Gly Phe Arg Ile Val Leu Ala Val Ala Leu
    50                  55                  60
Thr Ser Leu Ala Val Phe Ile Thr Leu Tyr Tyr His Tyr Leu Gln Asp
65                  70                  75                  80
Pro Val Phe His Gln Asn Ala Tyr Ala Leu Leu Thr Ile Val Val Val
                85                  90                  95
Leu Arg Ser Met Tyr Thr Met Glu Val Thr Leu Arg Pro Ser Leu Arg
            100                 105                 110
His Ser Thr Glu Glu Asp Arg Leu Ala Arg Gln Lys Lys Asp Leu Pro
        115                 120                 125
Val Leu Ser Lys Glu Arg Gln His Tyr Glu Asn Val Arg Asp Val Arg
    130                 135                 140
Thr Leu Lys Thr Met Trp Phe Met Val Ala Tyr Gly Leu Ala Met Phe
145                 150                 155                 160
Leu Gly Gly Phe Phe Ile Trp Thr Leu Asp Asn Arg Phe Cys His Thr
                165                 170                 175
Leu Arg Arg Trp Arg Arg Ala Val Gly Leu Pro Trp Gly Leu Phe Leu
```

```
            180                 185                 190
Glu Gly His Gly Trp Trp Tyr Val
        195                 200

<210> 27519
<211> 65
<212> PRT
<213> A.fumigatus

<400> 27519
Ile Thr Cys Arg Leu Leu His Trp Asn Thr Ser Glu Phe Ile Gln Ile
1               5                  10                  15
Ile Ala Arg Phe Asp Ser Arg Gly Cys Val Gln Gly Ser Leu Thr Asn
            20                  25                  30
Tyr Val Ser Gly Arg Leu Tyr Asp Tyr Asn Asn Tyr Leu Val Ile Phe
        35                  40                  45
Tyr Lys Asn Ile Cys Leu Asn His Ser Asn Pro Phe Gly Ile Ser Trp
    50                  55                  60
Leu
65

<210> 27520
<211> 153
<212> PRT
<213> A.fumigatus

<400> 27520
Leu Phe Asn Ala Ser Thr Val Ile Glu Ser Arg Ala Ala Thr Gln Leu
1               5                  10                  15
Gly Glu Asn Val Lys Leu Leu Thr Tyr Val Ser Ile Phe Tyr Leu Pro
            20                  25                  30
Leu Gly Tyr Cys Ala Ala Leu Trp Ser Ile Asn Arg Asp Phe Asn Leu
        35                  40                  45
Val Ala Phe Thr Ile Thr Thr Ala Leu Leu Ala Leu Gly Thr Tyr Ala
    50                  55                  60
Leu Val Leu Asn Leu Asn Asp Ile Val Phe Leu Ile Arg Lys Thr Tyr
65                  70                  75                  80
Arg Lys Leu Arg Ser Pro Ile Leu Glu Ala Met Lys Asn Asp Ser His
                85                  90                  95
Glu Gln Trp Ala Glu Leu Gly Ser Ala Phe Ser Glu Phe Met Pro Glu
            100                 105                 110
Arg His Gly Asp Gln Pro Ser Glu Trp Ala Ile Leu Leu Tyr Ala Val
        115                 120                 125
Leu Met Ala Thr Glu Lys Leu Lys Phe Trp Lys Arg Gly His Ser Asn
    130                 135                 140
Pro Ile Asp Asp Gly Leu Glu Arg Lys
145                 150

<210> 27521
<211> 155
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (151)
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<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27521
Leu Asp His Ser Pro Pro Ile Phe Pro Thr Thr Gly Phe Trp Pro Gln
1 5 10 15
Gln His Pro Tyr Ile Ala Ile Phe Thr Met Thr Ala Glu His Ser Pro
20 25 30
Leu Ser Leu Ser Thr Val Leu Val Thr Gly Gly Ser Gly Gly Leu Ala
35 40 45
Ser Lys Ile Leu Glu Leu Phe Ser Gln Arg Gly Cys Lys Arg Leu His
50 55 60
Ser Ile Asp Ile Arg Gln Pro Ser His Leu Leu His Gly Val Thr Tyr
65 70 75 80
His Leu Gly Asp Leu Thr Asp Val Asp Ala Met Arg Gln Ile Phe His
85 90 95
Glu Val Lys Pro Asp Val Val Ile His Thr Ala Ser Pro Arg Phe Asp
100 105 110
Thr Pro Asn His Ile Met Tyr Lys Val Asn Val Glu Gly Thr Lys Asn
115 120 125
Leu Val Gln Ile Ala Gln Glu Ser Gly Ala His Ser Phe Val Tyr Thr
130 135 140
Ser Ser Ala Ser Val Ile Xaa Asp Gly Lys Asp
145 150 155

<210> 27522
<211> 63
<212> PRT
<213> A.fumigatus

<400> 27522
Gly Leu Thr Lys Ser Val Ala Pro Asn Leu Arg Ala His Ala Ser Leu
1 5 10 15
Leu Ser Leu Thr Ser Thr Ala Met Ile Leu Pro Ala Leu Phe Leu Thr
20 25 30
Ala Pro Trp Met Thr Glu Arg Pro Thr Gln Pro Ala Pro Lys Thr Ala
35 40 45
Thr Phe Glu Pro Ser Ser Thr Leu Ala Val Thr Thr Ala Ala Pro
50 55 60

<210> 27523
<211> 105
<212> PRT
<213> A.fumigatus

<400> 27523
Ser Pro Gly Phe Thr Glu Val Thr Pro Ser Pro Thr Asp Ser Thr Ile
1 5 10 15
Pro Ala Pro Ser Cys Pro Arg Met Thr Gly Lys Ala Pro Ser Gly Ser
20 25 30
Phe Pro Asp Ser Val Tyr Ala Ser Gly Gly Arg Leu Ala Val Val Thr
35 40 45
Val Ser Glu Ala Ser Ser Gln Pro Arg Asp Thr Asn Leu Cys Gly Arg
50 55 60
His Arg Cys Ala Glu Pro Gly Cys Gly Leu Arg Ala Pro Trp Gly Val
65 70 75 80
Gln Pro Gln His Pro Gln Ser Arg Glu Ala Arg Gln Arg Pro Met Gln

```
                85                  90                  95
Arg Gln Pro Ala Val Leu Ser Met Ile
            100                 105

<210> 27524
<211> 87
<212> PRT
<213> A.fumigatus

<400> 27524
Gly Cys Thr Pro Gln Gly Ala Arg Ser Pro His Pro Gly Ser Ala His
1               5                  10                  15
Arg Cys Leu Pro His Arg Leu Val Ser Leu Gly Trp Glu Glu Ala Ser
            20                  25                  30
Glu Thr Val Thr Thr Ala Asn Arg Pro Pro Asp Ala Tyr Thr Leu Ser
        35                  40                  45
Gly Lys Asp Pro Glu Gly Ala Phe Pro Val Ile Leu Gly His Glu Gly
    50                  55                  60
Ala Gly Ile Val Glu Ser Val Gly Glu Gly Val Thr Ser Val Lys Pro
65                  70                  75                  80
Gly Asp Tyr Val Ile Ala Leu
                85

<210> 27525
<211> 150
<212> PRT
<213> A.fumigatus

<400> 27525
Ser Thr Pro Glu Cys Arg Glu Cys Lys Phe Cys Lys Ser Gly Lys Thr
1               5                  10                  15
Asn Leu Cys Gly Lys Ile Arg Ala Thr Gln Gly Lys Gly Val Met Pro
            20                  25                  30
Asp Gly Thr Ser Arg Phe Lys Ala Arg Gly Lys Asp Leu Leu His Phe
        35                  40                  45
Met Gly Thr Ser Thr Phe Ser Gln Tyr Thr Val Val Ala Asp Ile Ser
    50                  55                  60
Val Val Ala Val Thr Pro Lys Ile Pro Thr Asp Arg Ser Cys Leu Leu
65                  70                  75                  80
Gly Cys Gly Ile Thr Thr Gly Tyr Gly Ala Ala Val Val Thr Ala Lys
                85                  90                  95
Val Glu Glu Gly Ser Asn Val Ala Val Phe Gly Ala Gly Cys Val Gly
            100                 105                 110
Leu Ser Val Ile Gln Gly Ala Val Lys Asn Lys Ala Gly Lys Ile Ile
        115                 120                 125
Ala Val Asp Val Asn Asp Ser Lys Glu Ala Trp Ala Arg Lys Phe Gly
    130                 135                 140
Ala Thr Asp Phe Val Asn
145                 150

<210> 27526
<211> 191
<212> PRT
<213> A.fumigatus

<220>
```

<221> UNSURE
<222> (178)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27526
Lys Ile Val Val Glu Thr Cys Ala His Ile Leu Ser Ser Val Leu Val
1 5 10 15
Ile Gly Ala Arg Asn Ser Gly Lys Thr Ser Phe Leu Asn Phe Leu Arg
20 25 30
Lys Ser Leu Thr Met Pro Pro His Lys His Pro Ile Arg Ser Pro Glu
35 40 45
Glu Val Glu Ala Tyr Glu Arg His Ser Pro Ala Asn Glu Gly Phe Thr
50 55 60
Ser His Tyr Leu Glu Thr Glu Ile Asp Gly Glu Arg Val Gly Leu Thr
65 70 75 80
Leu Trp Asp Ser Gln Gly Leu Glu Lys Asn Ile Val Asp Ile Gln Leu
85 90 95
Arg Gly Val Thr Gly Phe Leu Glu Ser Lys Phe Glu Glu Thr Leu Arg
100 105 110
Glu Glu Thr Lys Val Ile Arg Ser Pro Gly Phe Arg Asp Thr His Ile
115 120 125
His Cys Thr Phe Leu Leu Leu Asp Pro Val Arg Leu Asp Glu Asn Ile
130 135 140
Ala Ala Ala Glu Arg Ala Ala Gln Gly Thr Ser Lys Ala Ala Asp Thr
145 150 155 160
Pro Val Ile Gly Gly Leu Asp Glu Phe Leu Asp Ile Gln Val Leu Arg
165 170 175
Thr Xaa Leu Gly Glu Asn His Cys Cys Ser Cys His Gln Pro Ser
180 185 190

<210> 27527
<211> 448
<212> PRT
<213> A.fumigatus

<400> 27527
Ser His Pro Ala Gly Ser Tyr Arg Ile Gln Ile Phe Trp Lys Gly Asp
1 5 10 15
Pro Gly Val Val Asp Asn Phe Ile Ile Arg Phe Gln Asn Glu Asp Val
20 25 30
Met Arg Lys Trp Tyr Lys Glu Ile Asp Thr Gln Arg Ala Ile Gln Ala
35 40 45
Glu Gln Arg Ser Ala Arg Asn Thr Gly Thr Ser Glu Thr Glu Phe Met
50 55 60
Tyr Met Lys Gly Ile Ala Asn Met Pro Asn Pro Tyr Gln Gln Glu Tyr
65 70 75 80
Asp Ala Glu Glu Gln Ser Thr Lys Glu Ala Ala Phe Phe Ser Glu Phe
85 90 95
Pro Met Ser Arg Asn Ala Ser Ser Thr Ser Leu Arg Thr Arg Ser Ala
100 105 110
Thr Gly Gly Ser Gly Ser Ser Gly Pro Pro Leu Ser Ser Gly Arg Gln
115 120 125
Ile Cys Phe Pro Arg Asp Pro Ser Leu Ser Val His Thr Gln Phe Thr
130 135 140
Pro Gly Ser Met Ser Pro Ala Glu Arg Asn Met Asn Ser Tyr Phe Ser
145 150 155 160

```
Pro Val Ala Glu Thr Pro Ser Thr Arg Ser Ser Ser Gln Ser Thr Gly
                165                 170                 175
Tyr Ser Tyr Gly Arg Gln Gly Thr Pro Ser Asn Asn Trp Asn Glu Glu
            180                 185                 190
Pro Asn Arg Tyr Thr Ala Pro Ala Leu Ser Arg Gly Val Ser Arg Asp
        195                 200                 205
Gly Thr Asn Phe Phe Asn Asn Ala Pro Asn Gly Arg Gly Thr Arg Pro
    210                 215                 220
Ser Leu Pro Pro Leu Ala Gly Gln Thr Asn Ala Asn Gly Met Ala Gln
225                 230                 235                 240
Arg Met Arg Ser Ala Ser Ser Pro Asp Ile His His His Asn Pro Glu
                245                 250                 255
Ser Arg Arg Tyr Met Gly Ala His Thr Met Gln Thr Val Asp Asn Val
            260                 265                 270
Pro Val Pro Pro Ile Pro Ala His Met Ala Ser Met Lys Ala Pro Val
        275                 280                 285
Asn Arg Ser Gln Asn Asn Ser Pro Thr Gly Ile Asn Leu Pro Ile Arg
    290                 295                 300
Asn Gly His Ser Gln Gln Ala Ser Thr His Phe His Glu Pro Gln Tyr
305                 310                 315                 320
Ser Glu Ser Arg Ala Thr Gly Pro Ala Ser Asp Gln Pro Thr Ser Pro
                325                 330                 335
Leu Ser Arg Glu Pro Asp Glu Asp Pro Leu Met Pro Thr Gln Leu Lys
            340                 345                 350
Ala Lys Val Asn Phe Asp Asp Asn Tyr Val Thr Leu Val Ile Ala Ser
        355                 360                 365
Asn Ile Met Phe Arg Ser Leu Thr Asp Arg Val Asp Ala Lys Leu Ala
    370                 375                 380
Arg Phe Thr Asn Arg Ser Ile Gly Asn Lys Ser Val Arg Leu Arg Tyr
385                 390                 395                 400
Arg Asp Glu Asp Gly Asp Phe Val Thr Ile Asp Ser Asp Glu Ala Val
                405                 410                 415
Gln Leu Ala Phe Met Glu Trp Arg Glu Gln His Arg Asp Met Leu Ala
            420                 425                 430
Lys Gly Gln Val Gly Glu Ile Gln Leu Tyr Cys Gln Val Val Glu Asn
        435                 440                 445
```

<210> 27528
<211> 303
<212> PRT
<213> A.fumigatus

<400> 27528

```
Thr Asn Cys Ser Ser Asn Ser Glu Ala Arg Ala Thr Thr Ser Ile Ala
1               5                   10                  15
Ile Met Val His Ala His Ala His Arg Asp His His Ala Ala Leu Leu
            20                  25                  30
Glu Arg Ser Leu Glu Glu Arg Asp Pro Lys Asn Glu Ala Val Thr Ile
        35                  40                  45
Val Tyr Val Thr Ala Ala Pro Thr Phe Asp Gly Pro Ile Gly Gly Tyr
    50                  55                  60
Val Thr Gly Val Asp Pro Ala Glu Thr Ala Thr Arg Pro Asn Gln Gly
65                  70                  75                  80
Val Gly Ala Pro Leu Gly His Thr Arg Pro Thr Thr Thr Glu Glu Val
                85                  90                  95
Thr Thr Thr Ala Gln Pro Lys Pro Lys Thr Thr Lys Glu Thr Lys Pro
```

```
            100                 105                 110
Thr Ile Thr Glu Ala Glu Pro Thr Thr Thr Gln Arg Thr Thr Lys Ala
        115                 120                 125
Thr Lys Ala Ile Thr Thr Asp Asn Thr Glu Asp Ile Ile Thr Thr Pro
    130                 135                 140
Thr Thr Phe Ser Thr Ala Thr Ser Ser Ser Thr Ser Ser Leu Thr Ile
145                 150                 155                 160
Pro Gly Leu Asp Thr Thr Thr Thr Thr Thr Thr His Gly Ser Ser Ser
                165                 170                 175
Leu Glu Lys Ser Ala Ser Pro Ser Ala Ser Pro Val Ala Ala Gly Ser
            180                 185                 190
Ser Ser Gly Leu Thr Gly Gly Ala Lys Ala Gly Ile Ala Ile Gly Val
        195                 200                 205
Ile Leu Gly Leu Gly Leu Ile Ala Gly Phe Ile Phe Phe Val Met Arg
    210                 215                 220
Lys Arg Lys Gln Gly Gln Gln Met Ala Glu Ala Glu Ala Ile Lys Glu
225                 230                 235                 240
Lys Ser His Glu Ala Asp Asn Met Leu Pro Pro Gly Pro Pro Pro Lys
                245                 250                 255
Pro Gln Pro Met Thr Pro Ala Glu Pro Pro Gln Leu Asn Val Arg Pro
            260                 265                 270
Val Thr Gln Phe Ala Pro Asp Leu Thr Pro Met Gly Thr Leu Gly Ala
        275                 280                 285
Gly Gly Ala Gly Gly Leu His Gln Thr Ala Gly Lys Ser Tyr Val
    290                 295                 300
```

<210> 27529
<211> 238
<212> PRT
<213> A.fumigatus

<400> 27529

```
Ala Ser Asn Ser Leu Asn Asn Gly Pro Leu Lys Ser Thr Phe Gly Ala
1               5                   10                  15
Asn Val Ala Arg Arg Arg Trp Ser Ser Ile Tyr Met Ile Ser Asp Thr
            20                  25                  30
Tyr Glu Asn Ala Lys Phe Ser Ser Thr Thr Gly Gly Lys Ser Pro Ile
        35                  40                  45
Ala Leu Gly Lys Pro Ser Thr Met Ser Trp Asn Leu Ser Thr Asp Thr
    50                  55                  60
Ser Thr Glu Ala Thr Ser Arg Pro Pro Leu Ala Ser Gln Gln Ser Asn
65                  70                  75                  80
Ser Leu Pro Ser Thr Pro Tyr Gln His Thr Arg Asn Leu Ser Phe His
                85                  90                  95
Ser Arg Thr Pro Ser Pro Pro His Gly Asn Thr Ser Pro Arg Ser Thr
            100                 105                 110
His Ser Glu Ser Ile His Phe Pro Pro Ser Leu Arg Lys Pro Phe Ala
        115                 120                 125
Gly Cys Lys Tyr Glu Thr Ala Met Ala Phe Phe Arg Arg Arg Met Pro
    130                 135                 140
Tyr Thr Ile Gly Ala Asp Leu Leu Pro Glu Glu Lys Glu Gly Leu Lys
145                 150                 155                 160
Glu Arg Leu Glu Ala Glu Glu Glu Glu Arg Leu Thr Lys Asp Met Leu
                165                 170                 175
Glu Val Tyr Asp Arg Leu Leu Pro Ser Ala Glu Ser Asp Asp Arg Arg
            180                 185                 190
```

```
Arg Gln Leu Val Arg Lys Leu Glu Lys Leu Phe Asn Asp Gln Trp Pro
        195                 200                 205
Gly His Asp Ile Lys Val His Val Phe Gly Ser Ser Gly Asn Lys Leu
    210                 215                 220
Cys Ser Ser Asp Ser Asp Gly Glu Trp Ser Trp Cys Arg Ala
225                 230                 235
```

<210> 27530
<211> 128
<212> PRT
<213> A.fumigatus

<400> 27530

```
Cys Cys Ala His Phe Ala Ser Thr Leu Val Tyr Leu Thr Glu Ala Pro
1               5                   10                  15
Ala Leu Gly Lys Ile Ser Thr Val Thr Ala Asn Thr Val Ser Ile Arg
            20                  25                  30
Ser Ser Arg Ile Pro Ser Ser Ile Thr Pro Ala Arg Thr Val Gly Ile
        35                  40                  45
Tyr Leu Gln Leu Val Thr Pro Ile Thr Pro Gly Ser Gly Ala Asp Cys
    50                  55                  60
Arg Met Gln Ser Pro Arg Lys Thr Leu Arg Glu Gln Glu Ser Leu Val
65                  70                  75                  80
Leu His Tyr Val Asp Leu Leu Val Glu Lys Leu Arg Ala Glu Cys Ala
                85                  90                  95
Ala Ala Arg Ser Thr Val Asp Met Met Lys Trp Tyr Asn Tyr Thr Thr
            100                 105                 110
Phe Asp Ile Phe Val Asp Ile Ala His Asp Gly Ala Lys Gln Thr Arg
        115                 120                 125
```

<210> 27531
<211> 119
<212> PRT
<213> A.fumigatus

<400> 27531

```
Val His Leu Thr Thr Asn Cys Leu Thr Gly Gln Arg Pro Ala Glu Gln
1               5                   10                  15
Ala Thr Ser Arg Ile Ala Gly Gly Ser Ser Ala Trp Ala Gly Tyr Leu
            20                  25                  30
Gln Tyr Leu Val Ile Tyr Leu Gln Pro Leu Arg Lys Ser Pro Gly Pro
        35                  40                  45
Lys Leu Val Ala Cys Ser Asn Ile Cys Tyr Ile Trp Trp Thr Phe Ser
    50                  55                  60
Gly Glu Ile His Ala Lys Leu Lys Glu Leu His Asp Gln Tyr Gly Asp
65                  70                  75                  80
Val Val Arg Ile Ser Pro Pro Leu Trp Cys Thr Leu Pro Lys Pro Arg
                85                  90                  95
Arg Leu Glu Arg Tyr Leu Arg Ser Pro Gln Thr Arg Cys Gln Phe Val
            100                 105                 110
His Gln Gly Ser Arg Val Leu
        115
```

<210> 27532
<211> 63
<212> PRT

<213> A.fumigatus

<400> 27532
Pro Gly Arg Lys His Arg Arg Arg Glu Ala Arg Leu Ala Lys Ala Ala
1 5 10 15
Ala Val Ala Pro Arg Pro Val Asp Lys Leu Arg Pro Val Val Arg Cys
20 25 30
Pro Thr Val Lys Tyr Asn Arg Arg Val Arg Val Gly Arg Gly Phe Thr
35 40 45
Leu Ala Glu Leu Lys Val Asn Ser Ser Ser Leu Phe Val Pro Gln
50 55 60

<210> 27533
<211> 145
<212> PRT
<213> A.fumigatus

<400> 27533
Glu Ala Gly Ile Pro Lys Lys Leu Ala Arg Thr Val Gly Ile Ala Val
1 5 10 15
Asp His Arg Arg Val Asn Tyr Ser Lys Glu Ser Leu Val Ala Asn Val
20 25 30
Ala Arg Leu Lys Asp Tyr Lys Ala Arg Leu Ile Leu Phe Pro Arg Lys
35 40 45
Ser Gly Gln Phe Lys Lys Leu Asp Ser Ser Ala Asp Glu Val Asn Ala
50 55 60
Ala Lys Ala Ala Phe Ala Ala Glu Gly Lys Thr Glu Gly Tyr Ala Thr
65 70 75 80
Lys Leu Gly Ala Thr Phe Pro Val Lys Asn Ile Ser Ala Ala Glu Ala
85 90 95
Val Thr Glu Val Lys Arg Asp Glu Leu Pro Lys Gly Glu Glu Ala Ala
100 105 110
Tyr Arg Arg Leu Arg Glu Ala Arg Ser Glu Ala Arg Tyr Lys Gly Ile
115 120 125
Arg Glu Lys Arg Ala Lys Ala Lys Ala Glu Glu Glu Ser Ala Ala Lys
130 135 140
Lys
145

<210> 27534
<211> 68
<212> PRT
<213> A.fumigatus

<400> 27534
Cys Lys Pro Asn Phe Ser Leu Leu Leu Ser Pro Asp Ala Gly His Thr
1 5 10 15
Ile Val His Glu Asn Ile Thr Tyr Asp Phe His Ile Leu Pro Ser Gly
20 25 30
Leu Val Ser Pro Ser Cys Val Asn Leu Ile Gly Ala Gly Thr Val Val
35 40 45
His Val Pro Ser Phe Phe Lys Glu Leu Ala Ser Leu Glu Glu Lys Gly
50 55 60
Leu Lys Asp Ala
65

<210> 27535
<211> 60
<212> PRT
<213> A.fumigatus

<400> 27535
Lys Val Gly Trp Ile Tyr Leu Tyr Asn Phe Ser Lys Tyr Lys Val Tyr
1 5 10 15
Thr Tyr Phe Pro Ile Thr Ala Ile Ile Leu Asn Ser Leu Leu Tyr Leu
20 25 30
Leu Leu Ser Phe Leu Tyr Arg His Tyr Ile Leu Lys Phe Phe Asn Lys
35 40 45
Ser Ser Thr Phe Ser Leu Thr Glu Asn Lys Ile Ser
50 55 60

<210> 27536
<211> 147
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (116)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27536
Leu Leu His Thr Ala Leu Tyr Leu Tyr Ala Arg His Glu Ser Ser Thr
1 5 10 15
His Ser Thr Thr Ala Tyr Cys Thr Asp Cys Leu Pro Tyr Pro Met Ser
20 25 30
Val Asp Pro Lys Ile Arg His Pro Glu Glu Gly Arg Ala Glu Asn Ile
35 40 45
Arg Thr Asn Lys Gln Ser Phe Arg Tyr Ala Val Asp Leu Thr Phe Arg
50 55 60
Gly Pro Val Val Arg Ser Asn Asn Pro Gly Ser Gly Leu Ser Gly Asp
65 70 75 80
Glu Phe Leu Gly Gly Met Arg Glu Lys Ile Phe Arg Phe Ala Val Gly
85 90 95
Gly Thr Pro Tyr Gln Cys Leu Val Trp Gly Asp Trp Asp Leu Gly Leu
100 105 110
Ile Arg Leu Xaa Thr Pro Leu Leu Thr Lys Pro Ile Trp Ser Phe Gly
115 120 125
Leu Ala Phe Ser Glu Phe Ser Ser Pro Leu Asn Pro Asp Ile Gly Ser
130 135 140
Gly Leu Tyr
145

<210> 27537
<211> 66
<212> PRT
<213> A.fumigatus

<400> 27537
Arg His Ile Gly Ser Thr Ser Arg Gln Arg Val Gln Gln Val Ser Glu
1 5 10 15
Ser Trp Lys Glu Gly Gln Asn Val Ala Trp Met Ala Ser Val Ala Gln

```
            20                  25                  30
Phe Ala Asp Leu Lys Asp Leu Tyr Val Arg Ser Gly Thr Ser Ser Asn
        35                  40                  45
Thr Phe Ser Asn Asn Asp Thr Arg Ser Ser Glu Thr Ile Leu Leu Lys
    50                  55                  60
Phe Gln
65
```

<210> 27538
<211> 559
<212> PRT
<213> A.fumigatus

<400> 27538

```
Lys Ala Ile Tyr Thr Ser Pro Ile Lys Ala Leu Ser Asn Gln Lys Phe
1               5                   10                  15
Arg Asp Phe Arg Thr Glu Phe Asp Asp Val Gly Ile Leu Thr Gly Asp
            20                  25                  30
Val Gln Ile Asn Pro Glu Ala Ser Cys Leu Ile Met Thr Thr Glu Ile
        35                  40                  45
Leu Arg Ser Met Leu Tyr Arg Gly Ala Asp Leu Ile Arg Asp Val Glu
    50                  55                  60
Phe Val Ile Phe Asp Glu Val His Tyr Val Asn Asp Leu Glu Arg Gly
65                  70                  75                  80
Val Val Trp Glu Glu Val Ile Ile Met Leu Pro Glu His Val Thr Leu
                85                  90                  95
Ile Leu Leu Ser Ala Thr Val Pro Asn Thr Tyr Glu Phe Ala Ser Trp
            100                 105                 110
Val Gly Arg Thr Lys Lys Lys Asp Ile Tyr Val Ile Ser Thr Ala Lys
        115                 120                 125
Arg Pro Val Pro Leu Glu His Tyr Leu Trp Ala Gly Lys Asp Lys Tyr
    130                 135                 140
Lys Ile Val Asp Ser Asn Lys Arg Phe Leu Glu Thr Gly Trp Lys Glu
145                 150                 155                 160
Ala Asp Asn Val Ile Ser Gly Arg Asp Lys Ile Lys Ala Gln Lys Ala
                165                 170                 175
Ala Glu Ala Gln Ala Gln Ser Gln Ala Gln Arg Gly Gly Gln Gln Gly
            180                 185                 190
Arg Gly Arg Gly Gln Pro Thr Gly Arg Gly Ala Pro Arg Gly Asn Ala
        195                 200                 205
Gln Arg Gly Gly Ala Pro Arg Gly Arg Gly Gln Pro Ala Asn Arg Gly
    210                 215                 220
Thr Gly Asn Ile Ala Arg Thr Gly Arg Gly Gly Gly Arg Thr Thr Ala
225                 230                 235                 240
Ala Gln Asp Lys Thr Ile Trp Val Gln Leu Val Gly His Leu Arg Lys
                245                 250                 255
Glu Asn Leu Leu Pro Gly Cys Ile Phe Val Phe Ser Lys Lys Arg Cys
            260                 265                 270
Glu Glu Asn Ala Asp Ser Leu Ser Asn Gln Asp Phe Cys Asn Ala Ser
        275                 280                 285
Glu Lys Ser Leu Ile His Met Phe Ile Glu Lys Ser Leu Thr Arg Leu
    290                 295                 300
Lys Pro Glu Asp Arg Ile Leu Pro Gln Ile Leu Arg Leu Arg Glu Leu
305                 310                 315                 320
Leu Ser Arg Gly Ile Ala Val His His Gly Gly Leu Leu Pro Ile Met
                325                 330                 335
```

Lys Glu Ile Val Glu Ile Leu Phe Ala Lys Ser Leu Val Lys Ile Leu
340 345 350
Phe Ala Thr Glu Thr Phe Ala Met Gly Leu Asn Leu Pro Thr Arg Thr
355 360 365
Val Val Phe Ser Gly Phe Arg Lys His Asp Gly Arg Gly Phe Arg Asp
370 375 380
Leu Leu Pro Gly Glu Tyr Thr Gln Met Ala Gly Arg Ala Gly Arg Arg
385 390 395 400
Gly Leu Asp Thr Val Gly Tyr Val Ile Ile Val Ser Ala Gly Arg Asp
405 410 415
Glu Ala Pro Pro Ala Gly Ala Leu Arg Lys Met Ile Leu Gly Asp Pro
420 425 430
Thr Lys Leu Arg Ser Gln Phe Arg Leu Thr Tyr Asn Met Ile Leu Asn
435 440 445
Leu Leu Arg Val Glu Ala Leu Lys Ile Glu Glu Met Ile Lys Arg Ser
450 455 460
Phe Ser Glu Asn Ala Thr Gln Ala Leu Leu Pro Glu His Glu Lys Gln
465 470 475 480
Val Gln Leu Ser Glu Ala Ser Leu Ala Lys Ile Lys Arg Glu Pro Cys
485 490 495
Asp Ile Cys Asp Ile Asp Leu Val Ala Cys His Asp Ala Ala Ile Glu
500 505 510
Tyr Glu Lys Leu Thr Ser Glu Leu His Val Gly Leu Leu Ala Ser Pro
515 520 525
Val Gly Lys Arg Leu Phe Met Pro Lys Arg Leu Val Val Tyr Arg Lys
530 535 540
Val Ser Arg Thr Val Asp Val Ile Ala Phe Cys Ser Gln Ile Tyr
545 550 555

<210> 27539
<211> 62
<212> PRT
<213> A.fumigatus

<400> 27539
Val Pro Gly Ser His Thr Pro Leu Arg Lys Gly Pro Phe Thr Gly Ser
1 5 10 15
His Leu Leu Thr Gln Ser Thr Ser Ser Ala Asn Tyr Leu Thr Ser Cys
20 25 30
Lys Ser Ile His Gln Arg Ser Arg His Val Ser Ser Phe Ile Lys Leu
35 40 45
Asp Val Thr Ser Leu Phe Gln Leu Cys Ser Val Thr Lys Gln
50 55 60

<210> 27540
<211> 81
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (46)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27540
Val Ser Phe Ser Phe Thr Ala Ala Leu Val Gln Glu Glu Ala Ala Gln

```
1               5                   10                  15
Ile Arg Glu Leu Val Phe Lys Cys Ile Ile Ser Tyr Leu Tyr Asn Asn
            20                  25                  30
Ser Ser Lys Gln Asp Glu Cys Thr Glu Gly Ser Trp Asp Xaa Ile Gly
        35                  40                  45
Trp Phe Glu Leu Lys Ile Arg Leu Leu Phe Ile Asp Pro Asn His Ala
    50                  55                  60
Ile His Phe Arg Thr Thr Ala Ala Ser Pro Asn Pro Ser Ile Cys Asn
65                  70                  75                  80
Ser
```

<210> 27541
<211> 251
<212> PRT
<213> A.fumigatus

<400> 27541

```
Ser Ile Ala Thr Ser Arg Asn Asp Asp Leu Val Phe Leu Gly Asn Phe
1               5                   10                  15
Leu Ser Thr Phe Ser Asp Trp Ser Met Thr Gly Tyr Phe Ser Ala Ile
            20                  25                  30
Gln Lys Gln Leu Ala Pro Val Leu Ile Arg Lys Asp Ala Gln Ile Glu
        35                  40                  45
Val Ala Gln Leu Leu Val Glu Gln Val Thr Gln Ser Cys Leu Asp His
    50                  55                  60
Lys Val Asp Gly Ile Leu Asn Val Ser Glu Phe Glu Ser Lys Ala Tyr
65                  70                  75                  80
Ser Leu Arg Thr Phe Leu Glu Asp Thr Ala Phe Met Gly Glu Ile Glu
                85                  90                  95
Arg Leu Asp Leu Asn Gly Phe Val Ser Leu Gln Glu Asn Ser Gly Leu
            100                 105                 110
Ser Pro Pro Leu Thr Ala Thr Met Ser Arg Gln Ser Ser Gln Arg Lys
        115                 120                 125
Glu Asn Gly Lys Ser Ser Ile Leu Lys Leu Ala Pro Pro His Leu Arg
    130                 135                 140
Ile Arg Arg Gly Lys Asp Tyr Leu Glu Val Leu Pro Pro Ala Ile Ser
145                 150                 155                 160
Phe Trp Glu Thr Phe Gly Leu Glu Pro Ala Tyr Gly Ser Lys Asp Ile
                165                 170                 175
Tyr Ala Tyr Cys Ile His Pro Gln Thr Ala Ala Glu Ala Ala Asn Asp
            180                 185                 190
Phe Leu Glu Arg Leu Gly Leu Leu Tyr Ser Ser Cys Asn Leu Gly Gln
        195                 200                 205
His Thr Arg Ala Ser Arg Ser Thr Gly Phe Asp Arg Gly Met Cys Ser
    210                 215                 220
Trp Asn Ile Gly Ala Pro Gly Glu Phe Asn Tyr His Tyr Ile Met Gln
225                 230                 235                 240
Ser Leu Lys Ser Ile Cys Asp Lys Leu Gly Met
                245                 250
```

<210> 27542
<211> 62
<212> PRT
<213> A.fumigatus

<400> 27542
Phe Ala Thr Asn Pro Pro Leu Val Thr Ala Leu Leu Lys Ser Pro Pro
1 5 10 15
Thr Arg Asp Ser Val Val Val Tyr Ile Ile Asn Pro Phe Ser His Ala
20 25 30
Ala Ala Leu Ala Asp Ile Cys Ser Ala Phe Tyr Asp Leu Phe Gln Lys
35 40 45
Tyr Ile Asp Glu Val Gly Asn Gln His Ala Gly Gln Ala Lys
50 55 60

<210> 27543
<211> 236
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (226)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27543
Pro Ile Ile Pro Pro Ala His Gln His Thr Pro Leu Arg Ala Ser Ser
1 5 10 15
Leu Ile Met Ala Ser Val Glu Ser Arg Ile Ile Ala Ile Thr Gly Gly
20 25 30
Ala Ser Gly Ile Gly Ala Ala Thr Cys Arg Leu Leu Ala Glu Arg Gly
35 40 45
Ala Ala Val Leu Cys Val Cys Asp Ile Ser Pro Lys Asn Phe Asp Asp
50 55 60
Leu Lys Ile Ser Ile Lys Lys Ile Asn Pro Ser Thr Lys Val His Cys
65 70 75 80
Ala Thr Val Asp Val Thr Ser Ser Val Glu Val Arg Gln Trp Ile Glu
85 90 95
Gly Ile Ile Ser Asp Phe Gly Asp Leu His Gly Ala Val Asn Ala Ala
100 105 110
Gly Ile Ala Gln Gly Ala Gly Met Arg Asn Thr Pro Thr Ile Ala Glu
115 120 125
Glu Val Asp Glu Glu Trp Thr Arg Ile Met Asn Thr Asn Leu Asn Gly
130 135 140
Val Phe Tyr Cys Thr Arg Glu Glu Val Arg Ala Met Lys Gly Leu Pro
145 150 155 160
Ala Thr Asp Arg Ser Ile Val Asn Val Gly Ser Ile Ala Ser Val Ser
165 170 175
His Met Pro Asp Val Tyr Ala Tyr Gly Thr Ser Lys Gly Thr Cys Ala
180 185 190
Tyr Phe Thr Thr Cys Val Ala Ala Asp Ala Cys Pro Leu Gly Ile Arg
195 200 205
Ile Asn Asn Val Ser Pro Gly Gly Ser Ser Pro Ser Pro Ser Ser Ala
210 215 220
Trp Xaa Ala Val Ile Trp Ile Thr Ile Leu Ser Cys
225 230 235

<210> 27544
<211> 200
<212> PRT
<213> A.fumigatus

<400> 27544
Leu Arg Leu Ala Lys Tyr Ser Val Gly Ser Gln Tyr Gln His Leu Leu
1 5 10 15
Met Phe Tyr Ser Val Tyr Ala Pro Asn Leu Gly Pro Trp Pro Asn Asp
20 25 30
Lys Arg Asp Asn Val His Trp Val Cys Gly Ile Cys Pro Gly Gly Glu
35 40 45
Asn Leu Glu Ile Ser Met Asn Tyr Gln Gln Gly Ala Lys Cys Thr Val
50 55 60
Arg Ile Ala Ala Glu Thr Ile Thr Pro Ala Ala Gly Thr Asp Lys Asp
65 70 75 80
Pro Phe Asn Leu Thr Ala Glu Lys Lys Met Ile Glu Asp Leu Lys Ala
85 90 95
Leu Gln Pro Asn Leu Asn Phe Thr Trp Phe Asn His Phe Gln Arg Glu
100 105 110
Val Leu Val Pro Glu Glu Val Ala Leu Asn Asn Asp Glu Ile Ile Ser
115 120 125
Lys Val Pro Phe Lys Asn Gln Arg Leu His Gly Leu Asp Leu Ser Glu
130 135 140
Gly Ala Phe Met Leu Lys Ser Tyr Phe Met Pro Ala Ile Arg Ser Ala
145 150 155 160
Ile Thr Gly Val Glu Asn Thr Gln Ile Met Phe Glu Ser Ile Arg Lys
165 170 175
Leu Asn Leu Lys Asn Ala Asn Phe Ile Ser Ala Leu Arg Ser Ser Pro
180 185 190
Arg Gly Trp Glu Lys Lys Leu His
195 200

<210> 27545
<211> 249
<212> PRT
<213> A.fumigatus

<400> 27545
Ala Arg Phe Asp Gln Trp Ala Glu Ala Ser Met Glu Lys Asp Asp Asp
1 5 10 15
Leu Ile Ala Glu Leu Lys Ala Pro Glu Asp Leu Val Phe Ala Asp Gly
20 25 30
Leu Gln Asp Gln Thr Ala Thr Phe Asn Leu Ser Leu Arg Ala Val Asp
35 40 45
Pro Val Asp Val Cys Val Glu Asn Leu Ser Leu Gln Val Asp Thr Thr
50 55 60
Arg Pro Ile Trp Lys Thr Ser Pro Ser Gln Leu Trp Asn Arg Leu Cys
65 70 75 80
Gly Lys Thr Met Asp Thr His Thr His Lys Thr Val Leu Asp Ser Val
85 90 95
Asn Ala Phe Met Pro Ser Gly Ser Leu Thr Ala Ile Ile Gly Ser Ser
100 105 110
Gly Ser Gly Lys Thr Ser Leu Leu Asn Ile Met Ala Gly Arg Met Ser
115 120 125
Leu Thr Lys Ala Lys Val Ser Gly Ala Thr Thr Phe Asn Gly Val Ala
130 135 140
Gly Ile Glu Gly Ile Arg Ser Ala Tyr Val Met Gln Glu Asp Val Leu
145 150 155 160
Ile Pro Thr Leu Thr Val Arg Glu Thr Leu Arg Tyr Ala Ala Asp Leu

```
                165                 170                 175
Arg Leu Pro Ser Pro Ala Thr Gln Glu Glu Arg His Gln Val Val Glu
            180                 185                 190
Gln Val Val Leu Glu Leu Gly Leu Lys Glu Cys Ala Asp Thr Arg Ile
        195                 200                 205
Gly Thr Asn Thr His Asn Gly Cys Ser Gly Arg Glu Lys Met Arg Thr
    210                 215                 220
Ser Ile Gly Val Gln Met Leu Ala Asn Pro Ser Val Ser Ile Leu Arg
225                 230                 235                 240
Ile Pro Glu Gly Lys Glu Gln Glu Pro
                245
```

<210> 27546
<211> 76
<212> PRT
<213> A.fumigatus

<400> 27546

```
Arg Gln Gly Glu Gly Glu Thr Asp Asp Glu Arg Val Lys Ala Leu Leu
1               5                   10                  15
Ala Gln Leu Asp Gln Thr Leu Gln Gly Tyr Glu Arg Val Leu Ser Lys
            20                  25                  30
Gln Lys Tyr Leu Ala Gly Asp Glu Val Thr Phe Ala Asp Leu Ser His
        35                  40                  45
Leu Pro Tyr Gly Val Phe Val Glu Gln Phe Gly Phe Ala Asp Leu Ile
    50                  55                  60
Ala Lys Tyr Pro Arg Ser Lys Ser Thr Gly Arg Thr
65                  70                  75
```

<210> 27547
<211> 165
<212> PRT
<213> A.fumigatus

<400> 27547

```
Arg Ala Val Leu Pro Ala Arg Gly Glu Asp Leu Gly Ala Ser Tyr Ala
1               5                   10                  15
Gln Arg Asp Leu Ile Ala Arg Asn Glu Tyr His Asn Leu Ser Ala Ala
            20                  25                  30
Arg Thr Ile Leu Phe Ile Gly Asp Gly Ser Phe Gln Met Thr Val Gln
        35                  40                  45
Glu Leu Ser Thr Ile Ile His His Lys Leu Asp Val Ile Val Phe Leu
    50                  55                  60
Ile Asn Asn Asp Gly Tyr Thr Ile Glu Arg Cys Ile His Gly Arg Asn
65                  70                  75                  80
Gln Ala Tyr Asn Asp Val Ala Arg Trp Arg Tyr Leu Lys Ala Pro Glu
                85                  90                  95
Leu Phe Gly Ala Asp Gln Glu Gly Glu Tyr Ala Ser Arg Thr Trp Glu
            100                 105                 110
Ile Arg Thr Trp Ala Asp Cys Asp Ala Val Leu Lys Asp Glu Gln Leu
        115                 120                 125
Val Asn Gly Lys Gly Leu Arg Met Val Glu Val Phe Met Asp Lys Phe
    130                 135                 140
Asp Ala Pro Asp Val Leu Met Asn Leu Leu Asn Ala Gln Ile Ala Arg
145                 150                 155                 160
Asp Asn Ala Lys Lys
```

165

<210> 27548
<211> 95
<212> PRT
<213> A.fumigatus

<400> 27548
Ser Gly Pro Ser Pro Pro Leu Arg Lys Pro Cys Val Leu Val Asp Pro
1 5 10 15
Glu Cys Asp Ile Ala Val Gly Thr Met Ala Gln Leu Leu Leu Gln Gln
20 25 30
Gly Lys Val Ser Gln Ala Leu Lys Tyr Phe Glu Arg Ala Ala Glu Leu
35 40 45
Ala Arg Thr Glu Ala Glu Ile Val Asn Ala Ile Ser Tyr Ala Glu Ala
50 55 60
Thr Arg Thr Gln Leu Glu Val Gln Glu Arg Tyr Pro Gln Leu Ala Ala
65 70 75 80
Arg Leu Gln Ser Met Gly Ala Gly Leu Gly Gly Pro Pro Gly Leu
85 90 95

<210> 27549
<211> 144
<212> PRT
<213> A.fumigatus

<400> 27549
Thr Leu Ala Met Asp Thr Leu Gln Arg Val Val Ile Asp Pro Leu Gln
1 5 10 15
Pro Val Leu Arg Pro Ile Ser Ser Ala Leu Pro Gln Pro Val His Asp
20 25 30
Val Ile Ile Ser Leu Ile Gly Ser Pro Cys His Ser Ala Leu Leu Leu
35 40 45
Asp Leu Asp Val Thr Lys Asp Ala Ala Cys Thr Ser Leu Ala Ile Ser
50 55 60
Lys Ala Leu Gly Ile Ala Ile Val Gly Ala Ser Ala Ile Val Lys Val
65 70 75 80
Pro Gln Ile Leu Lys Leu Ile Arg Ser Arg Ser Ser Ala Gly Val Ser
85 90 95
Phe Val Ser Tyr Ala Leu Glu Thr Ala Ser Leu Leu Ile Thr Leu Ser
100 105 110
Tyr Gly Val Arg Asn Gln Phe Pro Phe Ser Thr Tyr Gly Glu Ser Ala
115 120 125
Leu Ile Ala Ser Tyr Thr Asp Gly Ala Gly Arg Ile Thr Arg Cys Lys
130 135 140

<210> 27550
<211> 333
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (210),(213)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27550
Phe Gln Tyr Pro Ser Val His Val Pro Ser Ala Met Ile Tyr Leu Arg
1 5 10 15
Ser Ser Leu Leu Arg Ser Gly Leu Ala Gln Asp Ser Ala Arg Leu Cys
20 25 30
Ser Gln Cys Phe Ser Arg Leu Ser Pro Ser Arg Arg Pro Val Ala Val
35 40 45
Arg Ser Phe Phe Ser Ser Ser Arg Leu Arg Ala Gly Ile Ala Asp His
50 55 60
Glu Ser Thr Pro Ser Thr Val Gln Lys Thr Tyr Phe Ser Ala Asn Arg
65 70 75 80
Thr Ala Asp Gly Leu Leu Ala Ser Leu Ser Ala Val Asn Ser Ser Pro
85 90 95
Arg Ser Ile Ala Asp Asn Ala Leu Ser Gln Gly Ala Ala Ser Ser Glu
100 105 110
Ser Ile Thr Ser Gln Ser Thr Ser Gln Glu Leu Pro His Arg Arg Arg
115 120 125
Lys Arg Leu Lys Glu Glu Ala Ala Lys Asn Asn Ala Ala Glu Thr Glu
130 135 140
Leu Pro Pro Asp Ala Ser Ser Gln Leu Ser Thr Leu Ser Ser Ala Leu
145 150 155 160
Pro Ala Thr Ser Leu Arg Arg Lys Leu Ala Ala Phe Leu Ala Leu Thr
165 170 175
Lys Pro Arg Leu Ser Phe Leu Ile Val Leu Thr Thr Thr Ser Ala Tyr
180 185 190
Gly Met Tyr Pro Ile Ser Ser Leu Leu Thr Leu Asp Pro Ser Met Thr
195 200 205
Pro Xaa Pro Thr Xaa Leu Thr Ser Thr Leu Thr Phe Leu Tyr Leu Thr
210 215 220
Thr Gly Thr Phe Leu Ser Ser Cys Ser Ala Asn Thr Leu Asn Met Leu
225 230 235 240
Leu Glu Pro Lys Tyr Asp Ala Leu Met Ser Arg Thr Arg Asn Arg Pro
245 250 255
Leu Val Arg Gly Leu Leu Ser Arg Arg Ala Ala Val Leu Phe Ala Ile
260 265 270
Ala Thr Ala Ala Ala Gly Leu Gly Leu Leu Tyr Ile Gly Thr Asn Pro
275 280 285
Thr Thr Thr Ala Leu Ser Ala Ser Asn Ile Cys Leu Tyr Ala Phe Val
290 295 300
Tyr Thr Pro Leu Lys Arg Ile Ser Val Ile Asn Thr Trp Val Gly Ala
305 310 315 320
Val Val Val Val Thr Thr Gly Leu Asp Gly Thr Ala Leu
325 330

<210> 27551
<211> 205
<212> PRT
<213> A.fumigatus

<400> 27551
Lys Leu Ile Gln Leu Val Phe Ser Arg Leu Asn Gln Ser Ile Ala Asn
1 5 10 15
Asn Glu His Pro Leu Asn Val Asp Ala Trp Asp Gly Tyr Leu Ala Asn
20 25 30
Lys Asn Arg Thr Leu Gln Thr Leu Tyr Asp Asn Gln Ile Asp Asn Asn
35 40 45

```
Ile Met Ile Ala Gly Asp Ser His Ala Asn Trp Val Ser Asp Val Ala
    50                  55                  60
Trp Ile Asp Asn Lys Pro Tyr Asp Pro Lys Thr Gly Ala Gly Ala Ile
65                  70                  75                  80
Gly Val Glu Phe Ala Gly Thr Ala Leu Thr Ser Pro Ser Pro Tyr Gly
                85                  90                  95
Gln Asn Ile Thr Ile Ala Asp Ala Asn Glu Ala Ser Lys Ala Leu Val
            100                 105                 110
Thr Asp Asn Glu Glu Leu Gln Trp Ser Glu Leu Tyr Tyr Arg Gly Tyr
        115                 120                 125
Phe Glu Leu His Ile Thr Pro Gln Glu Val Glu Ala Arg Phe Phe Gly
    130                 135                 140
Leu Pro Asn Ile Lys Glu Arg Asn Gly Glu Glu Ile Ser Leu Ala Asn
145                 150                 155                 160
Phe Thr Val Lys Ser Gly Ala Asn His Leu Glu Arg Asn Ser His Gly
                165                 170                 175
Val Val Gly Gly Gly Ala Val Ala Asn Gly Trp Leu Lys Asn Gly Gln
            180                 185                 190
Val Val Pro Thr Asn Gln Thr Asn Asn Thr Tyr Gly Gln
        195                 200                 205
```

<210> 27552
<211> 264
<212> PRT
<213> A.fumigatus

```
<400> 27552
Cys Pro Ser Leu Ala Asp Ala Leu Ala Leu Ala Arg Ser Pro Ala Thr
1               5                   10                  15
Ala Gly Leu Val Val Thr Met Pro Tyr Lys Asn Ser Ile Ile Pro His
            20                  25                  30
Leu Asp Glu Pro Asp Asp Leu Val Thr Met Ile Gly Ala Cys Asn Asn
        35                  40                  45
Val Tyr Tyr Arg Thr Asn Ala Ala Asp Arg Arg Leu Cys Gly Thr Asn
    50                  55                  60
Thr Asp Trp Arg Gly Ile Lys Gly Cys Leu Leu Glu Lys Glu Gly Gln
65                  70                  75                  80
Gly Gln Arg Pro Ser Ala Thr Ser Pro Gly Cys Ala Leu Val Val Gly
                85                  90                  95
Ala Gly Gly Ala Ser Arg Ala Ala Val Tyr Ala Leu Ala Val His Leu
            100                 105                 110
His Cys Pro Thr Ile Tyr Ile Leu Asn Arg Asp Glu Gly Glu Val Asp
        115                 120                 125
Ala Leu Leu Ala Asp Thr Gln Arg Leu Pro Val Thr Leu Ser Ile Thr
    130                 135                 140
His Val Lys Ser Ile Glu Gln Ala Arg Ala Leu Ala Ser Pro Tyr Tyr
145                 150                 155                 160
Val Val Gly Thr Val Pro Asp Asp Glu Pro Lys Thr Glu Ser Glu Arg
                165                 170                 175
Ala Val Ala Gly Ile Leu Glu Ser Phe Leu Ala Arg Glu Glu Lys Gly
            180                 185                 190
Val Leu Leu Glu Met Cys Phe Lys Pro Arg Arg Thr Arg Met Ile Arg
        195                 200                 205
Leu Ala Glu Arg Leu Gly Trp Pro Cys Val Glu Gly Thr His Val Ile
    210                 215                 220
Met Tyr Gln Ile Glu Glu Gln Trp Arg Leu Trp Ala Gly Glu Glu Ser
```

225 230 235 240
Val Val Asn Leu Asp Leu Lys Gly Ala Trp Asp Val Leu Leu Lys Ala
245 250 255
Ala Glu Glu Ser Thr Ala Ile Asn
260

<210> 27553
<211> 67
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (65)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27553
Ser Ala Gln Gly Ser Ala Asn Ser Leu Lys Ala Gly Leu Val Thr Gly
1 5 10 15
Lys Pro Leu Gly Leu Leu Pro Asn Phe Ile Arg Thr Asn Met Leu Ser
20 25 30
Asp Ala Cys Glu Trp Glu Asn Phe Ala Ser Ile Phe His Ala Asp Ala
35 40 45
Asn Val Tyr Thr Thr Trp Val Phe Thr Thr Arg Arg Gln Gly Ala Ala
50 55 60
Xaa Ser Val
65

<210> 27554
<211> 64
<212> PRT
<213> A.fumigatus

<400> 27554
Asp Gln Ile Val Trp Ala Val Val Ala Asn Gly Ala Arg Gly Pro Ile
1 5 10 15
Ala Phe Gly Lys Arg Val Tyr Ile Gly His Phe Gly Phe Phe Val Tyr
20 25 30
Trp His Cys Tyr Trp Cys Glu Gly Ser Leu Glu Asn Ile Tyr Tyr Glu
35 40 45
Gly His Pro Ala Lys Asp Ile Ala Glu Ser Ala Arg Leu Pro Leu Gln
50 55 60

<210> 27555
<211> 209
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (158)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27555
Leu Glu Gln Leu Asn Thr His Arg Leu Ile Gln Pro Leu Arg Tyr Pro
1 5 10 15

Leu Ser Pro Glu Ser Tyr Ile Pro Val Met Ala Pro Ala Pro Lys Asn
20 25 30
Phe Tyr Ile Phe Gly Ser Gly Ile Ser Phe Ser Ile Ser Pro Ala Ile
35 40 45
Tyr Gln Ala Gly Phe Ser His Tyr His Leu Pro His Thr Tyr Gln Ile
50 55 60
Arg Glu Ser Glu Ser Ile Asp Asp Val Ala His Leu Ile Ala Asp Asn
65 70 75 80
Thr Phe Gly Gly Ala Ser Val Thr Met Pro His Lys Leu His Ala His
85 90 95
Arg Phe Cys Asp Ile Gln Thr Glu Thr Ala Arg Leu Ile Gly Ala Ile
100 105 110
Asn Thr Leu Ile Val Thr Glu Thr Gly Asp Gln Arg Leu Ile Thr Gly
115 120 125
Asp Asn Thr Asp Trp Ser Gly Leu Tyr Ala Leu Ile Thr Glu Tyr Thr
130 135 140
Ser Arg Thr Gln His Pro Leu Gln Thr Gly Leu Val Ile Xaa Ala Gly
145 150 155 160
Gly Ala Ser Arg Ala Gly Leu Phe Ala Leu His Lys Ala Arg Val Arg
165 170 175
Gly Ile Tyr Leu Val Asn Arg Lys Leu Ala Ala Ala Glu Lys Val Arg
180 185 190
Asp His Phe Ser Ala Leu Phe Gln Ala Ile Ala Val Pro Pro Leu Asp
195 200 205
Asn

<210> 27556
<211> 412
<212> PRT
<213> A.fumigatus

<400> 27556
Arg Leu Gly Pro Trp Glu Arg Gly Gln Gly Ser Leu Gln Gly Ala Lys
1 5 10 15
Thr Gly Pro Lys Thr Ile Met Glu Leu His Val Glu Ile Leu Leu Lys
20 25 30
Ile Phe Val Lys Phe Gln Asp Pro Arg Val Arg Arg Arg Ala Gln Ile
35 40 45
Asp Cys Ser Ser Pro His Arg Gly Cys Glu Glu Asp Ile Ala Cys Gln
50 55 60
Thr Ala Arg Glu Thr Ile Arg Gln Ile Arg Met Val Cys Arg Leu Phe
65 70 75 80
Asn Asp Leu Ala Ser Pro Leu Leu Cys Pro Ile Leu Arg Val Asp Leu
85 90 95
Asp Gln Glu Ser Leu Asn Gly Ala Val Glu Leu Cys Lys Arg Pro Arg
100 105 110
Ile Ala Gly Gly Val His Ala Ile Gln Val Gly Leu Gln Tyr Arg Pro
115 120 125
Glu Glu Leu Val Ser Asp Cys Pro Arg Phe Lys Asp Tyr Cys Lys Gln
130 135 140
Gln Leu Asp Arg Val Ala Asp Arg Cys Asp Trp Leu Gly Gly Tyr Glu
145 150 155 160
Leu Asp Asp Glu Thr Asp Cys Leu Glu Asp Lys Arg Glu Phe Arg Glu
165 170 175
Ala Lys Arg Asn Tyr Gln Lys Ile Cys Arg Ser Trp Asp Ala Tyr Phe

```
            180                 185                 190
Ser Thr Asp Glu Ser Asp Glu Asn Asp Asp Val Ala Glu Ala Glu Ala
        195                 200                 205
Asp Glu His Met Glu Ile Leu Ile Arg Ala Tyr Asn Glu Tyr Cys Lys
    210                 215                 220
Lys His Glu Glu Gln Leu Gln Leu Ile Thr Ser Gly Ala Phe Val Thr
225                 230                 235                 240
Ala Leu Ala Ala Cys Ile Ser Gln Leu Pro Asn Thr Val Thr Leu Gly
                245                 250                 255
Phe Thr Asp Glu Met Glu Pro Leu Tyr Asp Trp Asp Asn Pro Thr Ile
            260                 265                 270
Val Leu Gly Asp Thr Ser Leu Leu Pro Gly Met Met Ser Ala Ala Leu
        275                 280                 285
Arg Trp Glu Lys Ile Asp Asn Leu Arg His Gly Asn Asp Pro Val Leu
    290                 295                 300
Thr Arg Asp Ala Arg Phe Thr Pro Ala Arg Ile Leu Phe Asp Leu Pro
305                 310                 315                 320
Val Ala Ile His Lys Ala Gly Ile Lys Leu Arg Asn Leu Asp Leu Gly
                325                 330                 335
Pro Phe Pro Cys Arg Gly Ser Phe Ser Leu Leu Cys Pro Asp Thr Val
            340                 345                 350
Ser Asn Pro Thr Asp Pro Ala Val Trp Ser Ala Leu Arg Ala Ala Cys
        355                 360                 365
Ser Ser Leu Trp Arg Val Asn Phe Gly Met Asn Gln Asn His His Arg
    370                 375                 380
Pro His Ile Arg His Glu His Leu Arg Pro Asp Glu Lys Phe Tyr Val
385                 390                 395                 400
Asp Gln Thr Ser Ala Gln Tyr Phe Ser Val Glu Ile
                405                 410
```

<210> 27557
<211> 79
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222>
(1),(2),(4),(5),(6),(7),(8),(9),(10),(11),(12),(13),(14),(15),(16),(17),(18),(19),(20),(21),(22),(23),(24),(25),(26),(27),(28),(38),(39),(78)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27557

```
Xaa Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1               5                   10                  15
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Leu Asn Lys
            20                  25                  30
Asp Lys Ile Leu Pro Xaa Xaa Lys Lys Asn Thr Arg Ala Ala Leu Lys
        35                  40                  45
His Gln Glu Lys Thr Arg Arg Phe Cys Asp Ile Lys Lys Glu Lys Lys
    50                  55                  60
Gln Thr Ile Ile Phe Phe Phe Tyr Ile Ser Thr Asn Lys Xaa Lys
65                  70                  75
```

<210> 27558
<211> 73

<212> PRT
<213> A.fumigatus

<400> 27558
Val Glu Leu Ser Ser Asn Phe Ser Ser Val His Thr Asn Asn Tyr Gly
1 5 10 15
Phe Ser Ser Arg Lys Ala Cys Gly Arg Tyr Gly Arg Ser Gly Ser Lys
20 25 30
Arg Trp Leu Arg Leu Cys Lys Leu Asn Lys Val Pro Leu Ser Thr Ile
35 40 45
Thr Phe Arg Ala Thr Leu Gln Ala Thr Ala Leu Tyr Thr Ser Ser Arg
50 55 60
Cys Gly Glu Ala Glu Thr Ile Met Leu
65 70

<210> 27559
<211> 73
<212> PRT
<213> A.fumigatus

<400> 27559
Asp Ile Arg Asp Glu Pro Ala Ile Thr Arg Gly Thr Asp Arg Pro Asp
1 5 10 15
Pro Ile Tyr Phe Asn Val Ser Lys Val Ser Ala Gln Tyr Pro Thr Ser
20 25 30
Trp Arg Ser Val His Met Thr Lys Asp Arg Gly Thr His Gln Arg Gly
35 40 45
Tyr Ala Asn Gly Asp Gln Leu Leu Ile Gln Gly Leu Asn Thr Val Gly
50 55 60
Leu Ala Leu Val Thr Tyr Ile Ala Tyr
65 70

<210> 27560
<211> 123
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (84),(105)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27560
Cys Ile Gly Thr Asp Ser Cys Ile Trp His Leu Val Arg Ile Ser Tyr
1 5 10 15
Leu Cys Leu Arg Ile Gly Ala Asp Val Ile Ala Pro Leu Ala Ala Ala
20 25 30
Gln Ile Tyr Ser Phe Ser Pro Ala Ser Asp Ile Val Tyr Arg Val Val
35 40 45
Ala Pro Glu Ser Thr Ala Ser Ser Asn Ser Gly Pro Ile Tyr Phe Gln
50 55 60
Ile Arg Ala Pro Thr Ser Tyr Gln Trp Val Thr Leu Gly Gln Gly Cys
65 70 75 80
Gln Leu Arg Xaa Phe Asn Ser Ser Tyr Val Arg Arg Leu Phe Gln Gln
85 90 95
Arg Asn Pro Phe Ser Trp Phe Gly Xaa Gly Arg Ser Val Lys Ile Lys

```
            100                 105                 110
Pro Arg Gly Ala Lys Arg Phe Tyr Lys Asp Gly
        115                 120
```

<210> 27561
<211> 380
<212> PRT
<213> A.fumigatus

<400> 27561

```
Ser Leu Glu Ser Leu Asp Gly Phe Ile Gly Arg Ser Thr Gly Lys Ser
1               5                  10                  15
Ala Met Leu Cys Ala Cys Pro Thr Tyr Phe Arg Glu Ser Glu Ser Asn
            20                  25                  30
Ser Thr Phe Cys Lys His Val Arg Arg Tyr Ser Thr Glu Ile Lys Arg
        35                  40                  45
Gln Leu Pro Gln Glu Cys Asn Ala Gln Lys Tyr His Thr Ser Ser Gln
    50                  55                  60
His Ser Leu Glu Val Arg Thr Phe Leu Val Asn Met Val Gly Phe Asp
65                  70                  75                  80
Met Cys Gly Leu Thr Pro Ala Pro Val Thr Pro Phe Thr Gln Asp Gly
                85                  90                  95
Ala Val Asp Tyr Glu Ala Ile Gln Arg Leu Gly Ser Trp Leu Gly Ser
            100                 105                 110
Ile Asp Gly Val Lys Gly Leu Val Val Leu Gly His Ala Gly Glu Gly
        115                 120                 125
Thr Phe Leu Thr Ala Glu Glu Gln Val Ser Val Ile Lys Ala Phe Val
    130                 135                 140
Lys Ser Val Asp Gly Lys Val Pro Ile Ile Ala Gly Ile Thr Gly Glu
145                 150                 155                 160
Gly Thr Glu Val Ala Ala Leu Glu Ala Lys Arg Ala Lys Glu Ala Gly
                165                 170                 175
Ala Ala Ala Gly Leu Leu Tyr Pro Ser His Gly Trp Leu Arg Phe Gly
            180                 185                 190
Tyr Gln Arg Gly Ala Pro Gln His Arg Tyr Arg Arg Val Tyr Glu Val
        195                 200                 205
Ser Gly Leu Pro Leu Ile Leu Phe Gln Tyr Pro Asp Asn Thr Lys Ala
    210                 215                 220
Thr Tyr Asp Leu Gln Thr Met Leu Asp Ile Ala Ala Gln Pro Gly Cys
225                 230                 235                 240
Phe Ala Met Lys Asn Gly Val Arg Asn Met Arg Arg Trp Asp Thr Glu
                245                 250                 255
Ile Pro Ile Ile Arg Ala Gln Arg Pro Asp Leu Gln Ile Leu Ser Cys
            260                 265                 270
His Asp Glu Tyr Leu Leu His Thr Ala Phe Asp Val Asp Gly Phe Leu
        275                 280                 285
Val Gly Tyr Gly Asn Ile Ala Pro Glu Pro Leu Ile Glu Leu Ile Lys
    290                 295                 300
Ala Gly Lys Ala Lys Asp Tyr Lys Lys Ala Arg Glu Ile His Asp Arg
305                 310                 315                 320
Leu Leu Pro Val Thr Lys Ser Val Tyr His Arg Gly Ser His Met Glu
                325                 330                 335
Gly Thr Val Ala Leu Lys His Gly Leu Val Ala Arg Gly Ile Leu Glu
            340                 345                 350
His Ala Thr Val Arg Ser Pro Leu Leu Pro Leu Glu Pro Gly Ala Glu
        355                 360                 365
```

```
Gln Glu Asn Met Leu Leu Ser Met Leu Phe Thr Gln
    370                 375                 380

<210> 27562
<211> 96
<212> PRT
<213> A.fumigatus

<400> 27562
Lys Val Ser Trp Phe Leu Asp Thr Leu Ala Arg Ala His Phe Leu Pro
1               5                  10                  15
Pro Arg Ser Lys Ser Gln Ser Ser Lys Arg Ser Ser Asn Arg Leu Met
            20                  25                  30
Ala Lys Ser Gln Leu Leu Leu Ala Ser Arg Val Lys Ala Pro Lys Leu
        35                  40                  45
Pro Pro Ser Arg Pro Ser Glu Gln Lys Lys Leu Glu Leu Leu Leu Gly
    50                  55                  60
Cys Ser Thr Arg Leu Thr Ala Gly Cys Ala Ser Asp Thr Asn Val Val
65                  70                  75                  80
Pro Leu Asn Ile Gly Thr Val Val Cys Met Lys Ser Leu Ala Cys Leu
                85                  90                  95

<210> 27563
<211> 136
<212> PRT
<213> A.fumigatus

<400> 27563
Ile Arg Pro Asp Phe Pro Asp Phe Thr Val Pro Ser Arg Arg Lys Arg
1               5                  10                  15
Leu Ser Thr Pro Arg Lys Trp Thr Val Ser Trp Pro Arg Leu Asp His
            20                  25                  30
Pro His Lys Leu Trp Lys His Thr Val Ser Ser Leu Gly Arg Val Thr
        35                  40                  45
Gln Leu Thr Gly Leu Gly Pro Ile Gln Gln Gly Tyr Leu Thr Ala Tyr
    50                  55                  60
Thr Thr Arg Leu Val Thr Leu Val Val Cys Arg Gly Phe Ile Pro Ala
65                  70                  75                  80
Arg Gly Asp Ile Ala Ile Arg Gln Pro Ala Pro Gly Glu Lys Leu Thr
                85                  90                  95
Ser His Gln Gln Pro Thr Ile Ser Asn His Cys Leu Arg His Arg Leu
            100                 105                 110
Phe Pro Arg Ala Asn Gly Pro Gly Leu Leu Gln Gly Cys Arg Arg Thr
        115                 120                 125
Trp Ser Val Val Ser Tyr Ile Lys
    130                 135

<210> 27564
<211> 136
<212> PRT
<213> A.fumigatus

<400> 27564
Ile His Arg Ser Val Met Ser Leu Pro Gln Arg Pro Gly Lys Val Ser
1               5                  10                  15
Pro Arg Arg Glu Glu Thr Gln Ala Phe Arg Asp Thr Ser Arg Arg Arg
```

```
            20                  25                  30
Arg Arg Asp Ile Glu Ser Gly Asp Asn Glu Thr Leu Ser Ser Pro His
        35                  40                  45
Arg His His His Arg Arg His Ser Gln Ser Ser Arg Lys Thr Arg Asp
    50                  55                  60
Met Asp Glu Glu Arg Leu Glu Pro Gly Gly His Arg Lys Ser Gln Val
65                  70                  75                  80
Arg Pro Glu Arg Ser Arg Ile Asp Glu Asn His Pro Asn Tyr His Tyr
                85                  90                  95
Arg Gln Lys Ser Gln Asn Met Pro Val Tyr Pro Ser Thr Thr Gly Asn
            100                 105                 110
Glu Pro Leu Ile Glu Ser Asp Glu Leu Asn Arg Asp Ser Ser Pro Glu
        115                 120                 125
Tyr Arg Ala His Lys Gln Gly Arg
    130                 135

<210> 27565
<211> 325
<212> PRT
<213> A.fumigatus

<400> 27565
Ser Leu Leu Leu Glu Arg Gly Lys Thr Pro Leu Pro His Gly Ser Ala
1               5                   10                  15
Ser Gln Gly Arg Lys Val Asp Val Ala Ser Ser Arg Pro Ala Lys Thr
            20                  25                  30
Phe Arg Ala Lys Asp Trp Glu Cys Pro Arg Cys Gln Phe His Cys Val
        35                  40                  45
Gly Arg Asn Phe Thr Cys Pro Arg Cys Asn Thr Pro Lys Pro Asn Leu
    50                  55                  60
Asp Ala Pro Ala Pro Glu Ser Pro Arg Gln Ile Lys Gln Gly Gln Asn
65                  70                  75                  80
Ala Leu Lys Ile Leu Arg Leu Ala Gln Ser Leu Arg Ser Glu Tyr Thr
                85                  90                  95
Asn Ala Gly Arg Arg Pro Leu Gly Asp Leu Ile Pro Glu Ala Gly Gly
            100                 105                 110
Ser Arg Asn Thr Ala Leu Asp Asn Tyr Leu Val Glu Ile Gly Arg Lys
        115                 120                 125
Ala Glu Ser Leu Pro Ala Ser Thr Glu Leu Glu Thr Gln Ser Leu Ala
    130                 135                 140
Glu Gln Pro Leu Ser Asn Ala Arg Asp Glu Val Thr Glu Ser Gly Gly
145                 150                 155                 160
Ala Asp Arg Gln Ala Ser Glu Ala Glu Arg Thr Ser Ser Lys Pro Glu
                165                 170                 175
Ala Asp Pro Trp Thr Trp Asp Gln Ser Ala Leu Glu Lys Leu Gln Gln
            180                 185                 190
Thr Tyr Glu Ala Glu Ala Gln Ser Gly Gln Lys Pro Lys Arg Trp Asp
        195                 200                 205
Gly Arg Lys Glu Arg Gly Asp Asp Val Asp Tyr Glu Glu Phe Asp Pro
    210                 215                 220
Glu Asp Asp Arg Arg Arg Arg Arg Gln Glu Arg Lys Arg Gln Lys Lys
225                 230                 235                 240
Glu Lys Thr Arg Gln Lys Glu Leu Glu Ala Ala Ala Pro Ser Pro Leu
                245                 250                 255
Tyr Leu Pro Glu Phe Ile Ser Val Ser Asn Leu Ala Asp Val Ile Gly
            260                 265                 270
```

```
Val Arg Pro Ala Gln Phe Val Arg Arg Met Glu Glu Met Gly Phe Glu
        275                 280                 285
Asp Val Ser Tyr Ser His Ile Leu Asp Ala Glu Thr Ala Gly Leu Ile
    290                 295                 300
Ala Ser Glu Tyr Asn Phe Glu Pro Ile Val Phe Thr Thr Gly Leu Glu
305                 310                 315                 320
Gly Ser Ala Val Val
                325
```

<210> 27566
<211> 297
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (294)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27566

```
Tyr Gly Gln Tyr His Arg Gly Ser Ala Thr Leu Gln Leu His His Ser
1               5                   10                  15
Gly Tyr Ala Thr Ala Ser Thr Val Glu Val Phe Glu Trp Leu Met Ile
            20                  25                  30
Arg Gly Thr Val Val Ala Leu Phe Thr Val Gly Gly Ile Phe Gly Ser
        35                  40                  45
Leu Ser Cys Ile Tyr Leu Gly Asp Arg Leu Gly Arg Arg Lys Val Val
    50                  55                  60
Phe Leu Ala Ser Gly Val Thr Ile Val Gly Ala Val Leu Met Ala Thr
65                  70                  75                  80
Ala Phe Asp Phe Ala Gln Phe Ile Val Ala Arg Leu Val Leu Gly Leu
                85                  90                  95
Gly Thr Gly Ala Tyr Leu Ala Thr Val Pro Val Trp Gln Ser Glu Ile
            100                 105                 110
Ser Lys Ala Ser Lys Arg Gly Ala His Val Val Thr Asp Gly Ile Phe
        115                 120                 125
Ile Gly Ile Gly Val Ser Leu Ser Leu Trp Ile Asp Phe Gly Phe Tyr
    130                 135                 140
Phe Ile Thr Gly Lys Ser Val Ser Trp Arg Phe Pro Leu Ala Phe Gln
145                 150                 155                 160
Ile Val Leu Leu Leu Thr Val Met Val Phe Ile Val Ile Phe Pro Glu
                165                 170                 175
Ser Pro Arg Trp Leu Val Lys Lys Gly Arg Val Gln Glu Ala Arg Glu
            180                 185                 190
Ile Leu Ala Ala Leu Ala Asp Val Glu Pro Asp Ser Glu Ser Val Ser
        195                 200                 205
Ala Asp Ile Arg Asp Ile Glu Leu Ser Leu Ser Ile Cys Gly Asn Gly
    210                 215                 220
Ser Phe Lys Ser Met Leu Thr Met Gly Glu Gln Arg Leu Phe Asn Arg
225                 230                 235                 240
Thr Leu Leu Ala Ala Gly Gly Gln Met Phe Gln Gln Met Cys Gly Ile
                245                 250                 255
Asn Leu Ile Ser Met Tyr Ala Thr Thr Ile Phe Glu Gln Tyr Leu Gly
            260                 265                 270
Met Ser Ala Ile Asn Ala Arg Ile Leu Gly Ala Phe Leu Thr Ala Val
        275                 280                 285
```

Ile Glu Gly Ser Ala Xaa Pro Pro Thr
290 295

<210> 27567
<211> 93
<212> PRT
<213> A.fumigatus

<400> 27567
Asp Thr Cys Ser Ala Cys Ile Tyr Phe Thr Thr Glu Met Ala Pro Tyr
1 5 10 15
Phe Gly Leu Arg Gly Ser Thr Leu Ser Gln Ala Ile Ile Cys Leu Val
20 25 30
Val Cys Pro Ala Phe Val Thr Tyr Gly Tyr Asn Leu Ser Val Ala Gly
35 40 45
Gly Leu Leu Thr Leu Glu Ser Phe Val Lys Thr Phe Pro Gln Ile Asp
50 55 60
Thr Val Asn Thr Thr Gly Ala Gln Gln His Tyr Asn Ser Thr Ile Gln
65 70 75 80
Gly Met Pro Leu His Pro Leu Leu Lys Tyr Ser Ser Gly
85 90

<210> 27568
<211> 166
<212> PRT
<213> A.fumigatus

<400> 27568
Ile Ile Arg Arg Leu Ile Leu Asp Ile Ile Gly Thr Asn Thr Tyr Leu
1 5 10 15
Ile Gly Arg Gly His Gln Arg Ile Leu Ile Asp Thr Gly Glu Gly Lys
20 25 30
Pro Ser Trp Ala Asn His Leu Lys Ser Val Leu Ala Lys Glu Asn Ala
35 40 45
Thr Val His Lys Ala Leu Leu Thr His Trp His His Asp His Val Asn
50 55 60
Gly Val Pro Asp Leu Leu Lys Ile Cys Pro Gln Ala Thr Val Tyr Lys
65 70 75 80
His Arg Pro Asp Glu Gly Gln Leu Asp Ile Glu Asp Gly Gln Val Phe
85 90 95
Ser Val Glu Gly Ala Thr Leu Lys Ala Tyr His Thr Pro Gly His Thr
100 105 110
Val Asp His Met Met Phe Val Leu Glu Glu Glu Asp Ala Ile Ile Thr
115 120 125
Gly Asp Ser Glu Ser Tyr Ser Pro Leu Cys Gly Cys Ser Thr Trp Ser
130 135 140
Pro Leu Arg Leu Thr Phe Phe Phe Thr Leu Ser Phe Arg Arg Ala Arg
145 150 155 160
Ser Arg Asp Ser Ser Ile
165

<210> 27569
<211> 106
<212> PRT
<213> A.fumigatus

<400> 27569
His Ala Cys Pro Ser Ser Pro Val Val Lys Ile Ser Leu Gly Leu Ser
1 5 10 15
Cys Thr Ser Gln Val Leu Asn Ala Leu Leu Val Asp Leu Trp Pro Lys
20 25 30
Arg Ser Ala Ala Ala Thr Ala Ala Asn Asn Leu Phe Arg Cys Glu Leu
35 40 45
Gly Ala Gly Ala Ser Ala Ala Ile Ala Pro Met Thr Asn Ala Met Gly
50 55 60
His Gly Trp Ala Tyr Thr Thr Leu Ala Leu Ile Cys Val Leu Ser Thr
65 70 75 80
Gly Cys Leu Trp Trp Thr Met Phe Phe Gly Ile Gln Cys Arg Gln Lys
85 90 95
Arg Ala Gln Arg Glu Gln Ala Arg Arg Ser
100 105

<210> 27570
<211> 93
<212> PRT
<213> A.fumigatus

<400> 27570
Lys His Ser Pro Gln Leu Met Val Lys Gly Val Thr Thr Arg Ser Pro
1 5 10 15
Phe Leu Lys Phe Arg Thr Ala Gly Pro Val Ser Thr Thr Ser Pro Val
20 25 30
Asn Ser Trp Pro Ile Met Lys Pro Val Leu Glu Gly Trp Trp Pro Arg
35 40 45
Lys Thr Trp Ser Ser Leu Arg Leu Ser Arg Tyr Asp Gly Ile Phe Gln
50 55 60
Ala Glu Lys Arg Gly Leu Thr Cys Arg Ile Val Pro Cys Tyr Arg Thr
65 70 75 80
Leu Met Asn Ala Ser Val Gly Ile Trp Ile Cys Gly Tyr
85 90

<210> 27571
<211> 312
<212> PRT
<213> A.fumigatus

<400> 27571
Arg Glu Arg Arg Ser Glu Leu His Val Phe Arg Gly His Gln Pro Ser
1 5 10 15
Ser Thr Gly Phe Ile Met Gly His Glu Phe Thr Gly Glu Val Val Glu
20 25 30
Thr Gly Pro Ala Val Arg Asn Phe Arg Lys Gly Asp Arg Val Val Thr
35 40 45
Pro Phe Thr Ile Ser Cys Gly Glu Cys Phe Tyr Cys Ala Arg Gly Cys
50 55 60
Ser Ser Arg Cys Ala Lys Gly Lys Leu Phe Gly Ser Ala Val Leu Asp
65 70 75 80
Gly Gly Gln Ala Glu Tyr Val Arg Val Pro Leu Ala Asp Gly Thr Leu
85 90 95
Val Ala Ala Pro Ala Ala Val Asp Glu Lys Lys Leu Val Leu Met Ala
100 105 110
Asp Ile Phe Pro Thr Gly Tyr Phe Ala Ala Arg Asn Ala Phe Arg Gly

```
        115                 120                 125
Trp Asp Glu Glu Asp Val Arg Gly Ser Thr Val Val Leu Phe Gly Cys
    130                 135                 140
Gly Pro Val Gly Leu Cys Ala Leu Ile Ser Ala Leu Glu Tyr Gln Pro
145                 150                 155                 160
Ala Ala Leu Ile Ala Val Asp Ser Val Pro Asp Arg Leu Glu Arg Ala
                165                 170                 175
Arg Ser Leu Gly Ala Glu Ala Trp Asn Phe Gln Thr Asp Ala Gln Gly
            180                 185                 190
Leu Arg Glu Arg Val Leu Glu Leu Thr Glu Gly Arg Gly Ala Asp Val
        195                 200                 205
Ala Ile Glu Val Val Gly His Ser Ser Ala Leu Arg Met Ala Phe Glu
    210                 215                 220
Leu Leu Arg Pro Trp Gly Arg Ile Ser Ser Val Gly Val His Asn Gly
225                 230                 235                 240
Glu Ile Pro Trp Thr Gly Asn Glu Ala Tyr Gly Lys Asn Leu Gln Ile
                245                 250                 255
Gln Met Gly Arg Cys Pro Val Arg Ser Ile Phe Arg Asp Ala Leu Glu
            260                 265                 270
Leu Leu Leu Lys Lys Gln Asp Ser Leu Glu Cys Val Cys Asn Phe Leu
        275                 280                 285
Leu Met Ala Arg Leu Thr Met Ser Arg Phe Met Ala Ala Asp Ile Arg
    290                 295                 300
Pro Leu Ser Gln Ala Ile Ala Ala
305                 310
```

Sequence Listing

<210> 27572
<211> 219
<212> PRT
<213> A.fumigatus

<400> 27572

```
Thr Gln Glu Met Gly Val Glu Leu Gly Gly Pro Gly Val Asp His Ser
1                   5                  10                  15
His Pro Gly Tyr Pro His Arg Pro Met Asn Pro Val Leu Ala Thr Pro
            20                  25                  30
Leu Phe Val Leu Ser Gly Val Phe Thr Val Leu Phe Leu Cys Arg Val
        35                  40                  45
Val Ile Arg Phe Gln His Arg Arg Arg Leu Arg Glu Ile Leu Gln Thr
    50                  55                  60
Glu Asp Gln Cys Lys Phe Ser Arg Thr Ser Val Ile Phe Ala Trp Ile
65                  70                  75                  80
Lys Lys His Val Leu Tyr Ala Pro Leu Val Ser Lys Arg His Ser Arg
                85                  90                  95
Glu Phe Gln Leu Leu Asn Arg Leu His Met Gly Ser Ile Pro Leu Arg
            100                 105                 110
Leu Glu Ala Thr Leu Val Leu Gly Tyr Ile Thr Thr Asn Leu Leu Phe
        115                 120                 125
Leu Phe Val Leu Val Asp Trp Trp Thr Asp Tyr Gln Glu Lys Met Tyr
    130                 135                 140
Gln Leu Lys Tyr Ala Ala Gly His Leu Ala Val Met Asn Ser Pro Val
145                 150                 155                 160
Leu Val Leu Ser Ala Gly Arg Asn Asn Pro Leu Ile Pro Leu Leu Gly
                165                 170                 175
Ile Pro Phe Asp Thr Phe Asn Phe Leu His Arg Trp Val Gly Arg Val
            180                 185                 190
```

```
Met Ile Ala Gly Ala Leu Ile His Met Gly Cys Val Ile Gly Ala Gln
        195                 200                 205
Ala Met Gln Gly Gly Trp Phe Ser Arg Leu Lys
    210                 215
```

<210> 27573
<211> 113
<212> PRT
<213> A.fumigatus

<400> 27573

```
Ala Leu Ile Ala Phe Val Val Ile Phe Phe Gln Ser Val Ser Pro Ile
1               5                  10                  15
Arg His Ala Phe Tyr Glu Ala Phe Leu His Phe His Ile Phe Leu Ala
            20                  25                  30
Ile Met Ala Phe Val Gly Leu Trp Tyr His Leu Arg Gly Leu Ala Gln
        35                  40                  45
Gln Arg Val Leu Leu Ala Thr Leu Ile Leu Trp Gly Leu Asp Val Ser
    50                  55                  60
Tyr Leu Pro Leu Ile Ser Ser Trp Ser Ser Ile Lys Val Arg Thr Ala
65                  70                  75                  80
His Ala Ser Leu Gln Arg Met His Phe Ser Ser Ala Phe Ser Gly Arg
                85                  90                  95
Ile Ala Gly Asn Thr Val Leu Pro Ala Thr Gly Glu Trp Trp Pro Gly
            100                 105                 110
Asn
```

<210> 27574
<211> 171
<212> PRT
<213> A.fumigatus

<400> 27574

```
Arg Gln Lys Leu Ile Ala Ala Arg Tyr Ser Thr Asn Gly Tyr Val Ile
1               5                  10                  15
Arg Lys Gly Ser Ile Arg Leu Phe Lys Leu Pro Ser Ser Ala Gly Val
            20                  25                  30
Ala Ile Cys Asp Gly Arg Arg Pro Ser Ser Cys Cys Trp Pro Ser Gln
        35                  40                  45
Leu Val Ile Asn Phe Cys Thr Arg Ser Arg Val Ser Ala Ser Arg Ser
    50                  55                  60
Ser Cys Cys Arg Ser Thr Val Ile Arg Ser Arg Thr Lys Ser Ala Gly
65                  70                  75                  80
Phe Val Val Leu Gly His Ser Tyr Pro Lys Asp Arg Lys Tyr Gly Ser
                85                  90                  95
Ile Phe Ser Pro Ser Pro Ala Tyr Thr Val Tyr Pro Pro Arg Ala Ser
            100                 105                 110
Ser Arg Thr Leu Glu Lys Cys Trp Asn Arg Ser Asp Arg Asp Trp Trp
        115                 120                 125
Met Val Met Ile Arg Val Arg Pro Ser Ala Ala Ser Ala Ser Arg Thr
    130                 135                 140
Ser Ile Ile Asp Val Ala Val Asn Ala Ser Arg Pro Glu Val Gly Ser
145                 150                 155                 160
Ser Asn Ser Lys Thr Leu Gly Ser Val Arg Ile
                165                 170
```

<210> 27575
<211> 86
<212> PRT
<213> A.fumigatus

<400> 27575
Ile Gln Asp Ala Asn Glu Ile Gly Met Leu Gln Asn Ile Ala Ile Tyr
1 5 10 15
Pro Asn Glu Arg Asp Val Phe Tyr Arg Glu Glu Ala Asp His Cys Tyr
20 25 30
Ser Ala Glu Thr Phe Ile Leu Gln Tyr Thr Thr Leu Glu Val Pro Phe
35 40 45
Glu Ala Ile Ser Ser Ile Ile Phe Gly Val Leu Ala Ala Tyr Ala Asp
50 55 60
Asn Leu Glu Arg Ser Pro Lys Met Phe Leu Ile Ser Ala Phe Asn Trp
65 70 75 80
Phe Cys Ile Ile Ser Phe
85

<210> 27576
<211> 587
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (1),(2),(7)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27576
Xaa Xaa Thr Ile Leu Thr Xaa Tyr Ile Ala Val Thr Phe Ala Ala Val
1 5 10 15
Ser Ile Gly Val Ala Ser Ser Phe Pro Gly Ala Ser Ile Val Gly Asn
20 25 30
Leu Ser Phe Thr Leu Gln Ser Phe Ala Cys Gly Tyr Phe Val Gln Ser
35 40 45
Asn Gln Ile Pro Val Tyr Val Arg Trp Leu Lys Trp Val Ala Tyr Thr
50 55 60
Phe Tyr Ile Phe Gly Ala Leu Cys Ala Asn Glu Phe Ile Gly Pro Asp
65 70 75 80
Gly Pro Pro Glu Gly Gln Phe Tyr Asp Cys Pro Tyr Ser Thr Asp Pro
85 90 95
Ser Asn Pro Ala Cys Thr Gln Tyr Thr Gly Arg Tyr Ile Met Glu Asn
100 105 110
Leu Gly Phe Pro Ser Asn Trp Ile Trp Arg Pro Ile Val Ile Leu Val
115 120 125
Ala Phe Val Ile Gly His Tyr Leu Leu Ala Gly Leu Leu Leu Gln Tyr
130 135 140
Asn Arg Phe Ala Ile Asp Ile Ala Gln Ala Arg Lys Thr Asp Val Asp
145 150 155 160
Leu Ser Ala Gly Lys Glu Lys Phe Ala Glu Arg Arg Ser Glu Glu Ala
165 170 175
Arg Pro Val Ala Ile Ser Leu Asp Lys Tyr Ala Leu Glu Ile Arg Lys
180 185 190
Arg Gln Val Ser Arg Arg Gly Ser Arg Thr Leu Ser Ile Leu Lys Pro

```
        195                 200                 205
Ile Thr Ala Glu Phe Gln Pro Gly Lys Leu Asn Val Ile Met Gly Pro
    210                 215                 220
Ser Gly Ser Gly Lys Thr Ser Leu Leu Asn Ser Ile Ala Arg Arg Leu
225                 230                 235                 240
Arg Gly Ser Leu Gly Thr Gln Tyr Arg Leu Gln Gly Asn Met Leu Tyr
                245                 250                 255
Asn Gly Ala Val Pro Ser Glu Ser Val Ile Arg Ser Val Thr Ser Phe
            260                 265                 270
Val Thr Gln Asp Asp Asp Ala Leu Met Pro Ser Leu Thr Val Arg Glu
        275                 280                 285
Ser Leu Arg Phe Ala Ala Gly Leu Arg Leu Pro Gln Trp Met Ser Arg
    290                 295                 300
Glu Glu Lys Asn His Arg Ala Glu Glu Ile Leu Leu Lys Met Gly Leu
305                 310                 315                 320
Lys Glu Cys Ala Asp Asn Leu Ile Gly Ser Glu Leu Ile Lys Gly Ile
                325                 330                 335
Ser Gly Gly Asp Lys Arg Arg Ile Thr Ile Ala Ile Gln Ile Leu Thr
            340                 345                 350
Asp Pro Lys Val Leu Leu Leu Asp Glu Pro Thr Ser Gly Leu Asp Ala
        355                 360                 365
Phe Thr Ala Thr Ser Ile Ile Glu Val Leu Glu Ala Leu Ala Ala Glu
    370                 375                 380
Gly Arg Thr Leu Ile Met Thr Ile His Gln Ser Arg Ser Asp Leu Phe
385                 390                 395                 400
Gln His Phe Ser Arg Val Leu Leu Leu Ala Arg Gly Gly Tyr Thr Val
                405                 410                 415
Tyr Ala Gly Glu Gly Glu Lys Met Leu Pro Tyr Phe Arg Ser Leu Gly
            420                 425                 430
Tyr Glu Cys Pro Lys Thr Thr Asn Pro Ala Asp Phe Val Leu Asp Leu
        435                 440                 445
Ile Thr Val Asp Leu Gln Gln Glu Asp Arg Glu Ala Leu Thr Arg Glu
    450                 455                 460
Arg Val Gln Lys Leu Ile Thr Ser Trp Asp Gly Gln Gln Gln Asp Glu
465                 470                 475                 480
Gly Arg Arg Pro Ser Gln Ile Ala Thr Pro Ala Glu Leu Gly Ser Leu
                485                 490                 495
Lys Arg Arg Met Leu Pro Phe Arg Ile Thr Tyr Pro Leu Val Leu Tyr
            500                 505                 510
Arg Ala Ala Ile Asn Phe Trp Arg Gln Pro Pro Leu Val Met Ala Arg
        515                 520                 525
Ser Leu Gln Val Val Gly Ile Ala Ile Ile Met Ala Leu Phe Phe Ala
    530                 535                 540
Pro Leu Lys Asn Asp Tyr Ala Ala Val Gln Ser Arg Met Gly Phe Ile
545                 550                 555                 560
Gln Glu Phe Ala Ala Leu Tyr Phe Val Gly Glu Phe Ser Ser Ile Ile
                565                 570                 575
Ile Gln Arg Val Arg Ser Lys Met Leu Met Arg
            580                 585
```

<210> 27577
<211> 60
<212> PRT
<213> A.fumigatus

<400> 27577

```
Lys Asp His Ala Tyr Gln Ile Ile Glu Lys Gln Tyr Ile Leu Pro Val
1               5                  10                  15
Leu His Ser Trp Met Thr Phe Tyr Tyr Val Asn Asp Tyr Ile Val Ile
            20                  25                  30
Met Cys Cys Asn Lys Ser Ser Ala Glu Glu Arg Met Glu Leu Val Cys
        35                  40                  45
Ile Pro Ala Lys His Thr Ser Leu Gly Tyr Leu Thr
    50                  55                  60
```

<210> 27578
<211> 106
<212> PRT
<213> A.fumigatus

<400> 27578

```
Met Ala Leu Pro Ala Asp Pro Ser Ser Pro Val Val Lys Thr Ala Ser
1               5                  10                  15
Gln Leu Ala Lys Leu Asn Leu Asp Asp Val Val Asp Asp Met Asn Glu
            20                  25                  30
Val Ser Leu Gln Gly Trp Ala Glu Leu Leu Glu Lys Lys Gly Ile Thr
        35                  40                  45
Arg Pro Gly Pro Ile Ser Pro Phe Leu Glu Lys Asp Val Ile Lys Asp
    50                  55                  60
Gln Asp Met Ser Ile Asp Gly Thr Leu Phe Glu Lys Thr Thr Gly Trp
65                  70                  75                  80
Lys Pro Thr Arg Glu Arg Phe Asp Ala Glu Gly Val Arg Ala Met Val
                85                  90                  95
Asp Ser Tyr Lys Arg Met Gly Trp Trp Pro
            100                 105
```

<210> 27579
<211> 67
<212> PRT
<213> A.fumigatus

<400> 27579

```
Ser Asn Phe Arg Leu Leu Leu Phe Leu Ser Ser Thr Ser Gly Ser Thr
1               5                  10                  15
Thr Val Ser Thr Gly Met Phe Leu Ile Ser Ser Ala Tyr Pro Ser Ala
            20                  25                  30
Tyr Phe Ile Thr Phe Leu Thr Ser Glu Ser Ala Ala Ser Ser Ser Ser
        35                  40                  45
Ala His Asp Pro Asp Glu His Val Asp Leu Gly Val His Asn Ile Thr
    50                  55                  60
Tyr Ala Leu
65
```

<210> 27580
<211> 116
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (10),(43),(45),(60),(97)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27580
Ala Trp Ser Ser Met Val Ser Met Arg Xaa Ser Ser Phe Val Ile Ala
1 5 10 15
Ala Ser Ser Phe Ser Thr Leu Gly Ala Leu Ala Leu Asn Phe Asp Phe
20 25 30
Ala Cys Leu Ile Phe Ser His Glu Ile Ile Xaa His Xaa Leu Gly Pro
35 40 45
Leu Glu Ala Val Phe Glu Leu Ala Gly Leu Ile Xaa Leu Leu Pro Phe
50 55 60
Gly Gly Gln Ala Ser His Ser Ser Ser Gln Asn Phe Phe Leu Asn Leu
65 70 75 80
Leu Ala Leu Val Leu Gln Val Gly Arg Leu Asp Gly Ser Ser Pro His
85 90 95
Xaa Ile Leu Met Ala Ser Ala Asn Leu Glu Glu Leu Cys Gly Pro Ser
100 105 110
Ser Phe Phe Glu
115

<210> 27581
<211> 62
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (28),(53)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27581
Glu Lys Ile Arg Gln Ala Lys Ser Lys Leu Arg Ala Arg Ala Pro Ser
1 5 10 15
Val Glu Lys Leu Glu Ala Ala Ile Thr Lys Leu Xaa Gln Arg Ile Glu
20 25 30
Thr Met Glu Leu Gln Ala Gln Asp Lys Glu Asp Thr Lys Glu Val Ala
35 40 45
Leu Gly Thr Pro Xaa Ile Val Ser His Pro Pro Ser Thr Pro
50 55 60

<210> 27582
<211> 433
<212> PRT
<213> A.fumigatus

<400> 27582
Leu Met Arg Leu Leu Gln Pro Arg Arg Glu Asp Arg Ile Pro Gly Met
1 5 10 15
Pro Ala Arg Arg Thr Thr Ile Leu Cys Ser Ala Thr Leu Lys Met Ser
20 25 30
Val Gln Lys Leu Gly Glu Ile Ser Leu Lys Asp Ala Val His Ile Lys
35 40 45
Ala Asp Pro Glu Asp Glu Asp Glu Lys Ala Arg Arg Ser Lys Ala Glu
50 55 60
Glu Ser Ala Tyr Arg Val Pro Ala Gln Leu Lys Gln Ser Tyr Ala Val
65 70 75 80
Val Ala Ala Lys Leu Arg Leu Val Thr Leu Thr Ala Phe Phe Lys Arg

```
                85                  90                  95
Thr Phe Met Arg Lys Gly Ser Val Met Lys Ala Ile Ile Phe Val Ser
            100                 105                 110
Cys Ala Asp Ser Val Asp Phe His Phe Glu Val Phe Thr Arg Lys Gln
        115                 120                 125
Val Lys Glu Asp Gly Gly Glu Pro Ser Asp Thr Asp Lys Ser Glu Glu
    130                 135                 140
Lys Pro Pro Ser Ser Pro His Gly Thr Ile Ala Pro Ala Thr Ala Phe
145                 150                 155                 160
Ser Asn Pro Ser Asn Pro Val Thr Leu Phe Arg Leu His Gly Ser Leu
                165                 170                 175
Pro Gln Asn Val Arg Thr Ser Thr Leu Gly Ala Phe Ala Lys Asn Lys
            180                 185                 190
Glu Ala Ser Val Leu Ile Cys Thr Asp Val Ala Ser Arg Gly Leu Asp
        195                 200                 205
Leu Pro Asn Val Asp Leu Val Val Glu Tyr Asp Pro Ala Phe Ser Ala
    210                 215                 220
Glu Asp His Leu His Arg Ile Gly Arg Thr Ala Arg Val Gly Arg Asp
225                 230                 235                 240
Gly Arg Ala Leu Ile Phe Leu Gln Pro Gly Cys Glu Glu Asn Tyr Val
                245                 250                 255
Glu Val Leu Lys Arg Gly Tyr Arg Asp Gly Gly Lys Ala Leu Thr Arg
            260                 265                 270
Ala Asp Ala Asn Glu Ile Leu Lys Arg Gly Phe Gly Gly Asn Val Glu
        275                 280                 285
Ser Gly Asn Lys Asp Trp Glu Thr Lys Ala Thr Asp Trp Gln Cys Glu
    290                 295                 300
Val Glu Arg Trp Ala Leu Glu Asn Pro Glu Tyr Leu Glu Met Ala Arg
305                 310                 315                 320
Arg Ala Phe Gln Ser His Ile Arg Ala Tyr Ala Thr His Ile Ala Ala
                325                 330                 335
Glu Arg Ser Met Phe Asn Ile Lys Glu Leu His Leu Gly His Leu Ala
            340                 345                 350
Lys Ala Phe Ala Leu Arg Asp Arg Pro Ser Lys Ile Asn Val Pro Gly
        355                 360                 365
Leu Arg Gln Gly Lys Glu Glu Thr Lys Lys Asp Phe Lys Ala Glu Arg
    370                 375                 380
Asn Ser Ala Ala Gly Lys Lys Arg Lys Ala Gly Gly Ala Asp Leu Ala
385                 390                 395                 400
Asp Asp Ile Pro Ser Ala Asn Asn Thr Ala Thr Ala Ala Gln Lys Met
                405                 410                 415
Arg Ala Lys Met Lys Glu His Met Ala Gly Ala Asn Glu Phe Asn Leu
            420                 425                 430
Ala
```

<210> 27583
<211> 241
<212> PRT
<213> A.fumigatus

<400> 27583

```
Arg Ala Arg Val Arg His Pro Arg Gly Glu Gly Arg Asp Ile Gln Leu
1               5                   10                  15
Asn Val Arg Gly Asn Lys Thr Leu Asp Asp Ser Phe Lys Asp Tyr Ile
            20                  25                  30
```

```
Gln Val Glu Thr Leu Glu Gly Glu Asn Lys Tyr Asp Ala Gly Ser Pro
        35                  40                  45
Tyr Gly Leu Gln Asp Ala Lys Lys Gly Val Ile Phe Glu Ser Phe Pro
    50                  55                  60
Pro Val Leu His Leu His Leu Lys Arg Phe Glu Tyr Asp Ile Asn Arg
65                  70                  75                  80
Asp Ala Met Met Lys Ile Asn Asp Arg His Ala Phe Pro Met Glu Phe
                85                  90                  95
Asp Ala Thr Pro Tyr Leu Ser Asp Ala Ala Asp Lys Ser Glu Pro Trp
            100                 105                 110
Ile Tyr Gln Leu His Gly Val Leu Val His Ser Gly Asp Leu Asn Ala
        115                 120                 125
Gly His Tyr Tyr Ala Phe Leu Lys Pro Thr Lys Asp Gly His Trp Phe
    130                 135                 140
Lys Phe Asp Asp Asp Arg Val Thr Arg Ala Thr Asp Lys Glu Val Leu
145                 150                 155                 160
Glu Glu Asn Tyr Gly Gly Glu Tyr Glu Leu Ser Asn Gly Ala Ala Gly
                165                 170                 175
Val Arg Gln Pro His Thr Arg Gly Leu Ser Thr Lys Arg Ser Met Asn
            180                 185                 190
Ala Tyr Met Leu Val Tyr Ile Arg Lys Thr Arg Leu Asp Asp Val Leu
        195                 200                 205
Leu Pro Ile Thr Lys Asp Asp Ile Pro Ser His Ile Gly Lys Pro Tyr
    210                 215                 220
Ala Phe Ser Ser Ser Ala Ser Arg Cys Leu Thr Leu Asn Gln Arg Ser
225                 230                 235                 240
Val
```

<210> 27584
<211> 117
<212> PRT
<213> A.fumigatus

<400> 27584

```
Gly His Ser Cys Ser Phe Leu Arg Gln Gln Leu Phe Glu Val Leu Val
1               5                   10                  15
Pro Arg Asp Gly Thr Phe Ala Asp Leu Leu Ala Gly Leu Gln Lys Lys
            20                  25                  30
Ala Asn Leu Glu Asp Asp Val Val Arg Glu Met Arg Ile Phe Glu Ala
        35                  40                  45
His Ser Gly Lys Ile Tyr Lys Glu Tyr Gln Glu Asp Ala Lys Ile Ala
    50                  55                  60
Gly Ile Asn Glu Tyr Val Thr Leu Tyr Ala Glu Arg Ile Pro Glu Glu
65                  70                  75                  80
Glu Leu Gln Met Gln Ala Gly Glu Arg Thr Ile Asn Ala Phe Asn Phe
                85                  90                  95
Asp Arg Glu Pro Ser Arg Pro His Gly Ile Pro Phe Lys Phe Val Met
            100                 105                 110
Lys Pro Val Cys Ile
        115
```

<210> 27585
<211> 416
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (99),(102),(203)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27585

```
Ala Leu Cys Ile Leu Phe Leu Arg Glu Gln Met Ser Asp Ile Glu Ser
1               5                  10                  15
Glu Lys Arg Leu Val Glu Glu Arg Ala Glu Leu Leu Arg Arg Lys Lys
            20                  25                  30
Glu Arg Glu Glu Ala His Leu Tyr Ile Asn Val Gly Val Leu Ser Asp
        35                  40                  45
Glu Ser Tyr Thr Ser His His Gly Phe Asp Leu Thr Ser Ala Asp Leu
    50                  55                  60
Pro Ala Gly Asp Pro Ala Leu Pro Lys Gln Tyr Arg Ile Leu Arg Ala
65                  70                  75                  80
Lys Lys Val Gly Glu Phe Val Glu Gln Leu Ala Glu Glu Arg Gly Leu
                85                  90                  95
Asn Ala Xaa Gln Ile Xaa Leu Trp Val Met Val Asn Arg Gln Asn Lys
            100                 105                 110
Thr Thr Arg Pro Asp Gln Ala Ile Lys Asp Pro Glu Met Thr Val Glu
        115                 120                 125
Glu Ala Tyr Ser Arg Phe Gly Thr Lys Gly Asn Arg Phe Lys Val Trp
    130                 135                 140
Met Glu Val Gly Gln Pro Ser Ala Asp Gly Thr Ile Ser Trp Ala Asp
145                 150                 155                 160
Ser Ser Thr Ser Val Leu Val Phe Leu Lys Asn Phe Asp Val Pro Ser
                165                 170                 175
Gln Ile Leu Ser Gly Val Gly Thr Val Tyr Val Arg Lys Asn Gln Lys
            180                 185                 190
Val Ala Glu Leu Ala Pro Thr Ile Leu Glu Xaa Met Asn Trp Pro Ala
        195                 200                 205
Gly Thr Glu Phe Met Leu Phe Glu Glu Ile Lys His Asn Met Ile Asp
    210                 215                 220
Val Met Lys Pro Lys Gln Thr Phe Gln Gln Ser Glu Ile Gln Asp Gly
225                 230                 235                 240
Asp Ile Ile Thr Phe Gln Arg Thr Val Lys Glu Ser Asp Leu Pro Ser
                245                 250                 255
Thr Ala Leu Tyr Thr Glu Ala Arg Gln Tyr Tyr Asp Tyr Leu Leu Asn
            260                 265                 270
Arg Ile Asn Ile Thr Phe Ala Pro Ile Lys Ala Thr Asp Gly Asp Glu
        275                 280                 285
Phe Thr Leu Thr Leu Ser Arg Lys Met Thr Tyr Asp Gln Phe Ser Lys
    290                 295                 300
Lys Val Gly Glu His Leu Asn Val Glu Ser Thr His Leu Arg Phe Ala
305                 310                 315                 320
Pro Val Leu Ala Ser Thr Gly Lys Pro Lys Gln Phe Ile Lys Arg Asn
                325                 330                 335
Pro Asn Gln Ala Asn Gln Thr Leu Tyr His Ile Leu Ser Gly Gln Val
            340                 345                 350
Ser Gly Tyr Gly Tyr Ser Met His Arg Gln Asp Ala Leu Tyr Tyr Glu
        355                 360                 365
Val Leu Glu Thr Ser Leu Ser Asp Tyr Glu Ser Lys Thr Thr Leu Lys
    370                 375                 380
Val Thr Leu Leu Thr Glu Gly Ile Val Lys Glu Val Ser Ser Pro Tyr
```

385 390 395 400
His Arg Ala Leu Gly Ser Phe Met Leu Ile Phe Thr Ser Ala Thr Val
405 410 415

<210> 27586
<211> 75
<212> PRT
<213> A.fumigatus

<400> 27586
Phe Gln Ser Tyr Ser Thr Arg Asn Leu Leu Ile His Ser Leu Pro Ile
1 5 10 15
Pro Ile Ala Phe Val Phe Pro Thr Pro Tyr Pro Pro Val Trp Ser Cys
20 25 30
Ser Phe Ser Ser Ser Pro Ile Ser Tyr Leu Pro Ser Asp Val Ser Phe
35 40 45
Leu Leu Leu Phe Leu Phe Ile Ile Asp Ser Asn Ser Pro Glu His Leu
50 55 60
Asn Arg Pro Ser Ala Ile Thr Tyr Ile Pro Thr
65 70 75

<210> 27587
<211> 95
<212> PRT
<213> A.fumigatus

<400> 27587
Cys Pro Ala Ala Ala Ala Lys Thr Leu Asp Lys Pro Leu Lys Asp Ile
1 5 10 15
Arg Ala Ser Ile Thr Glu Lys Thr Val Asp Ile Phe Ser Gly Tyr Arg
20 25 30
Lys Val Phe Ser Gly Ser His Pro Pro Gly Gln Leu Val Leu Pro Glu
35 40 45
Asn Leu Lys Glu Phe Ser Met Tyr Met Leu Ser Met Ile Lys Ser Arg
50 55 60
Ala Phe Lys Gly Glu Val Tyr Tyr Gly Cys Asn Asn Gly Phe Thr Ala
65 70 75 80
Asn Arg Ala Ser Arg Trp Ser Gly Ile Val Arg Pro Ala Asp Ser
85 90 95

<210> 27588
<211> 235
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (211)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27588
Ser Ser Arg Gly Arg Ser Lys Val Arg Tyr Thr Thr Val Ala Thr Met
1 5 10 15
Asp Ser Pro Leu Thr Gly Gln Val Gly Gly Gln Glu Ser Ser Asp Arg
20 25 30
Arg Ile His Asp Ile Arg Met Leu Arg Ser Ile Gly Cys Thr Glu Leu

```
        35                  40                  45
Ser Leu Tyr Leu Tyr Pro Arg Ile Ile Pro Ile His Asn Met Gln Pro
    50                  55                  60
Glu Asp Gly Phe Pro Asn Glu Gln Gly Gln Leu Gln Val Pro Pro Ala
65                  70                  75                  80
Leu Arg Ala Ser Tyr Ser Lys Ile Glu Glu Gly Gly Ala Tyr Leu Val
                85                  90                  95
Asp Asn Gly Gln Met Ile Leu Leu Trp Leu His Ser Gln Val Ser Pro
            100                 105                 110
Asn Leu Leu Glu Asp Leu Phe Gly Pro Gly Gln Thr Ser Leu Gln Ala
        115                 120                 125
Leu Asn Pro Gln Leu Ser Ser Leu Pro Val Leu Glu Thr His Leu Asn
    130                 135                 140
Ala Gln Val Arg Asn Leu Leu Gln Tyr Leu Ser Thr Ile Arg Gly Ser
145                 150                 155                 160
Lys Ala Val Ala Ile Gln Leu Ala Arg Gln Gly Leu Asp Gly Ala Glu
                165                 170                 175
Tyr Glu Phe Ala Arg Leu Leu Leu Glu Asp Arg Asn Asn Glu Ala Gln
            180                 185                 190
Ser Tyr Val Asp Trp Leu Val His Ile His Arg Gln Ile Asn Leu Glu
        195                 200                 205
Leu Ala Xaa His Arg Lys Arg Glu Asp Thr Ala Gly Glu Gly Thr Leu
    210                 215                 220
Ser Ser Leu Ala Gly Leu Arg Ala Pro Tyr Trp
225                 230                 235
```

<210> 27589
<211> 81
<212> PRT
<213> A.fumigatus

<400> 27589

```
Asn Gly Gly Ser Ser Arg Lys Arg Cys Arg Glu Gly Ser Glu Gly Ser
1               5                   10                  15
Glu Gly Ser Glu Gly Ser Glu Gly Gln Lys Asn Lys Gly Ser Phe Thr
            20                  25                  30
Ser Leu Pro Phe Phe Asp Leu Gln Glu Leu Glu Thr Trp Ile Leu Ser
        35                  40                  45
Leu Val Ser Gly Asn Lys Val Ile Gly Ser Cys Asp Ser Asp Trp Gly
    50                  55                  60
Ser Gly Val Gly Phe Ala Arg Gln Trp Ile Gln Asp Arg Gly Val Ser
65                  70                  75                  80
Ile
```

<210> 27590
<211> 88
<212> PRT
<213> A.fumigatus

<400> 27590

```
Gly Ala Lys Leu Lys Asp Gln Ala Gly Phe Arg Val Thr Leu Ala Leu
1               5                   10                  15
Phe Ala Tyr Met Tyr Ile Val Val Val Val Tyr Ile Ala Ile Arg Leu
            20                  25                  30
Ser Asp Phe Ser Ala Arg Ser Val Leu Val Gly Pro Gln Arg Pro Glu
```

```
        35                  40                  45
Ser Val Lys Ala Ala Arg Val Lys Glu Asn Asp Leu Asn Phe Arg Glu
    50                  55                  60
Arg Arg Ile Thr Ile Asp Met Asp Arg His Arg Ala Ser Arg His Lys
65                  70                  75                  80
Phe Gln Val Ile Lys Ile Arg Cys
                85
```

<210> 27591
<211> 310
<212> PRT
<213> A.fumigatus

<400> 27591

```
Val Gly Val Asp Phe Gln Leu His Arg Ala Asp Pro Ser Ser Pro Val
1               5                   10                  15
Val Lys Thr Glu Asn Thr Ala Glu Ile Met Phe Glu Ser Phe Asn Cys
            20                  25                  30
Ala Gly Leu Tyr Ile Ala Val Gln Ala Val Leu Ala Leu Ala Ala Ser
        35                  40                  45
Trp Thr Ser Ser Lys Val Thr Asp Arg Ser Leu Thr Gly Thr Val Ile
    50                  55                  60
Asp Ser Gly Asp Gly Val Thr His Val Ile Pro Val Ala Glu Gly Tyr
65                  70                  75                  80
Val Ile Gly Ser Ser Ile Lys Ser Ile Pro Ile Ala Gly Arg Asp Ile
                85                  90                  95
Thr Tyr Phe Val Gln Ser Leu Leu Arg Asp Arg Gly Glu Pro Asp Ser
            100                 105                 110
Ser Leu Lys Thr Ala Glu Arg Val Lys Glu Glu Tyr Cys Tyr Val Cys
        115                 120                 125
Pro Asp Ile Val Lys Glu Phe Ala Arg Tyr Asp Arg Glu Pro Asp Arg
    130                 135                 140
Phe Leu Lys His Thr Val Thr Ser Pro Asn Gly Arg Ser Val Thr Ile
145                 150                 155                 160
Asp Val Gly Tyr Glu Arg Phe Leu Ala Pro Glu Ile Phe Phe Asn Pro
                165                 170                 175
Glu Ile Tyr Ser Ser Asp Phe Leu Thr Pro Leu Pro Gln Val Val Asp
            180                 185                 190
Gly Val Ile Gln Ser Ser Pro Ile Asp Val Arg Arg Gly Leu Tyr Lys
        195                 200                 205
Asn Ile Val Leu Ser Gly Gly Ser Thr Leu Tyr Lys Asp Phe Gly Arg
    210                 215                 220
Arg Leu Gln Arg Asp Ile Arg His Leu Val Asp Ala Arg Ile Arg Ala
225                 230                 235                 240
Ser Glu Ala Arg Ser Gly Gly Ala Lys Ser Gly Gly Leu Asp Val Ala
                245                 250                 255
Val Val Thr His Lys Arg Gln Arg His Gly Pro Trp Phe Gly Gly Ser
            260                 265                 270
Leu Leu Gly Gln Thr Pro Glu Phe Arg Ser Tyr Cys His Thr Lys Ala
        275                 280                 285
Glu Tyr Asp Glu Ile Gly Pro Ser Ile Val Arg Arg Phe Ala Leu Leu
    290                 295                 300
Gly Gly Pro Gly Ser Thr
305                 310
```

<210> 27592

<211> 319
<212> PRT
<213> A.fumigatus

<400> 27592
Asp Tyr Phe Gly His Ala Arg Leu Cys Pro Glu Tyr Leu Leu Pro Asp
1 5 10 15
Phe Thr His Tyr Ile Leu His Leu Phe Pro Glu Thr Phe Pro Leu Cys
20 25 30
Ser Cys Leu Ala Met Asp Ser Pro Ser Asp Thr Pro Ser Lys Ser Lys
35 40 45
Gln Lys Leu Cys Lys Gln Ala Cys Asp Asn Cys Arg Arg Arg Lys Ile
50 55 60
Lys Cys Ser Arg Glu Leu Pro Cys Asp Lys Cys Ser Arg Leu Leu Leu
65 70 75 80
Ser Cys Ser Tyr Ser Asp Val Leu Arg Arg Lys Gly Pro Lys Phe Arg
85 90 95
Thr Leu Tyr Pro Leu Ala Pro Ile His Pro Leu Ile Ser Arg Ser Arg
100 105 110
Asp Thr Leu His Tyr Gly Pro Arg Gln His Thr Leu Asp Lys Asp Phe
115 120 125
Leu Pro Glu Ala Gly Gly Tyr Pro Leu Gly Ala Ser Pro Thr Ser Pro
130 135 140
Pro Phe Ser Leu Gly Asp Val Gln Phe Asn Ser Gln Asp Phe Leu Asp
145 150 155 160
Ser Leu Thr Arg Leu Ala Pro Pro Glu Leu Val Ser Ser Pro Asp Ser
165 170 175
Thr Asn Ser Ile Ser Asp Pro Gly Thr Gly Gln Cys Ser Pro Phe Ser
180 185 190
Arg Arg Leu Thr Ser Pro Val Leu Leu Ala His Val Asn Val Tyr Phe
195 200 205
Lys Tyr Ile Phe Pro Ile Met Pro Val Val Arg Lys Glu Gly Ile Gln
210 215 220
Ala Asp Cys His Gln Leu Glu Arg Leu Ser Ser Arg Arg Tyr Ala Phe
225 230 235 240
Leu Ala Ser Leu Cys Ala Ala Thr His Ile Gln Leu Lys Phe Asp Gly
245 250 255
Ala Met Gly Pro Pro Ala Phe Asn Thr Glu Ala Gln Ser Met Met Ser
260 265 270
Gly Glu Glu Leu Leu Ala Glu Ala Val Arg Ala Arg Lys Glu Cys Asp
275 280 285
Pro Val Asp Glu Ile Ser Ile Glu Ser Leu Leu Thr Ser Phe Phe Leu
290 295 300
Phe Ala Cys Tyr Gly Asn Leu Asp Lys Gln Glu Gln Ala Trp Ser
305 310 315

<210> 27593
<211> 78
<212> PRT
<213> A.fumigatus

<400> 27593
Ile His Arg Arg Cys Arg Val Leu Leu Ser Leu Ile Asn Gly Arg Arg
1 5 10 15
Ala Phe Phe Ser Ile Leu Gln Thr Gln Tyr Phe Ile Leu Ser Phe Val
20 25 30

```
Asp Thr Ile Ile Thr Ser Val Ile Gln Phe Ser Leu Val Cys Leu Ile
        35                  40                  45
Val Cys Ser Gln Arg Ser Glu Leu His Ile Arg Cys Asn Asn Phe Phe
    50                  55                  60
Ser Pro Ser Ile Ala Ile Leu Glu Pro Ser Asn His His Leu
65                  70                  75
```

<210> 27594
<211> 490
<212> PRT
<213> A.fumigatus

<400> 27594

```
Gly Asn Gly Gln Ala Ala Pro Gly Ser Gln Met Glu Ser Trp Arg Glu
1               5                   10                  15
Arg Gly Phe Val Pro Asp Ser Asp Ser Glu Val Asp Phe Asp Ser Gln
            20                  25                  30
Glu Leu Lys Val Val Ile Gly Arg Phe Glu Asp Gly Asp Gly Gly Thr
        35                  40                  45
Glu Glu Val Val Ala Pro Asn Val Lys Leu Thr Ala Leu Ala Ala Asp
    50                  55                  60
Asp Glu Thr Asn Glu Gly Glu Leu Asp Asp Ala Gly Asp Asp Gly Ile
65                  70                  75                  80
Asn Lys Ala Gln Asn Glu Val Leu Gly Leu Lys Asp Ala Glu Glu Arg
                85                  90                  95
Thr Ser Ala Ile Asp Lys Ala Glu Glu Asp Ser Ala Thr Thr Val Asp
            100                 105                 110
Ser Arg Lys Lys Thr Ser Gln Ser Asp Ser Gly Ser Val Gln Gly Asn
        115                 120                 125
Gln Lys Asp Pro Ala Ser Gln Ser Ala Arg Ala Thr Ala Lys Val Pro
    130                 135                 140
Asn Ser Ser Pro Ser Ser Gly Gly Val Thr Ala Met Asn Pro Ser Ala
145                 150                 155                 160
Pro Ser Thr Pro Arg Thr Gln Pro His Ala Ala Ile Trp Asp Ile Pro
                165                 170                 175
Ser Ser Pro Asp Glu Leu Gln Phe Asp Leu Gln Pro Ser Arg Arg Leu
            180                 185                 190
Val Thr Tyr Phe Ser Lys Lys Lys Asp Pro Glu Thr Gln Lys Asn Ser
        195                 200                 205
Pro Thr Ile Asp Glu Ala Glu Thr Gln Leu Val Asn Glu Asn Asp Asn
    210                 215                 220
Ile Ser Pro Leu Ser Ser Pro Leu Ser Ser Leu His Ser Ile Ser Leu
225                 230                 235                 240
Gly Glu Asp Asp Glu Ser Leu Arg Asp Arg Pro Glu Gly His Lys Glu
                245                 250                 255
Thr Ala Thr Thr Glu Thr Gln Ala Pro Gln Asn Arg Glu Glu Pro Leu
            260                 265                 270
Pro Pro Phe Glu Ser Ser Asp Arg Ile Leu Gln Glu Met Ser Gln Pro
        275                 280                 285
Met Arg Arg Ser Leu Arg Gln Arg Asn Pro Ile Gln Leu His Pro Tyr
    290                 295                 300
Leu Leu Glu Asp Ala Lys Tyr Arg Ser Leu Met Lys Ala Arg Gly Leu
305                 310                 315                 320
Lys Pro Val Arg Val Pro Leu His Gln Ala Val His Glu Thr Ala Asp
                325                 330                 335
Glu Ser Gln Ile Lys Asp Phe Glu Pro Pro Ser Ser Ser Pro Val Glu
```

```
            340                 345                 350
Asp Phe Gln Phe Pro Pro Ser Ser Pro Ile Ile Asp His Pro Leu Pro
        355                 360                 365
Asp Arg His Ile His Lys Glu Ser Ser His Arg Arg Gly Arg Val Asp
    370                 375                 380
Pro Gln Phe Gln Asp His Leu Ala Asn Arg Pro Asp Ala Arg Pro Ser
385                 390                 395                 400
Lys Arg Arg Arg Val Ser Arg Pro Arg Asn Thr Asp Arg Arg Ser Leu
                405                 410                 415
Ile His Ala Pro Gln Pro Lys Val Val Ile Gly Gln Ser Pro Ala Arg
            420                 425                 430
Pro Glu His Glu Ser Ile Phe Asn Ile Pro Ser Pro Pro Arg Ser Gly
        435                 440                 445
Ser Ile Ser Ser Thr Gln Thr Ser Gln His Ala Glu Gly Phe Arg Phe
    450                 455                 460
Pro Leu Gly Phe Thr Pro Pro Thr Leu Thr Thr Pro Val Thr Glu Pro
465                 470                 475                 480
Arg Val Asn Ala Arg Gln Cys Tyr Lys Leu
                485                 490
```

<210> 27595
<211> 322
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (233)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27595

```
Ser His Gln Asp Thr Ala His Arg Thr Val Leu Cys Thr Asn Ala Gln
1               5                   10                  15
Leu Ser Ile Tyr His His Pro Ile Lys Asn Pro Ala Ser Ile Leu Val
            20                  25                  30
His Gly Phe His Leu Leu Ile Met Ser Asn Met Asn Pro Leu Cys Thr
        35                  40                  45
Leu Gly Met Thr Arg Arg Val Thr Arg Ser Ala Ala Ala Arg Glu Ala
    50                  55                  60
Ala Leu Phe Ala Ala Lys Ala Gln Asp Val Lys Pro Gln Leu Thr Asp
65                  70                  75                  80
Ser Asn Gly Pro Asp Val Ser Pro Lys Thr Gly Lys Ser Thr Pro Gly
                85                  90                  95
Arg Lys Arg Lys Leu Pro Ile Glu His Pro Glu Lys Leu Ser Lys Ser
            100                 105                 110
Ser Lys Thr Ser Lys Pro Lys Gly Ser Leu Pro Ser Leu Asn Val Asn
        115                 120                 125
Asp Asp Leu Pro His Asn Leu Gly Ser Val Ser Gln Pro Leu Glu Ser
    130                 135                 140
Ile Asn Val Glu Pro Lys Leu Asn Lys Gln Asp Pro Gly Ile Gly Glu
145                 150                 155                 160
Glu Glu Asp Leu Asp Asn Leu Ala Ser Asp Leu Gln Lys Thr Val Asp
                165                 170                 175
Lys Ala Thr Glu Gly Leu Pro Gln Gln Ile Lys Ile Ser Lys Lys Lys
            180                 185                 190
Asn Pro Tyr Gly Leu Thr Pro Gly Ala Thr Pro Phe Pro Glu Trp Ala
```

```
        195                 200                 205
Arg Pro Thr Pro Glu Glu Cys Glu Glu Val Asn Arg Leu Leu Ser Ser
    210                 215                 220
Ala His Gly Glu Val Ile Pro Pro Xaa Lys Ile Pro Glu Pro Ser Leu
225                 230                 235                 240
Thr Val Thr Gly Cys Gly Glu Val Pro Ser Val Leu Asp Ala Leu Ile
                245                 250                 255
Arg Thr Leu Leu Ser Gly Ala Thr Thr Gly Arg Asn Ser Ala Leu Ala
            260                 265                 270
Phe Gly Gly Leu Val Gln Arg Phe Gly Ile Leu Glu Glu Gly Ile Gly
        275                 280                 285
Lys Gly Ser Val Asn Trp Asp Ala Val Arg Gln Ala Pro Leu Lys Asp
    290                 295                 300
Val Phe Glu Ala Ile Lys Arg Gly Gly Leu Ser Glu Met His Glu Pro
305                 310                 315                 320
Glu Arg
```

<210> 27596
<211> 111
<212> PRT
<213> A.fumigatus

<400> 27596

```
Thr His Cys Val Gly Phe Ser Gly Pro Val Val Glu Asp Arg Leu Phe
1               5                   10                  15
Gly Pro Ser Gly Glu Asp Arg Gly Glu Gly Arg Lys Ile Lys Ala Val
            20                  25                  30
Asp Arg Ala Lys Glu Ala Val Thr His Gly Phe Ala Asn Glu Glu Asp
        35                  40                  45
Tyr Gln Ile Ala Ala Asn Gly Val Lys Leu Asp Gln His Gly Lys Ile
    50                  55                  60
Val Pro Ala Lys Tyr Pro Gly Glu Ser Glu Val Leu Gln Ala Gly Phe
65                  70                  75                  80
Asn Arg Cys Asn Lys Pro Met Thr His Glu Asp Glu Pro Pro Lys Val
                85                  90                  95
Lys Asp Arg Met Asp Ile Ser Ile His Asn Ile Ala Asp His Glu
            100                 105                 110
```

<210> 27597
<211> 161
<212> PRT
<213> A.fumigatus

<400> 27597

```
Val Ala Thr Pro Gln Val Glu Glu Pro Arg Asp Glu Lys Ala Arg Leu
1               5                   10                  15
Arg His Val Glu Gln Thr Phe Ile Pro Ser Arg Pro Pro Asp Asp Ser
            20                  25                  30
Glu Pro Gly Pro Ser Ala Gly His Leu Ala Met Pro Thr Ala Pro Val
        35                  40                  45
Leu Pro Glu Asp Asp His Ile Asn Gly Tyr His His Leu Pro Ser Pro
    50                  55                  60
Val Glu Asn Cys Leu Pro His Thr Leu Gly Ser Ala Glu Ser Val Gln
65                  70                  75                  80
Thr Val Val Ala Ser Ser Ser Val Ala Glu Pro Asn Gly Ser Thr Ala
```

```
                85                  90                  95
Pro Pro Gly Glu Asp Lys Gln Glu Leu Glu Arg Arg Arg Leu Met Met
            100                 105                 110
Glu Ala Ser Ala Pro Glu Asp Met Asp Ala His Thr Asp Asn Ser Ala
        115                 120                 125
Met Asp Gly Pro Ser Ala Pro Val Phe His Asp Asp His Asp Glu Gln
    130                 135                 140
Leu Val Gly Gly Ala Ala His Gly Asp Glu Ser Leu Pro Arg Tyr Gln
145                 150                 155                 160
Arg
```

<210> 27598
<211> 106
<212> PRT
<213> A.fumigatus

<400> 27598

```
Leu Phe Thr Ser Asp Asn Pro Asn Lys Pro Ile Gly Arg Gln Ile Asp
1               5                   10                  15
Asn Tyr Cys His Leu Asn Leu Gly Tyr Leu His Pro Thr Ala Ile Gly
            20                  25                  30
Val Arg Ser Lys Arg Ala Gly Leu Ala Pro Ser Leu Ser Gly His Ala
        35                  40                  45
Thr Thr Leu Ile Phe Ile Ala Ser His Gln Pro Phe Ala Leu Val Phe
    50                  55                  60
Ser Phe Ser Tyr Leu Ile Phe Ser Ala Val Ser Ser Ser Val Asn Asn
65                  70                  75                  80
Pro Phe Gln Cys Phe Ser Ile Ala Ser Asn His Gly Leu Gln Glu Arg
                85                  90                  95
Val Leu Cys Asp Leu Pro Asp Arg Leu Ser
            100                 105
```

<210> 27599
<211> 151
<212> PRT
<213> A.fumigatus

<400> 27599

```
Ala Ala Thr Arg Arg His Leu Ser Ser Ser Pro Leu Thr Ser His Ser
1               5                   10                  15
Pro Ser Ser Ser Pro Phe Pro Thr Ser Ser Phe Leu Pro Cys Pro Leu
            20                  25                  30
Pro Ser Ile Ile Leu Phe Ser Ala Ser Pro Ser Gln Ala Thr Met Ala
        35                  40                  45
Phe Arg Asn Gly Ser Phe Ala Thr Phe Leu Ile Val Cys Arg Lys Pro
    50                  55                  60
Pro Pro Ile His Leu Leu Glu His Phe Leu Phe Arg Thr Thr Ile Leu
65                  70                  75                  80
Thr Gly Leu Pro Lys Thr Ala Val Ser Phe Phe Leu Gly Ile Ile Phe
                85                  90                  95
Ser Leu Phe Pro Tyr Asp Tyr Pro Ile Leu Trp Ser Thr Gly Pro Thr
            100                 105                 110
Pro Pro Ala His Tyr Asp Tyr Leu Glu Ala His Leu Arg Phe Leu His
        115                 120                 125
Ala Ser Pro Pro Leu Ile Pro Arg Ile Leu His Ile Val Ile Phe Leu
```

```
    130                 135                 140
Gly Leu Ala Gly Leu Val Ser
145                 150

<210> 27600
<211> 328
<212> PRT
<213> A.fumigatus

<400> 27600
Pro Thr Ser His Arg Tyr Lys Ala Ala Ser Leu Pro Ala Ser Phe Ser
1               5                   10                  15
Gly Leu Lys Ala Ala Lys Thr Lys Ser Gly Asp Ile Arg Phe Val Ala
            20                  25                  30
Tyr Gly Gln Ser Tyr Pro Asn Gly Thr Ala Tyr Asn Glu Glu Leu Ala
        35                  40                  45
Thr Ala Pro Leu Ser Ser Ala Arg Ile Tyr Asp Ser Ile Tyr Val Arg
    50                  55                  60
His Trp Asp Tyr Trp Leu Ser Thr Thr Phe Asn Ala Val Phe Ser Gly
65                  70                  75                  80
Thr Leu Lys Lys Gly His Gly Lys Asn Gly Tyr Ser Leu Asp Gly Glu
                85                  90                  95
Leu Lys Asn Leu Val Ser Pro Val Lys Asn Ala Glu Ser Pro Tyr Pro
            100                 105                 110
Pro Phe Gly Gly Ala Ser Asp Tyr Asp Leu Ser Pro Asp Gly Lys Trp
        115                 120                 125
Val Ala Phe Lys Ser Lys Ala Pro Glu Leu Pro Lys Ala Asn Phe Thr
    130                 135                 140
Thr Ser Tyr Ile Tyr Leu Val Pro His Asp Ala Ser Glu Thr Ala Arg
145                 150                 155                 160
Pro Ile Asn Gly Pro Asp Ser Pro Gly Thr Pro Lys Gly Ile Lys Gly
                165                 170                 175
Asp Ser Ser Ser Pro Val Phe Ser Pro Asn Gly Asp Lys Leu Ala Tyr
            180                 185                 190
Phe Gln Met Arg Asp Glu Thr Tyr Glu Ser Asp Arg Arg Val Leu Tyr
        195                 200                 205
Val Tyr Ser Leu Gly Ser Lys Lys Thr Ile Pro Ser Val Ala Gly Asp
    210                 215                 220
Trp Asp Arg Ser Pro Asp Ser Val Lys Trp Thr Pro Asp Gly Lys Thr
225                 230                 235                 240
Leu Ile Val Gly Ser Glu Asp Leu Gly Arg Thr Arg Leu Phe Ser Leu
                245                 250                 255
Pro Ala Asn Ala Lys Asp Asp Tyr Lys Pro Lys Asn Phe Thr Asp Gly
            260                 265                 270
Gly Ser Val Ser Ala Tyr Tyr Phe Leu Pro Asp Ser Ser Leu Leu Val
        275                 280                 285
Thr Gly Ser Ala Leu Trp Thr Asn Trp Asn Val Tyr Thr Ala Lys Pro
    290                 295                 300
Glu Lys Gly Val Ile Ile Glu Asp Cys Val Cys Gln Arg Asp Arg Ser
305                 310                 315                 320
Arg Ala Gln Gly Thr Trp Ser Phe
                325

<210> 27601
<211> 71
<212> PRT
```

<213> A.fumigatus

<220>
<221> UNSURE
<222> (17),(25)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27601
Arg Thr Ile Ser Gly Pro Leu Ser Thr Asn Gly Ala Ile Ser Arg Pro
1 5 10 15
Xaa Ala Ser Thr Met Leu Ala Leu Xaa Thr Gln Asp Cys Gly Asp Gln
20 25 30
Asp Ser Val Gln Asp Ser Pro Val Phe Leu Cys Phe Ser Ala His Thr
35 40 45
Asp Gln Ala Lys Leu Ser Glu Ala His Ser Trp Arg Gly Glu Trp Ala
50 55 60
Pro Tyr Glu Arg Pro Trp Met
65 70

<210> 27602
<211> 109
<212> PRT
<213> A.fumigatus

<400> 27602
Lys Val Ala Val Phe Ser Thr Ser Gln Tyr Ser Phe Glu Thr His Lys
1 5 10 15
Arg Thr Ser Trp Trp Ser Leu Leu Asp Leu Lys Thr Gly Gln Thr Lys
20 25 30
Val Leu Thr Asn Asp Ser Ser Val Ser Glu Ile Val Trp Leu Ser Asp
35 40 45
Asp Ser Ile Leu Tyr Val Asn Ser Thr Asn Ala Asp Ile Pro Gly Gly
50 55 60
Val Glu Leu Trp Val Thr Gln Ala Ser Ser Phe Ala Lys Gly Tyr Ile
65 70 75 80
Arg Leu Pro Val Thr Ser Phe Arg Arg Leu Ser Asn Arg Pro Arg Ile
85 90 95
Asp Thr Arg Gln Pro Leu Cys Arg Pro Pro Ser Gln Val
100 105

<210> 27603
<211> 334
<212> PRT
<213> A.fumigatus

<400> 27603
Gly His Cys Leu Ser Ile Arg Thr Gln His Gln Ile Leu Leu Lys Ser
1 5 10 15
Arg His His Ile Asp Glu Thr Val Ser Thr Met Leu Asp Lys Arg Gly
20 25 30
Gly Pro Tyr Pro Pro His Asn Ala Ala Leu Gly Gly Leu Pro Ser Val
35 40 45
Ile Pro Asp Ile Pro Ile Cys Ala Val Phe Leu Ala Leu Tyr Ile Gly
50 55 60
Phe Ala Ala Thr Asn Met Ala Thr Leu Gln Ile Asn Arg Arg Arg Ser
65 70 75 80

```
His Lys Phe Leu Met Ser Gly Met Leu Phe Gly Phe Cys Met Ala Arg
                85                  90                  95
Ile Thr Thr Leu Val Leu Arg Ile Ala Trp Ala Asn Arg Gln His Asn
            100                 105                 110
Val Arg Leu Ala Val Ala Ala Asn Ile Phe Val Asn Ala Gly Val Leu
        115                 120                 125
Leu Val Tyr Ile Ile Asn Leu Leu Leu Ala Gln Arg Ile Leu Arg Ala
    130                 135                 140
Lys Gln Pro Arg Ile Gly Trp Asn Pro Val Leu Arg Val Ala Tyr Lys
145                 150                 155                 160
Val Leu Tyr Ala Leu Val Ala Ala Ala Leu Ile Met Val Ile Thr Ala
                165                 170                 175
Thr Val Val Ser Val Tyr Thr Leu Asp Arg His Thr Gln Ala Gln Cys
            180                 185                 190
Arg Asp Val Gln Leu Ala Ala Ile Thr Leu Leu Leu Val Ile Thr Cys
        195                 200                 205
Leu Pro Ile Leu His Leu Leu Val Ala Phe Leu Phe Pro Arg Ser Glu
    210                 215                 220
Gln Glu Glu Thr Phe Gly Glu Gly Ser Met Ala Ser Lys Ala Ile Thr
225                 230                 235                 240
Val Ile Leu Ser Ser Ala Leu Cys Ile Leu Ile Gly Gly Phe Lys Ala
                245                 250                 255
Gly Ala Asn Trp Ser Thr Pro Arg Pro Val Thr Asn Pro Ala Trp Phe
            260                 265                 270
His Ser Lys Thr Ala Phe Tyr Val Phe Asn Phe Val Leu Glu Ile Leu
        275                 280                 285
Ile Leu Cys Val Leu Ala Leu Gly Arg Ile Asp Lys Arg Phe His Ile
    290                 295                 300
Pro Asn Gly Ser Thr Lys Pro Gly Asp Tyr Thr Arg Leu Gly Leu Gln
305                 310                 315                 320
Leu Asp Lys Gly Lys Gly Met Glu Arg Ala Pro Ala Ser Arg
                325                 330
```

<210> 27604
<211> 80
<212> PRT
<213> A.fumigatus

<400> 27604

```
Ala Arg Ala Asn Arg Arg Ala Thr Ala Leu Pro Val Pro Trp Pro Ala
1               5                   10                  15
Pro Ala Met Ile Ala Ile Gly Phe Thr Ile Val Asn Ile Gly Val Cys
            20                  25                  30
Val Pro Trp Gly Leu Gly Leu Gln Pro Gln Thr Thr Thr Tyr Gln Leu
        35                  40                  45
Ser Ser Leu Thr Thr Val Asp Ile Ile Ala Gly Met Arg Cys Pro Glu
    50                  55                  60
Asp Ala Ala Leu Ala Trp Asp Thr Ser Met Glu Ile Pro Arg Glu Arg
65                  70                  75                  80
```

<210> 27605
<211> 66
<212> PRT
<213> A.fumigatus

<400> 27605

```
Gln Ile Pro Gln Leu Tyr Phe Glu Gln Ala Glu Glu Leu Ala Pro Leu
1               5                  10                  15
Leu Asn Leu Lys Leu Ala Val Lys Arg Thr Ser Ala Gly Pro Val Pro
            20                  25                  30
Met Ala Gly Phe Pro Phe Phe Gln Leu Asp Arg Phe Leu Lys Ile Leu
        35                  40                  45
Val Gln Asp Leu Asn Lys Tyr Val Ala Ile Ser Glu Lys Phe Ala Asn
    50                  55                  60
Ala Arg
65
```

<210> 27606
<211> 194
<212> PRT
<213> A.fumigatus

```
<400> 27606
Ile Ser Thr Trp Leu Ser Ala Lys Ser Leu Pro Met Pro Ala Glu Asp
1               5                  10                  15
Lys Ser Arg Gly Gly Leu Leu Phe Asp Arg Arg Val Ala Arg Ile Ile
            20                  25                  30
Thr Pro Gly Thr Leu Ile Asp Glu Lys Phe Met Asp Pro Ser Glu Asn
        35                  40                  45
Asn Phe Leu Leu Ala Val Tyr Ile Asp Val Ala Ala Leu Lys Ala Gln
    50                  55                  60
Leu Glu Gln Gln Glu Gly Asn Leu Ser Ala Gln Gln His Ile Leu Ser
65                  70                  75                  80
Ser Ala Ser Gln His Val Gly Leu Ser Trp Leu Asp Leu Ser Thr Gly
                85                  90                  95
Asp Phe Phe Thr Gln Ser Thr Thr Thr Gln Met Leu Pro Ser Ala Ile
            100                 105                 110
Ala Arg Ile Gly Ala Arg Glu Ile Leu Val Asp His Lys Leu Gln Asp
        115                 120                 125
Leu Ile Gly Gln Glu Leu Gln Leu Leu Val Gly His Asp His Arg Leu
    130                 135                 140
Met Thr Phe Phe Ala Tyr Pro Ser Lys Ile Leu Pro Ile Ala Gln Trp
145                 150                 155                 160
Ser Ser Val Leu Glu Ala Gln Val Ala Asp Gln Asp Ser Asp Ala Phe
                165                 170                 175
Thr Pro Glu Glu Val Ala Ala Gly Tyr Ser Leu Leu Glu Tyr Ile Arg
            180                 185                 190
Val Gln
```

<210> 27607
<211> 186
<212> PRT
<213> A.fumigatus

```
<400> 27607
Cys Pro Lys Thr Lys Lys Lys Pro Gly Arg Pro Thr Asp Ile Glu Arg
1               5                  10                  15
Gly Ala Ile Arg Glu Ser Glu Asp Val Leu Ala Arg Glu Gln Arg Lys
            20                  25                  30
Arg Arg Gly Gln Gln Gln Leu Arg Gly Gln Gly Ile Leu Ser Ala Ala
        35                  40                  45
```

```
Asp Ala Leu Ile Glu Gly Leu Lys Tyr Arg Pro Arg Thr Pro Ala Thr
    50                  55                  60
Arg Ala Thr Tyr Asp Leu Ile Leu Thr Met Thr Ala Ser His Leu Gly
65                  70                  75                  80
Asp Val Pro His Glu Val Val Arg Ser Ala Ala Asp Ala Val Leu Glu
                85                  90                  95
Leu Leu Lys Asp Glu Asp Met Lys Asp Phe Asp Lys Lys Lys Glu Ile
            100                 105                 110
Asp Asp Leu Leu Gly Ser Ser Met Ser Pro Lys Glu Phe Asn Glu Leu
        115                 120                 125
Val Asn Leu Gly Lys Lys Ile Thr Asp Tyr Asp Ala Gln Asp Glu Asp
    130                 135                 140
Glu Glu Met Glu Gly Gly Met Asp Gly Gln Glu Glu Ala Glu Leu Asp
145                 150                 155                 160
Glu Arg Gln Gly Val Ala Val Val Phe Asp Glu Glu Asp Glu Asp Asp
                165                 170                 175
Glu Arg Met Gly Thr Val Thr Glu Val Arg
            180                 185
```

<210> 27608
<211> 176
<212> PRT
<213> A.fumigatus

<400> 27608

```
Pro Asn Ile Ile Met Glu Tyr Arg Thr Gln Ala Gly Glu Lys Glu Ala
1               5                   10                  15
Pro Asp Arg Asp Gln Leu Cys Cys Cys Ser Val Asn Pro Leu Leu Trp
            20                  25                  30
Leu Val Cys Arg Ile Ala Ser Leu Met Leu Leu Leu Ile Arg Tyr Ser
        35                  40                  45
Gly Tyr Asp Gln Gly Met Met Gly Gly Val Asn Asn Ala Lys Asp Tyr
    50                  55                  60
Ile Asp Leu Met Gly Phe Gly Tyr Thr Glu Met Lys Asp Gly Gln Pro
65                  70                  75                  80
Thr Pro Val Val Thr Asn Ser Leu Leu Gln Gly Gly Ile Val Ser Val
                85                  90                  95
Tyr Tyr Leu Gly Thr Leu Cys Gly Cys Leu Leu Gly Gly Trp Ile Gly
            100                 105                 110
Asp Ser Ile Gly Arg Ile Lys Thr Ile Ala Ser Gly Ala Val Trp Ala
        115                 120                 125
Ile Phe Gly Ala Ala Leu Gln Cys Ser Ala Gln Asn His Asn Trp Met
    130                 135                 140
Ile Cys Gly Lys Ala Ser Phe Leu Pro Ser Thr Asp Arg Phe Ala Val
145                 150                 155                 160
Thr Asp Gln Thr Gln Pro Ala Leu Ser Thr Gly Leu Ala Pro Val Phe
                165                 170                 175
```

<210> 27609
<211> 65
<212> PRT
<213> A.fumigatus

<400> 27609

```
Pro Asn Ser Ala Arg Phe Ile Asn Gly Ile Gly Thr Gly Ile Leu Asn
1               5                   10                  15
```

```
Ala Ile Val Pro Val Trp Ala Thr Glu Thr Ala Glu His Thr Ser Arg
            20                  25                  30
Gly Gln Phe Ile Ala Ile Glu Phe Thr Leu Asn Ile Phe Gly Val Val
        35                  40                  45
Leu Ala Tyr Trp Leu Ser Thr Arg Pro Gly Ala Gly Arg Leu Pro Arg
    50                  55                  60
Cys
65
```

<210> 27610
<211> 437
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (181),(202),(434),(435)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27610

```
Asn Asn Ile Thr Glu Val Gly Leu Phe Cys Val Phe Gly Val Lys Met
1               5                  10                  15
Gly Ser Lys Lys Ser Gln Ser Lys Pro Pro Pro Ser Ala Ala Leu Asp
            20                  25                  30
Tyr Lys Pro Ala Asn Lys Leu Arg Arg Gln Met Leu His Val Lys Arg
        35                  40                  45
Lys Arg Ala Lys Asp Ser Glu Arg Arg Ala Glu Arg Phe Gly Arg Lys
    50                  55                  60
Lys Glu Glu Ala Lys Asn Pro Lys Leu Lys Glu Glu Arg Leu Lys Arg
65                  70                  75                  80
Asn Ile Pro Leu Thr Leu Asp Arg Lys Arg Val Trp Asp Glu Ala Asp
                85                  90                  95
Ser Asp Val Glu Asp Ala Leu Gly Leu Ser Val Asp Val Glu Arg Ile
            100                 105                 110
Lys Arg Gln Lys Lys Glu Glu Glu Asp Glu Leu Asn Arg Pro Leu Asp
        115                 120                 125
Asp Lys Asp Ser Gly Ser Asp Glu Ser Glu Asp Asp Val Asp Ser Met
    130                 135                 140
Leu Ala Thr Ser Asp Glu Glu Glu Asp Gly Asp Glu Lys Ala Lys Lys
145                 150                 155                 160
Asp Asp Thr Arg Gly Arg Lys Lys Ser Ser Leu Pro Ser Ala Thr Glu
                165                 170                 175
Arg Ala Thr Ser Xaa Ser Gln Ser Thr Arg Ser Thr Asn Leu Asn Leu
            180                 185                 190
Ala Pro Glu Ala Leu Ala Ala Lys Phe Xaa Thr Leu Phe Pro Ser Glu
        195                 200                 205
Pro His Pro Thr Pro Lys Ile Leu Ile Thr Thr Ser Leu Asn Ser Thr
    210                 215                 220
Leu His Asn Glu Ala Arg Ser Leu Thr Asp Leu Phe Pro Asn Ser Val
225                 230                 235                 240
Tyr Ile Arg Arg Thr Ala His Arg Tyr Ser His Lys Phe Ser Ile Arg
                245                 250                 255
Glu Ile Ala Ala Phe Ala Ser Asn Arg Asn Tyr Thr Ser Val Val Val
            260                 265                 270
Leu Gln Glu Asp Gln Lys Arg Pro Ser Gly Leu Thr Ile Val His Leu
        275                 280                 285
```

```
Pro Gln Gly Pro Thr Phe His Phe Thr Ile Ser Arg Trp Ile Glu Gly
    290                 295                 300
Lys Lys Leu Pro Gly His Gly Asn Ala Thr Glu His Arg Pro Glu Leu
305                 310                 315                 320
Ile Leu Asn Asn Phe Arg Thr Pro Leu Gly Leu Leu Thr Ala His Leu
                325                 330                 335
Phe Arg Ser Met Phe Pro Pro Gln Pro Asp Leu Glu Gly Arg Gln Val
            340                 345                 350
Val Thr Ile His Asn Gln Arg Asp Tyr Leu Phe Leu Arg Arg His Arg
        355                 360                 365
Tyr Val Phe Arg Glu Lys Arg Glu Thr Glu Lys Ser Val Val Gly Thr
    370                 375                 380
Asp Gly Lys Glu Ile Lys Gly Val Glu Gly Ile Arg Ala Gly Leu Gln
385                 390                 395                 400
Glu Leu Gly Pro Ala Ile Asn Phe Lys Leu Arg Arg Val Asp Lys Gly
                405                 410                 415
Ile Arg Leu His His Gly Ala Gly Arg Ser Ala Ala Lys Val Gln Ser
            420                 425                 430
Ile Xaa Xaa Glu Gly
        435
```

Substitute Sheet (Rule 26)

<210> 27611
<211> 164
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (8),(29)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27611

```
Gly Ser Glu Gly Asn Asn Val Xaa Asn Leu Ala Ala Ser Ala Ser Gly
1               5                   10                  15
Ala Arg Leu Arg Phe Val Leu Arg Val Asp Trp Leu Xaa Glu Val Ala
            20                  25                  30
Arg Ser Val Ala Asp Gly Arg Glu Asp Phe Leu Arg Pro Arg Val Ser
        35                  40                  45
Ser Phe Leu Ala Phe Ser Ser Pro Ser Ser Ser Ser Ser Leu Val Ala
    50                  55                  60
Ser Met Leu Ser Thr Ser Ser Ser Asp Ser Ser Glu Pro Glu Ser Leu
65                  70                  75                  80
Ser Ser Lys Gly Leu Leu Ser Ser Ser Ser Ser Ser Phe Phe Cys Arg
                85                  90                  95
Leu Met Arg Ser Thr Ser Thr Leu Arg Pro Arg Ala Ser Ser Thr Ser
            100                 105                 110
Leu Ser Ala Ser Ser Gln Thr Arg Phe Arg Ser Arg Val Ser Gly Ile
        115                 120                 125
Phe Arg Leu Arg Arg Ser Ser Phe Asn Phe Gly Phe Leu Ala Ser Ser
    130                 135                 140
Phe Phe Leu Pro Asn Arg Ser Ala Arg Arg Ser Glu Ser Leu Ala Arg
145                 150                 155                 160
Leu Arg Leu Thr
```

<210> 27612

<211> 204
<212> PRT
<213> A.fumigatus

<400> 27612
Glu Glu Asn Gln Gly Lys Gly Glu Ile Phe Asp Phe Ser Asn Ser Arg
1 5 10 15
Ser Phe His Leu Leu Arg Thr Ser Ser Pro Cys Leu Ser Leu Pro Ser
20 25 30
Phe Leu Arg Phe Val Gly Ser Gly Gly Arg Leu Thr Trp Trp Met Thr
35 40 45
Gln Leu Pro Phe Leu Arg Leu Ser Leu Pro Arg Gln Ile Pro Leu Cys
50 55 60
Ser Pro Ala Arg Ser Phe Phe His Thr Thr Ala Ala Leu Gln Ala Val
65 70 75 80
Gln Ala Ser Lys Lys Asn Gln Leu Thr Met Ala Thr Val Asn Thr Lys
85 90 95
Thr Gly Lys Val Val Asp Arg Thr Val Leu Asp Ser Met Leu Arg Arg
100 105 110
Arg Leu Phe Tyr Thr Pro Ser Phe Asp Ile Tyr Gly Gly Val Ser Gly
115 120 125
Leu Tyr Asp Tyr Gly Pro Pro Gly Thr Ala Leu Leu Asn Asn Ile Val
130 135 140
Asp Leu Trp Arg Lys His Phe Val Leu Glu Glu Asp Met Leu Glu Val
145 150 155 160
Asp Cys Thr Met Leu Thr Pro His Glu Val Leu Lys Thr Ser Gly His
165 170 175
Val Asp Lys Phe Ala Asp Trp Met Cys Lys Asp Pro Lys Thr Gly Glu
180 185 190
Ser Leu His His Ala Gly Gly Arg Ile His Ala Lys
195 200

<210> 27613
<211> 127
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (75)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27613
Pro Gly Arg Ser Ala Arg Ser Ala Thr Ser Pro Arg Ser Gly Thr Arg
1 5 10 15
Thr Ile Ser Pro Ser Ala Ala Lys Gln Thr Ser Thr Ser Asn Ser Ala
20 25 30
Thr Pro Pro Arg Met Glu Ser Thr Ser Ser Pro Cys Ser Thr Pro Pro
35 40 45
Asn Ser Ala Asn Ser Cys Thr Ile Lys Arg Asn Ser Pro Ser Pro Ile
50 55 60
Pro Ser Thr Ser Leu Met Lys His Thr Pro Xaa His Ala Phe Pro Leu
65 70 75 80
Arg Leu Leu Ile Ala Ile Val Val Leu Leu Asp Cys His Ser Leu Phe
85 90 95
Gln Ile Ala Leu Gly Ala Cys Thr Trp Gly Ile Asn Tyr His Val Arg

```
            100                 105                 110
Pro Phe Ala Leu Thr Thr Val Ile Leu Cys Cys Ser Ile Thr Cys
        115                 120                 125
```

<210> 27614
<211> 273
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (218)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27614

```
Thr Ile Gly Ser Asp Ile Cys Tyr Ile Arg Asp Ala Leu Pro Ser Ser
1               5                   10                  15
Gly Pro Trp Leu Gly Leu Val Asn Met Tyr Arg Asn Val Ser Arg Trp
            20                  25                  30
Thr Ala Cys Phe Gly Cys Ser Tyr Asp Pro Trp Leu Ile Ala Val Cys
        35                  40                  45
Arg Gln Arg Trp Gly Phe Trp Leu Leu Tyr Thr Gln Leu Ser Ser Pro
    50                  55                  60
Phe Leu Gly Leu His Gly Cys Phe Ser Leu Leu Val Cys Ser Pro Pro
65                  70                  75                  80
Gln Ile Leu Pro Thr Pro Ala Ala Asp Ile Gln Lys Gly Trp Ile Asn
                85                  90                  95
Val Gly Gly Arg Gln Leu Tyr Val Ile Asn Val Ile Asp Asn Val Leu
            100                 105                 110
Val Ala Leu Phe Ala Ile Met Gly Asp Gly Leu Ala Pro Phe Arg Ala
        115                 120                 125
Ile Asp Thr Tyr His Met Ile Phe Ile Ala His Tyr Thr Phe Leu Thr
    130                 135                 140
Trp Lys Ile Arg Lys Lys Arg Asp Leu Pro Ala Leu Arg Asp Lys Asn
145                 150                 155                 160
Asp Leu Pro Glu Arg Arg Glu Ala Asp Val Asp Val Glu Leu Gly Asp
                165                 170                 175
Ser Pro Lys Asp Gly Glu His Glu Phe Ser Val Leu Asn Pro Thr Gln
            180                 185                 190
Gln Arg Lys Leu Met His His Gln Glu Lys Phe Ala Lys Ser His Thr
        195                 200                 205
Phe Tyr Lys Pro His Glu Thr Tyr Thr Xaa Pro Arg Leu Pro Thr Thr
    210                 215                 220
Pro Pro His Arg His Arg Cys Pro Pro Arg Leu Pro Leu Pro Leu Ser
225                 230                 235                 240
Asp Arg Pro Arg Arg Leu His Val Gly His Gln Leu Pro Arg Ala Pro
                245                 250                 255
Leu Arg Pro His Asn Cys His Pro Leu Leu Leu His His Leu Leu Lys
            260                 265                 270
Ser
```

<210> 27615
<211> 348
<212> PRT
<213> A.fumigatus

<400> 27615
Arg Met Tyr Arg Thr Glu Thr Gly Gln Leu Met Thr Ser Phe Arg Pro
1 5 10 15
Pro Glu Asp Lys Gly Trp Asp Trp Val Arg Pro Ser Glu Gln Val Lys
20 25 30
Lys Tyr Leu Val Phe Glu Glu Arg Ser Pro Gly Ile Tyr Glu Leu Ile
35 40 45
Val Leu Asp Gly Trp Pro Ser Lys Val Leu Ser Asn Arg Pro Asp Gly
50 55 60
Ser Tyr Ala Thr Lys Asp Leu Phe Leu Lys His Pro Thr Met Glu Ala
65 70 75 80
Tyr Lys Tyr Tyr Ala Arg Leu Asp Asp Thr Ile Val Leu Val Asn Gly
85 90 95
Glu Lys Val Asn Pro Leu Asp Met Glu Gly Arg Val Arg Gln His Asp
100 105 110
Ala Val Ser Glu Ala Val Val Phe Gly Ala Gly Lys Ala Cys Ile Gly
115 120 125
Leu Leu Val Ile Arg Ala Pro Gly Thr Glu Val Ile Ser Asp Glu Glu
130 135 140
Leu Asn Glu Ala Ile Trp Pro Ala Val Thr Arg Ala Asn Gln Thr Met
145 150 155 160
Pro Ala Phe Gly Gln Leu Ser Lys Ser Met Val Arg Ile Leu Pro Ala
165 170 175
Asp Thr Gln Tyr Pro Arg Thr Asp Lys Gly Thr Val Ile Arg Gln Ala
180 185 190
Phe Tyr Arg Thr Phe Ser Lys Leu Ile Glu Glu Ala Tyr Glu Ala Glu
195 200 205
Asn Ala Ser Thr Gly Ala Leu Thr Leu Ser Glu Ala Glu Leu Lys Asp
210 215 220
Phe Leu Arg Glu Gln Leu His Arg Leu Leu Pro Leu Lys Asn Gly His
225 230 235 240
Val Val Thr Asp Asp Ala Asp Phe Phe Thr Leu Gly Met Asp Ser Leu
245 250 255
Gln Ala Thr Gln Leu Arg Ser Val Leu Leu Lys Thr Leu Asp Thr Lys
260 265 270
Gly Gln Lys Leu Gly Leu Asn Val Ala Phe Glu His Pro Thr Ile Asn
275 280 285
Ala Leu Ala Arg Tyr Leu Asn Gly Leu Gly Ser Gly Val Ser Asp Gly
290 295 300
Pro Val Pro Val Glu Glu Gln Met Ser Ala Leu Ile Ser Lys Tyr Ser
305 310 315 320
Gln Phe Glu Pro His Arg Pro Ile Pro Asn Gly Leu Lys Gly Arg Tyr
325 330 335
Val Val Ser Leu Ser Phe Ser Ser Ile Ser Val Ile
340 345

<210> 27616
<211> 161
<212> PRT
<213> A.fumigatus

<400> 27616
Thr Glu Asp Val Asp Thr Asn Leu Val Pro His Leu Asp Ser Glu Ala
1 5 10 15
Glu Ser Lys His Val Ala Trp Ile Ile His Ser Ser Gly Ser Thr Gly

```
            20                  25                  30
Leu Pro Lys Pro Ile Phe Gln Thr Gln Ser Ala Val Ile Lys Asn Tyr
        35                  40                  45
Ala Gly Asn Met Asn Met Thr Gly Phe Ile Thr Leu Pro Leu Tyr His
    50                  55                  60
Asn His Gly Leu Ser Cys Leu Phe Arg Ala Val His Ser Cys Lys Ser
65                  70                  75                  80
Leu Arg Leu Tyr Asn Ala Glu Leu Pro Leu Thr Lys Gln Tyr Leu Leu
                85                  90                  95
Asp Ile Met Arg Ser His Glu Phe Glu Ile Phe Tyr Gly Val Pro Tyr
            100                 105                 110
Ala Leu Lys Leu Leu Ala Glu Ser Ser Glu Gly Ile Ala Val Leu Ala
        115                 120                 125
Lys Leu Lys Ala Val Met Phe Gly Gly Ser Ala Cys Pro Asp Ser Leu
    130                 135                 140
Gly Asp Leu Leu Val Glu Asn Gly Val Asn Leu Ile Ser His Tyr Gly
145                 150                 155                 160
Thr
```

Sequence Listing

```
<210> 27617
<211> 66
<212> PRT
<213> A.fumigatus

<400> 27617
Thr Gly Ala His Lys Ala Val His Leu Leu Asp Val Val Glu Gly Gly
1               5                   10                  15
Asp Phe Arg Gly Asp Met Ala Ser Lys Gly Ser Ser Gly Ala Arg Asp
            20                  25                  30
Asn Leu Glu Ser Val Asn Tyr Met Thr Asp Met Asp Glu Asn Asp Lys
        35                  40                  45
Leu Thr Thr Tyr Leu Pro Phe Ser Pro Leu Gly Ile Gly Leu Cys Gly
    50                  55                  60
Ser Asn
65

<210> 27618
<211> 111
<212> PRT
<213> A.fumigatus

<400> 27618
Lys Leu Ala Lys Cys Arg His Cys Leu Val Arg Pro Cys Asn Gly Gly
1               5                   10                  15
Pro Asp Gly Phe Ile Glu Phe Leu Val Arg Tyr Asn Leu Gly Ala Arg
            20                  25                  30
Arg Thr Asn Asn Gln Gln Ser Asp Thr Ser Leu Ser Ser Ser Lys Asp
        35                  40                  45
Asn Gly Phe Gly Asp Gly Ile Met Leu Pro Asp Ser Thr Leu His Val
    50                  55                  60
Gln Arg Ile Asp Phe Phe Ala Ile Asp Glu Asp Asn Arg Val Val Gln
65                  70                  75                  80
Ser Ser Val Val Leu Val Cys Phe His Ser Gly Met Leu Glu Glu Glu
                85                  90                  95
Ile Leu Cys Ser Ile Arg Thr Ile Trp Ser Val Arg Gln Asn Leu
```

100 105 110

<210> 27619
<211> 93
<212> PRT
<213> A.fumigatus

<400> 27619
Gln Thr Ser Phe Ile Val Phe Arg Ser Asp Tyr Gly Ser Pro Phe Phe
1 5 10 15
Val Leu Arg His Val His Pro Met Arg Arg Thr Arg Ile Trp Ala Ser
20 25 30
Asp Leu Gln Arg Val Ile Asp Thr Ala Ala Cys Phe Ala Ser Gly Leu
35 40 45
Phe Ser Leu Asn Gln Glu Lys Asn Asp Lys Ala Thr Leu Phe Thr Gln
50 55 60
Lys Glu Trp Gly His Phe Thr Tyr Ala Arg Asp Ala Ile His Tyr Tyr
65 70 75 80
Arg Ala Gly Pro Gly Asn Pro Tyr Ala Gly Ala Met Gly
85 90

<210> 27620
<211> 212
<212> PRT
<213> A.fumigatus

<400> 27620
Ser Ser Trp Arg Pro Val Glu Pro Val Asp Glu Arg Arg Lys Gly Pro
1 5 10 15
Thr Gly Pro Leu Arg Arg Ser Lys Lys Ser Arg Arg Tyr Val Ile Asp
20 25 30
Ser Ser Leu Val Asp His Leu Leu Thr Val Ser Pro Ala Phe Arg Asp
35 40 45
Gln Asp Phe Ala His Leu Pro Ile Glu Lys Ala Leu Glu Phe Gly Gly
50 55 60
Tyr Phe Gly Arg His His Ile His Gln Thr Ser Gly Ala Pro Arg Gly
65 70 75 80
Tyr Pro Glu Ile His Leu Val His Arg Gly Ala Asp Asp Arg Ser Gly
85 90 95
Ala Glu Phe Leu Ala Thr Arg Thr Asn Thr Val Thr Trp His Ser Asp
100 105 110
Val Thr Phe Glu Lys Gln Pro Pro Gly Thr Thr Phe Leu Tyr Leu Leu
115 120 125
Asp Gly Pro Thr Ser Gly Gly Asp Thr Leu Phe Ala Asp Met Val Gln
130 135 140
Ala Tyr Lys Arg Leu Ser Pro Glu Phe Arg Lys Arg Leu His Gly Leu
145 150 155 160
Lys Ala Val His Ser Gly Ile Glu Gln Ile Asn Ala Ser Leu Asn Arg
165 170 175
Gly Gly Ile Ala Arg Arg Glu Gly Ile Thr Ser Glu His Pro Ile Val
180 185 190
Arg Thr His Pro Val Ser Trp Pro Asn Phe Ser Arg Leu Val Ile Val
195 200 205
Ile Asp Ile Val
210

<210> 27621
<211> 77
<212> PRT
<213> A.fumigatus

<400> 27621
Thr Thr Asp Thr Ile Arg Asp Pro Pro Leu Thr Pro Phe Glu His Tyr
1 5 10 15
Asp His Gly Lys Asp Ala Asp Pro Ser Phe Pro Asp Leu Leu Pro Pro
20 25 30
Gly Lys Val Gln Val Asp Asn Leu Thr Pro Thr Ile Gly Ser Glu Val
35 40 45
Arg Gly Val Gln Leu Ser Gln Leu Thr Lys Glu Gly Lys Asp Gln Leu
50 55 60
Ala Leu Tyr Val Ala Gln Arg Lys Val Val Gly Thr Leu
65 70 75

<210> 27622
<211> 88
<212> PRT
<213> A.fumigatus

<400> 27622
Leu Ile Ser Phe Arg Leu Leu Glu Arg Lys Pro Cys Leu Ser Ile His
1 5 10 15
Asn Val Ser Ile Leu Phe Thr Lys Asp Arg Val Ser Ser Asn Trp Ala
20 25 30
Val Thr Arg Tyr Ile Val Gly Tyr Lys Lys Glu Glu Ser Asp Met Leu
35 40 45
Leu Lys Phe Leu Tyr Asp His Ile Ala Leu Ser Gln Asp Leu Gln Thr
50 55 60
Arg Val Arg Trp Leu Pro Gly Thr Val Val Val Trp Asp Val Ser Ile
65 70 75 80
Leu Ile Leu Arg Ser Gly Lys Tyr
85

<210> 27623
<211> 136
<212> PRT
<213> A.fumigatus

<400> 27623
Asn Leu Asp Ile Gln Arg Ser Leu Glu Thr Asn Arg Arg Thr Asn Leu
1 5 10 15
Ile Met Pro Cys Arg Asn Asn Asn Asn Asn Thr Pro Gly Pro Trp Gly
20 25 30
Ser Gln Cys Ala Cys Leu Cys Leu Asp Ser Thr Gly Gln Arg Asp Phe
35 40 45
Ile Glu Gly Gly Ala Phe Met Glu Ser Asp Asp Glu Glu Gly Leu Ala
50 55 60
Trp Gln His Val Glu Asp Ile Ser Ile Leu Thr Pro Glu Glu Gln Asp
65 70 75 80
Phe Ser Leu Gly Ala Thr Gly Arg Asn Arg Glu Asn Gly Phe Lys Asn
85 90 95
Arg Cys Ile Ser Glu Ser Ala Ser Ala Lys Glu Cys Gly Ser Lys Lys
100 105 110

```
Gly Ile Phe Gly Phe Cys Ala Lys Ser Lys Cys Lys Gly Lys Gly Lys
        115                 120                 125
Thr Lys Gly Leu Ala Gly Lys Asn
    130                 135

<210> 27624
<211> 68
<212> PRT
<213> A.fumigatus

<400> 27624
Phe Glu Lys Ser Ala Tyr Ser Ser Leu Asp Ala Ser Asn Cys Arg Val
1               5                   10                  15
Asp Ala Glu Lys Asp Pro Arg Leu Glu Ala Asp Thr Gly Tyr Lys Gly
            20                  25                  30
Asn Gln Ser Gly Phe Cys Leu Lys Trp Gln Gly Met Asp Gly Cys Phe
        35                  40                  45
Val Thr Glu Gln Gly Leu Val Glu Gln Ser Arg Glu Met Ala Gly Phe
    50                  55                  60
Leu Thr Ser Leu
65

<210> 27625
<211> 198
<212> PRT
<213> A.fumigatus

<400> 27625
Pro Leu Leu Ser Asp Lys Thr Thr Val His Ala Leu Pro Phe Gln Ala
1               5                   10                  15
Lys Ala Ala Leu Val Ser Leu Ile Ala Ser Ile Gly Phe Lys Pro Arg
            20                  25                  30
Val Leu Leu Gly Ile Asn Thr Ala Val Gly Ser Val Gln Gly Gly Val
        35                  40                  45
Gly Ala Phe Leu Glu Leu Pro Lys Val Ser Val Asn Val Thr Gln Leu
    50                  55                  60
Arg Asn Val Asn Glu Lys Cys Glu Ser Val Ser Asn Gly Glu Gly Lys
65                  70                  75                  80
Leu Thr Ser Met Leu Asp Asn Ile Val Gly Asp Phe Thr Asn Ile Val
                85                  90                  95
Pro Thr Val Asp Ile Asn Leu Gly Ala Leu Ala Asn Phe Glu Val Asp
            100                 105                 110
Val Pro Arg Val Phe Thr Glu Thr Ala Ala Val Gln Thr Val Leu Ala
        115                 120                 125
Ser Thr Ser Tyr Pro Leu Pro Thr Ala Cys Leu Gln Phe Asp Ser Glu
    130                 135                 140
Ser Gly Glu Tyr Ser Ser Pro Thr Pro Thr Pro Thr Pro Thr Ser Val
145                 150                 155                 160
Ser Ser Ala Val Gly Lys Ala Ala Thr Ala Glu Ala Lys Lys Ser Arg
                165                 170                 175
Ala Gly Ser Val Gly Ile Asn Arg Arg Phe Val Phe Leu Ser Val Ile
            180                 185                 190
Val Ser Leu Cys Val Phe
        195

<210> 27626
```

<211> 159
<212> PRT
<213> A.fumigatus

<400> 27626
Lys Glu Glu Asn Ala Ala Phe Cys Ile Phe Gln Pro Phe Ser Leu Pro
1 5 10 15
Leu Phe Arg Leu Ile Asn Thr Ser Trp Thr Met Ala Thr Ala Asn Ala
20 25 30
Ser Ile Thr Asp Ser Pro Arg Lys Ser Leu Ile Leu Asn Ala Phe Val
35 40 45
Glu Met Cys Thr His Ser Ile Ser Pro Cys Leu Thr Ile Leu Thr Tyr
50 55 60
His Arg Gln Arg Pro Pro Val Ser Arg Ala Val Ala Thr Pro Arg Arg
65 70 75 80
Arg Ile Val Pro Val Gln Arg Arg Arg Pro Leu Asp Arg Ala Gly Thr
85 90 95
Val Val Gly Ile Arg Gln Val Pro Trp His Leu His Arg Arg Arg Pro
100 105 110
Arg Trp Leu Arg Arg Val Gln Arg Gly Ser Lys Thr Cys Ser Gly Asp
115 120 125
Cys Phe Arg Asn Arg Asn Gly Pro Val Asn Glu Pro Ala Ser Leu Trp
130 135 140
Phe Pro Ala Lys Cys Thr Leu Gln Gln Lys Ile Ile Leu Leu Trp
145 150 155

<210> 27627
<211> 97
<212> PRT
<213> A.fumigatus

<400> 27627
His Thr Thr Gly Ser Gly His Gln Ser Pro Gly Leu Trp Arg His Pro
1 5 10 15
Glu Asp Glu Ser Tyr Arg Phe Asn Asp Val Asp His Trp Ile Glu Leu
20 25 30
Ala Gln Leu Leu Glu Ser Ala Lys Phe His Gly Ile Phe Ile Ala Asp
35 40 45
Val Leu Gly Gly Tyr Asp Val Tyr Lys Gly Ala Arg Lys Leu Ala Pro
50 55 60
Ala Ile Val Ser Gly Thr Ala Met Ala Pro Ser Met Ser Pro Leu Ala
65 70 75 80
Cys Gly Phe Arg Arg Asn Ala Pro Cys Asn Lys Lys Leu Phe Cys Phe
85 90 95
Gly

<210> 27628
<211> 110
<212> PRT
<213> A.fumigatus

<400> 27628
Ser Pro Ile Thr Arg Gly Ser Thr Gln Met Leu Ile Pro Asn Pro Ala
1 5 10 15
Ala Gly Glu Leu Glu Asn Leu Ile Asp Glu Phe Ser Glu Gly Lys Ile

```
            20                  25                  30
Gln Phe Ala Phe Val Lys Val Thr Asp Pro Asn Ser Gly Leu Pro Lys
        35                  40                  45
Asn Val Leu Ile Gly Trp Cys Gly Glu Gly Val Ser Lys Arg Thr Lys
    50                  55                  60
Gly Tyr Phe Thr Ser His Leu Ser Ala Val Thr Lys Phe Leu Ser Val
65                  70                  75                  80
Gly Ala Pro Leu Ser Ser Leu Asp Glu Arg Asn Ile Leu Ile Leu Gly
                85                  90                  95
Tyr Ser Arg Thr Thr Met Phe Arg Ser Leu His Ala Leu Arg
            100                 105                 110
```

<210> 27629
<211> 284
<212> PRT
<213> A.fumigatus

<400> 27629

```
Tyr Ser Asp Ile Arg Leu Leu Gln Asn Tyr His Val Gln Ile Thr Ala
1               5                   10                  15
Arg Ser Glu Val Asp Leu Thr Pro Glu Gly Ile Ile Gln Lys Val Gly
            20                  25                  30
Asp Ala Ser Gly Ala Lys Tyr Thr Pro Glu Arg Ala Ser Pro Val Thr
        35                  40                  45
Ala Leu Pro Lys Thr Phe Pro Val Thr Ser Lys Pro Ala Phe Thr Pro
    50                  55                  60
Thr Arg Thr Val Ala Val Gly Ser Lys Thr Cys Ser Asn Val Ser Thr
65                  70                  75                  80
Arg Val Val Pro Arg Thr Ser Gly Asp Glu Asp Asp Trp Gly Pro Asp
                85                  90                  95
Ala Pro Pro Val Thr Arg Thr Glu Leu Glu Lys Val Gln Ser Ala Tyr
            100                 105                 110
Lys Pro Thr Lys Val Asp Ile Glu Ala Ile Lys Ser Gln Asn Leu Pro
        115                 120                 125
Arg Thr Ser Tyr Tyr Arg Glu Leu Pro Val Thr Glu Asn Asn Asp Val
    130                 135                 140
Val Lys Gly Gly Tyr Gln Pro Ile Gly Lys Val Asp Ile Ala Ala Ile
145                 150                 155                 160
Arg Lys Gln Ala Arg Glu Ala Gly Glu Leu Lys Glu Asp Arg Pro Glu
                165                 170                 175
Pro Val Arg Gly Ala Tyr Glu Pro Val Gly Lys Val Asp Ile Ala Ala
            180                 185                 190
Ile Arg Ser Lys Ala Gln Lys Gln Pro Glu Ser Ser Val Asp Gln Ser
        195                 200                 205
Ile Ser Ser Asn Pro Val Gly Ser Arg Asn Glu Arg Val Glu Pro Ser
    210                 215                 220
Asp Phe Ser Lys Leu Ala Asp Gln Pro Glu Arg Leu Thr Thr Leu Pro
225                 230                 235                 240
Lys Pro Lys Val Ala Lys Lys Ile Gly Ile Ser Ser Thr Phe Thr Gly
                245                 250                 255
Thr Lys Ala Pro Leu Pro Gly Gly Phe Val Ser Ser Pro Val Pro Pro
            260                 265                 270
Thr Thr Gln Val Gly Ile Ala Lys Pro Thr Phe Trp
        275                 280
```

<210> 27630

<211> 67
<212> PRT
<213> A.fumigatus

<400> 27630
Cys Pro Lys Ser Ala Cys Leu Gly Pro Gly Thr Thr Thr Tyr Ile His
1 5 10 15
Gly Phe Val Gly Val Ile His Ser Ser Thr His Tyr Phe Ile Met Met
20 25 30
Tyr Gln His Ala Ser Asn Trp Cys Phe Ala Met Phe Glu Arg Ser Leu
35 40 45
Ser Leu His Ser Val Phe Val Ser Ala Asp Pro Ala Leu Gly Lys Val
50 55 60
Ser Tyr His
65

<210> 27631
<211> 66
<212> PRT
<213> A.fumigatus

<400> 27631
Trp Ser Ala Ser Thr Ile Pro Tyr Leu His His Pro Gln Ala Ile Arg
1 5 10 15
Val Asp Asp Trp Met Arg Thr Glu Met Glu Thr Pro Arg Ala Gly Asn
20 25 30
Glu Gln Gly Leu Val Ile Gln Arg Ile Trp Ser Thr Asp Gly Val Leu
35 40 45
Val Ala Thr Cys Ile Gln Glu Val Ser Gln Ser Ser Leu Ser Tyr Leu
50 55 60
Ser Asn
65

<210> 27632
<211> 107
<212> PRT
<213> A.fumigatus

<400> 27632
Leu Gln Thr Thr Leu Ala Asp Cys Pro Leu Glu Leu Pro Gln Asn Val
1 5 10 15
His His His Thr Leu Gln His Lys Gln Val Arg Asp Leu Ile Gly Asp
20 25 30
Pro Glu Pro Pro Thr Ser Ser Thr Pro Tyr Ser Arg Thr Pro Glu Leu
35 40 45
Arg Val Thr His Lys Leu Ala Glu Arg Lys Arg Arg Ser Glu Met Lys
50 55 60
Asp Cys Phe Glu Ala Leu Arg Met Arg Leu Pro Gln Ser Gln Asn Asn
65 70 75 80
Lys Ser Ser Lys Trp Glu Thr Leu Thr Arg Gly Thr Asp Phe Ile Thr
85 90 95
Ala Ser Ser Ile Ala Phe Thr Leu Thr Phe Leu
100 105

<210> 27633
<211> 107

<212> PRT
<213> A.fumigatus

<400> 27633
His Leu Leu Phe Ser Ala Pro Val Asp Ser Arg Lys Pro Asp Asp Asp
1 5 10 15
Glu Glu Gly Ala Val Asn Pro Gly Ser Asn Leu Phe Val Thr Gly Ile
20 25 30
His Pro Arg Leu Thr Glu Ser Asp Ile Ser Arg Leu Phe Glu Lys Tyr
35 40 45
Gly Asp Val Glu Ser Cys Ser Ile Met Val Asp Pro His Thr Lys Glu
50 55 60
Ser Arg Gly Phe Gly Phe Val Lys Met Val Thr Ala Glu Gln Ala Asp
65 70 75 80
Ala Ala Lys Glu Gly Leu Gln Gly Glu Val Ile Glu Gly Arg Thr Leu
85 90 95
Ser Ile Glu Lys Ala Arg Arg Ser Arg Pro Ser
100 105

<210> 27634
<211> 191
<212> PRT
<213> A.fumigatus

<400> 27634
Leu Cys Ser Cys Trp Gly Tyr Gly Arg Cys Leu Pro Ser Arg Ile Leu
1 5 10 15
Gly Tyr Gly Glu Gly Gln Pro Phe Pro Cys Gly Pro Arg Arg Leu Cys
20 25 30
Ser Cys Asp Ala Thr Gly Asp Ser Asn Arg Phe Asp Trp Arg Ser Ala
35 40 45
His Thr Leu Pro Glu Ile Leu Gln Tyr Val Asn Ala Leu Lys Pro Leu
50 55 60
Val Ala Cys Ile Asn Pro Ser Ile Asp Arg Phe Tyr Gly Phe Thr Glu
65 70 75 80
Asn Ala Arg Glu Val Glu Met Asp Met Arg Glu Met Val Asp Lys Val
85 90 95
Lys Lys Gly Glu Pro Leu Tyr Gly Thr Ser Gln Val Ser Ser Tyr Leu
100 105 110
Gln Gly Val Ala Ala Arg Asn Ser Arg Tyr Ser Gln Leu Phe Ile His
115 120 125
Val Leu Pro Trp Phe Asn Ile Val Asn His Asp Gln Val Ser Leu Phe
130 135 140
Val Phe His Cys Cys Pro Gln Asn Phe Glu His Ser Ser Gln Phe Ala
145 150 155 160
Asn Val Arg Gln His Gly Val Asp Thr Ala Lys Tyr Tyr Gln Gln Ala
165 170 175
Glu Arg Glu Leu Glu Ala Glu Arg Leu Thr Thr Ala Gly Ser His
180 185 190

<210> 27635
<211> 106
<212> PRT
<213> A.fumigatus

<400> 27635

```
Ser Leu Thr Leu His Cys Ser Ser Leu Thr Leu Ile Arg Met Ser Leu
1               5                  10                  15
Pro Phe Ala Gln Ala Leu Asn Cys Gly Ser Arg Tyr Ser His Gln His
            20                  25                  30
Arg His Leu Arg Arg Val Phe Gly Tyr Ala Arg Pro Ser Asp Tyr Ala
        35                  40                  45
Val Ala Gly Gly Met Ala Ala Ala Ser Pro Leu Ala Phe Trp Ala Met
    50                  55                  60
Glu Arg Val Ser Pro Ser His Val Gly Arg Gly Gly Phe Ala Pro Val
65                  70                  75                  80
Met Arg Leu Ala Thr Ala Ile Gly Leu Ile Gly Gly Leu His Ile Leu
                85                  90                  95
Tyr Gln Arg Ser Cys Ser Thr Ser Thr His
            100                 105
```

<210> 27636
<211> 503
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (28)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27636

```
Thr Glu Gln Ala Ala Leu Ser Ser Ser Pro Leu Gln Ile Ala Ser Trp
1               5                  10                  15
Asn Pro Ser Leu Cys Pro Ser Ile Ser Leu Glu Xaa Tyr Leu Ser Ile
            20                  25                  30
Leu Lys Gln Val Ser His Leu Leu Gly Thr Asn Pro Val Ser Thr Val
        35                  40                  45
Gln His Lys Lys His Cys Phe Leu Arg Ser Thr Ser Ser Ser Leu Ala
    50                  55                  60
Val Val Ser Glu Thr Tyr Leu Ser Ser Lys Val Ala His Val Pro Ala
65                  70                  75                  80
Ile His Thr His Thr Glu Tyr Arg Ser Gly Gly Arg Leu Ser Leu Cys
                85                  90                  95
Leu His Gly Glu Thr His Arg His Asn His Ser Ala Val Arg His Pro
            100                 105                 110
Gln Asn Thr Gln His Arg Arg Lys His Asp Val Arg Arg His Gly Val
        115                 120                 125
Asp Leu Arg Arg Asp Leu Pro Ala Pro Arg Phe Ala Val Ser Asp Gln
    130                 135                 140
Cys Leu Ser Ser Phe Arg Ser Val Val Arg Leu Thr Tyr Leu Ser Thr
145                 150                 155                 160
Asn Ser Ser Ile Arg Ser Ile Ser Asn Ser Ser Ser Gly Pro Val Asp
                165                 170                 175
Leu Gly Asp Asp Arg Ile Leu Pro Pro Leu Pro Arg Ala Glu Pro Leu
            180                 185                 190
Pro Arg Gly Pro Phe Asn Pro Phe Thr Ser Asn Ile Phe Ala Pro Ser
        195                 200                 205
Pro Pro Ser Pro His Asp Thr Ile Pro Ala Lys Ser Ser Trp Pro Val
    210                 215                 220
Ser Glu His Ile Val Thr Pro Pro Ser Pro Ala Asn Ser Ala Asp Ser
225                 230                 235                 240
```

```
Ser Trp Pro Asp Ser Leu Thr Pro Arg Lys Ala Phe Asp Trp Ser Gln
                245                 250                 255
Glu Leu Ser Pro Ala Asp Leu Leu Ser Leu Ile Ala Pro Lys Asn Ile
            260                 265                 270
Ser Arg Lys Pro Pro Leu Gln Gln Leu Cys Gly Arg Lys Arg Lys Gly
        275                 280                 285
Ser Met Ile Ser Ala Asp Val Asp Asp Gln Arg Glu Lys His Arg Ile
    290                 295                 300
Ala Glu Gly Asn Arg Arg Lys Asn Leu Ser Gln Leu His Arg Glu Leu
305                 310                 315                 320
Asp Ser Arg Ile His Asp Phe Phe Leu Glu Arg Ala Gly Trp Asn Pro
                325                 330                 335
Ala Lys Ser Leu Pro Glu Ser Lys Glu His Ile Val Gln Gly Ala Ile
            340                 345                 350
Phe Leu Ile Asp Phe Met Leu Leu Ile Ile Val His Leu Ile Arg Gln
        355                 360                 365
Glu Asn Glu Met Pro Arg Gln Leu Ser Glu Lys Leu Gln Pro Gln Ile
    370                 375                 380
Arg Cys Met Gln Leu Gln Gln Leu Val Ser Asn Leu Gln Gln Gln Gln
385                 390                 395                 400
Gln Thr Ala Gln Gln Gln Ile Lys Val Leu Lys Gln Glu Asn Gln Leu
                405                 410                 415
Leu Glu Glu Arg Asn Gln Ala Leu Glu Phe Gln Leu Lys Ser Tyr Glu
            420                 425                 430
His Met Phe Arg Ser Pro Lys Ser Glu Gln Thr Ser Pro Arg Pro Leu
        435                 440                 445
Ala Leu Val Pro Glu Ala Lys Thr Gln Asn Val Leu Pro Gly Leu Arg
    450                 455                 460
Val Leu Cys Asp Gly Ile Ala Ala Pro Ser Ala Ala Pro Glu Pro Leu
465                 470                 475                 480
His Pro Gly Ser Ser His Gly Gln Ser Phe Gly Arg Leu His His Gly
                485                 490                 495
Gly Arg Arg Ile Arg Ala Lys
            500
```

<210> 27637
<211> 310
<212> PRT
<213> A.fumigatus

<400> 27637

```
Arg Gly Ser Gly Pro Leu Arg Gly Glu Asp Ile Gly Asp Glu Glu Asp
1               5                   10                  15
Asp Asp Asp Ser Asp Asp Asp Asp Asp Asp Asp Asp Asp Asp Asn Ser
            20                  25                  30
Leu Ser Arg Phe Ile Val Asp Asp Glu Asp Asp Ser Ser Ser Val Arg
        35                  40                  45
Lys Ser Lys Thr Lys Lys Gly Lys Lys Ala Lys Lys Thr Lys Lys Ser
    50                  55                  60
Leu Ala Glu Leu Lys Lys Glu Ala Ser Lys Asn Ile Lys Ser Lys Gln
65                  70                  75                  80
Lys Tyr Leu Arg Arg Leu Glu Lys Thr Trp Val Thr Ser Ala Lys Ile
                85                  90                  95
Glu Lys Thr Leu Glu Ile Leu Gln Glu Ile Gln Asp Arg Glu Asp Ser
            100                 105                 110
Glu Lys Thr Ile Ile Phe Ser Gln Phe Thr Ala Leu Leu Asp Leu Leu
```

```
        115                 120                 125
Glu Val Pro Ile Val Arg Arg Gly Trp Gly Tyr Arg Arg Tyr Asp Gly
    130                 135                 140
Ser Met Arg Pro Gly Asp Arg Asn Ala Ala Val Leu Glu Phe Thr Asp
145                 150                 155                 160
Asn Pro Asp Cys Lys Ile Met Leu Val Ser Leu Lys Ala Gly Asn Ala
                165                 170                 175
Gly Leu Asn Leu Val Ala Ala Ser Gln Val Ile Ile Phe Asp Pro Phe
            180                 185                 190
Trp Asn Pro Tyr Val Glu Asp Gln Ala Ile Asp Arg Ala His Arg Ile
        195                 200                 205
Gly Gln Met Arg Gln Val His Ile His Arg Ile Leu Val Gln Lys Thr
    210                 215                 220
Val Glu Asp Arg Ile Leu Glu Leu Gln Glu Lys Lys Arg Glu Ile Ile
225                 230                 235                 240
Asp Gly Ala Leu Asp Glu Lys Ala Gln Lys Lys Val Ser Arg Leu Gly
                245                 250                 255
Thr Gln Glu Leu Ala Tyr Leu Phe Val Arg Glu Ser Ile Pro Ser Ser
            260                 265                 270
Leu Asn Lys Arg Leu Thr Glu Phe Ser His Arg Ala Phe Gly Asn Gly
        275                 280                 285
Ser Leu Ser Phe Asp Met Arg Gly Met Gly Leu His His Gly Ala Gly
    290                 295                 300
Arg Ile Arg Gln Gly Gln
305                 310
```

<210> 27638
<211> 412
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (258)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 27638
Gln Leu Leu Arg Leu Ser Ser Ile Ser Thr Gly Val His Gln Thr Asn
1               5                   10                  15
His His Asn Gly Gly Thr Gly Ala Thr Asn Ile Arg Pro Ala Pro Thr
            20                  25                  30
Ser Val Asn Val Glu Thr Gly Cys Thr Ala Leu Gly His Leu Arg Gln
        35                  40                  45
Pro Thr Gln Leu Pro Gln Pro Leu Ser Leu Phe Ser Asn Ile Ser Ser
    50                  55                  60
Leu Ala Phe Glu Asp Val Ile Pro Asn Thr Asn Thr Tyr Ser Val Ser
65                  70                  75                  80
Gln Ser Thr Asp Gly Ser Asp Ser Ser Ser Trp Arg Asp Thr Lys Phe
                85                  90                  95
Arg Ala Tyr Glu Val His Gln Gln Thr Ser Lys Ser Asn Ala Asp Gln
            100                 105                 110
Val Glu Leu Ser Gln Gly Val Pro Tyr Gly Ser Ser Arg Gly Val Thr
        115                 120                 125
Thr Thr Gly Gly Thr Arg Ala Gln Gly His Asn Ile Pro Ile Thr Arg
    130                 135                 140
Ser Lys Gly Ile Pro Asp Ser Ser Leu Pro Ser Asp Arg Arg Phe Val
```

```
145                 150                 155                 160
Leu Gln Ile Pro Ala Thr Ser Thr Met Gln Gly Thr Glu His Met Asn
                165                 170                 175
Val Glu Leu Gly Ala His Ser Pro Ser Ala Ala Gly Leu Gly Gln Ala
            180                 185                 190
Ser Ile Leu Pro Ser Pro Ser Ser Arg Lys Gln Pro Ser Ser Thr Gln
        195                 200                 205
Arg Val Gly Leu Thr Ala Gly Val Leu Gly Gly Leu Ser Met Thr Phe
    210                 215                 220
Thr Pro Asp Pro Ser Leu Val Gly Gln Ser Gly Val Lys Ser Ile Ile
225                 230                 235                 240
Asn Leu Ser Leu Val Lys Thr Gly Ser Gly Ser Leu Gln Ile Thr Thr
                245                 250                 255
Pro Xaa Asp Asn Ala Tyr Phe Phe Leu Lys Asp Arg Val Val Ala Ser
            260                 265                 270
Glu Ser Thr Ala Ile Val Gly Thr Leu Ser Ala Glu Tyr Ser Val Asn
        275                 280                 285
Ile Ala Thr Asp Ala Asp Lys Pro Val Gln Thr Asp Phe Leu Val Pro
    290                 295                 300
Gln Gly His Ile Thr Thr Pro Leu Leu Gln Ser Leu Gln Arg Leu Thr
305                 310                 315                 320
Thr Ala His Ser Gln Gln Leu His Ile Thr Val Thr Thr Ser Thr His
                325                 330                 335
Arg Ser Tyr Ser Gly Ser Ile Ser Ser Ser Ala Ser Asp Gln Leu Asp
            340                 345                 350
Lys Gly Met Ser Gly Arg Ala Ile Gly Val Met Val Gly Ala Val Ala
        355                 360                 365
Gly Gly Thr Cys Gly Phe Leu Gly Ile Phe Leu Ile Ala Val Arg His
    370                 375                 380
Arg Lys Arg Lys Arg Arg Arg Ile Trp Ile Ser Asn Gln Phe Trp Glu
385                 390                 395                 400
Asp Pro Asn Arg Ser Tyr Ile Ser Phe Gly Ser Thr
                405                 410
```

<210> 27639
<211> 158
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27639

```
Val Phe Asp Leu Xaa Gly Leu Arg Ala Ser Leu Thr Ala Phe Ile Asp
1               5                   10                  15
Gln Ile Asp Ile Gly His Gly Gln Ser Gly Lys Asn Phe Tyr Tyr Lys
            20                  25                  30
Thr Lys His Phe Val Gly Pro Leu Gln Gln Leu Ala Leu Gln Glu Lys
        35                  40                  45
Val Ser Gly Asp Val Glu Leu Phe Tyr Pro Asp Gly Pro Trp Pro Ala
    50                  55                  60
Pro Gly Gly Glu Glu Leu Asp Val Arg Ala Trp Gly Phe Gly Asp Phe
65                  70                  75                  80
Glu His Gly Leu Ile Lys Gly Leu Asp Ile Ser Ile Leu Lys Ile Leu
```

```
                85                  90                  95
Asp Ile Leu Asp Leu Tyr Gly Pro Phe Ser Gly Val Met Gly Phe Ser
            100                 105                 110
Thr Gly Ala Ala Val Ala Ala Ile Ile Ala Ser Ile Leu Glu Arg His
        115                 120                 125
Glu Arg Ile Gln Met Phe Ile Arg Gly His Ile His Glu Gly Lys Leu
    130                 135                 140
Val Gln Val Phe Arg Asp Phe Gly Lys Leu Thr Asp Ala Ile
145                 150                 155
```

<210> 27640
<211> 106
<212> PRT
<213> A.fumigatus

<400> 27640

```
Ile Ala His Pro Pro Leu Gln Phe Val Val Cys Phe Ser Gly Phe Arg
1               5                   10                  15
Leu Gly Asn Leu Gln Tyr Gly Ser Leu Tyr Ser Pro Lys Leu Glu Thr
            20                  25                  30
Pro Ser Leu His Leu Ile Gly Val Leu Asp Ala Met Ile Ala Gly His
        35                  40                  45
Leu Thr Glu Asp Phe Ser Ala Gln Phe Met Ser Pro Lys Ile Gln Arg
    50                  55                  60
Phe Phe Gly Ala His Tyr Val Pro Lys Thr Asp Arg Thr Asn Gln Ala
65                  70                  75                  80
Val Gly Lys Phe Ile Leu Tyr Trp Cys Arg Gln Ser Leu Ser Arg Ser
                85                  90                  95
Arg Thr Tyr Leu Leu Pro Trp Asn Ser Ile
            100                 105
```

<210> 27641
<211> 198
<212> PRT
<213> A.fumigatus

<400> 27641

```
Arg Ser Gly Ala Ala Pro Ser Gly Ala Ile Pro Ser Gly Ala Ile Pro
1               5                   10                  15
Thr Gly Ala Val Pro Ser Gly Ala Pro Asn Gly Phe Gly Gly Phe Gly
            20                  25                  30
Gln Gly Gly His Gly Gly Pro Gly Gly Pro Gly Glu Glu Gly Ser Gly
        35                  40                  45
Pro Ser Pro Thr Gly Ala Val Pro Ser Gly Ala Ile Pro Ser Gly Ala
    50                  55                  60
Ala Pro Ser Gly Ala Val Gly Gly Phe Asp Gly Phe Gly Gln Ala Ser
65                  70                  75                  80
Glu Asn Ser Gly Asn Ala Gln Phe Gln Ser Ser Gly Thr Ser Pro Phe
                85                  90                  95
Gly Ala Ser His Ser Gly Ser Ala Ser Gly His Gln Gly Gly Arg His
            100                 105                 110
Gly Gly Asp His Arg Gly His His Gly Asn Gly Ser Gly Ala Ile Pro
        115                 120                 125
Ser Asp Ala Ala Pro Ser Gly Ala Ala Pro Ser Gly Ala Ala Gly Gly
    130                 135                 140
Phe Pro Gly Phe Gly Gln Gly Gly Glu Gly Ser Gly Pro Ser Pro Thr
```

```
145                 150                 155                 160
Gly Ala Val Pro Ser Gly Ala Ala Gly Phe Gly Gly Gln Gly His Gly
                165                 170                 175
Gln Gly Gln Gly Ser Phe Pro Thr Gly Val Ala Pro Ser Gly Val Pro
            180                 185                 190
Ser Ala Gln Pro Thr Ala
        195
```

<210> 27642
<211> 129
<212> PRT
<213> A.fumigatus

<400> 27642

```
Glu Asp Leu Phe Thr Ala Phe Gly Ala Phe Gln Ser Tyr Tyr Gln Ser
1               5                   10                  15
Asp Leu Leu His Thr Ser Ser Pro Ser Arg Ile Ala Trp Val Gly Thr
            20                  25                  30
Val Asn Ala Phe Phe Leu Ile Ser Thr Gly Val Ile Ala Gly Pro Leu
        35                  40                  45
Phe Asp Arg Gly Tyr Leu His His Leu Met Ile Ala Gly Cys Phe Leu
    50                  55                  60
Thr Thr Phe Gly Leu Met Met Leu Ser Leu Ser Thr Gln Tyr Tyr Gln
65                  70                  75                  80
Val Phe Leu Ser Gln Gly Val Cys Cys Gly Leu Gly Ser Gly Leu Ile
                85                  90                  95
Tyr Val Pro Ala Leu Ser Leu Val Ser Thr Arg Phe Thr Thr Arg Arg
            100                 105                 110
Gly Ile Ala Val Gly Leu Val Thr Ser Gly Ala Ser Val Gly Met Leu
        115                 120                 125
His
```

<210> 27643
<211> 266
<212> PRT
<213> A.fumigatus

<400> 27643

```
Ala Asp Glu Asn His Ser Thr Pro Gly Gly Val Leu Phe Pro Ile Ile
1               5                   10                  15
Phe Ile Arg Leu Gln Pro Arg Ile Gly Phe Pro Trp Thr Val Arg Ser
            20                  25                  30
Leu Gly Phe Ile Gln Leu Ala Cys Ser Cys Ile Ala Val Pro Leu Leu
        35                  40                  45
Met Val Thr Thr Lys Thr Arg Arg Ser Pro Pro Arg Lys Leu Ile His
    50                  55                  60
Trp His Ala Met Lys Glu Trp Ser Phe Asn Ala Tyr Gly Ile Ala Asn
65                  70                  75                  80
Phe Leu Met Phe Met Ala Tyr Phe Ile Pro Leu Phe Tyr Val Pro Ala
                85                  90                  95
Phe Ala Ser Thr Ala Leu Arg Ser Ser Thr Asp Leu Ser Phe Tyr Met
            100                 105                 110
Val Ser Ile Leu Asn Ala Gly Ser Ala Phe Gly Arg Ile Gly Ser Ser
        115                 120                 125
Leu Leu Thr Tyr Arg Leu Gly Ala Ser Ser Ile Leu Leu Ala Ser Val
```

```
    130                 135                 140
Val Ala Ser Ala Val Leu Leu Phe Gly Trp Ile Gly Ile His Ser Val
145                 150                 155                 160
Ala Ser Phe Val Val Phe Cys Val Leu Phe Gly Ile Phe Ser Gly Val
                165                 170                 175
Leu Ile Ser Ala Asn Pro Leu Val Ile Ala His Pro Val Val Ser Pro
            180                 185                 190
Thr Pro Ser Val Ile Gly Thr Arg Met Gly Met Gln Trp Phe Ala Thr
        195                 200                 205
Ser Leu Gly Val Leu Ile Gly Ala Pro Ile Ala Gly Val Ile Glu Gly
    210                 215                 220
His Gly Gly Asp Asn Gly Phe Leu Gly Leu Gln Ile Phe Ser Gly Ala
225                 230                 235                 240
Gly Met Ala Ala Gly Ala Ala Phe Leu Leu Val Pro Leu Met Ala Val
                245                 250                 255
Trp Arg His Asp Asn Ile Gln Asn Lys Ala
            260                 265
```

<210> 27644
<211> 134
<212> PRT
<213> A.fumigatus

<400> 27644

```
His Gly Ile Trp Asp Ala Asp Ser Pro Arg Pro Arg Leu Ser Ser Leu
1               5                   10                  15
Leu Phe Ala Phe Leu Pro Ala Leu Ala Ala Ala His Arg Trp Arg Leu
            20                  25                  30
Glu Glu Ala Pro Ser Gly Lys Lys Trp Met Gln Pro Pro Arg Asp Ser
        35                  40                  45
Ser Phe Ala Asn Pro Ser Cys Ser Asp Met Trp Ser Ala Glu Glu Arg
    50                  55                  60
Gly Lys Ala Met Gly Val Tyr Thr Leu Gly Pro Leu Leu Gly Pro Val
65                  70                  75                  80
Ile Gly Pro Ile Ala Gly Gly Phe Ile Ala Gln Tyr Ser Thr Trp Arg
                85                  90                  95
Trp Val Leu Trp Ala Thr Ser Ala Ala Ala Val Gly Ile Gln Val Val
            100                 105                 110
Gly Leu Ile Trp Leu Arg Glu Cys His Pro Ala Thr Ser Ser Pro Arg
        115                 120                 125
Gly Arg Arg Tyr Ala Tyr
    130
```

<210> 27645
<211> 186
<212> PRT
<213> A.fumigatus

<400> 27645

```
Glu Ser Val Asp Val Ser Pro Pro Lys Met Asp Asp Lys Thr Pro Phe
1               5                   10                  15
Ala Ser Cys Glu Gly Ile Thr Pro Ser Pro Gln Lys Glu Asp Leu Glu
            20                  25                  30
Ala Ala Lys Glu Thr Ile Pro Thr Lys Pro Ser Asn Thr Gly Pro Asp
        35                  40                  45
Leu Val Thr Trp Ser Gly Pro Asn Asp Thr Glu Asn Pro Gln Asn Trp
```

```
    50                  55                  60
Pro Asn Ser Leu Lys Trp Lys Asn Thr Trp Ala Ile Ser Leu Phe Val
65                  70                  75                  80
Phe Ile Ser Pro Val Ser Ser Ser Met Ile Ala Pro Ala Met Gln Asp
                85                  90                  95
Leu Gly Lys Ser Leu Gly Met Asn Thr Glu Ile Glu Val Tyr Leu Ser
            100                 105                 110
Met Ala Ile Phe Ile Leu Ala Tyr Ala Ile Gly Pro Ile Phe Phe Gly
        115                 120                 125
Pro Ala Ser Glu Leu Tyr Gly Arg Val Arg Leu Leu Gln Val Ser Asn
    130                 135                 140
Ala Trp Tyr Leu Ala Trp Asn Leu Gly Cys Gly Phe Ala Lys Thr Lys
145                 150                 155                 160
Ala Gln Leu Phe Ala Phe Arg Phe Leu Ala Gly Ile Gly Gly Ser Ala
                165                 170                 175
Pro Leu Ala Ile Gly Gly Gly Ala Ile Arg
            180                 185
```

<210> 27646
<211> 84
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (37)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 27646
Ile Cys Gln Ala Ser Arg Ile Ser Leu Thr Ile Leu Asn Leu Ile Lys
1               5                   10                  15
Ser Ser His Cys Leu Trp Arg Thr Lys Ala Leu Cys His His Gly Glu
            20                  25                  30
Ser Phe Arg Val Xaa Lys Gly Ala Phe Thr Phe Ile Asp Ile Ala Phe
        35                  40                  45
Cys Ser Phe Leu Thr Lys Pro Tyr Val Ser Arg Ile Pro Cys Asn Thr
    50                  55                  60
Thr Val Gln Met Ala Ser Gln Val Asp Gly Lys Tyr Ala Trp Ile Val
65                  70                  75                  80
Val Ala Thr Val
```

<210> 27647
<211> 303
<212> PRT
<213> A.fumigatus

```
<400> 27647
Ile Ser Leu Ser Ser Ile Thr Pro Gln Pro Phe Cys Val Ser Gly Ser
1               5                   10                  15
Leu Gln Lys Leu Ala Val Met Ala Pro Phe Gln Gly Ser Val Ser Val
            20                  25                  30
Thr Tyr Ile Thr Thr Ala Thr Ala Ile Ile Asn Ile Asp Gly Val Arg
        35                  40                  45
Phe Leu Thr Asp Pro Val Phe Cys Pro Ala Gly Ser Glu Tyr Val Tyr
    50                  55                  60
```

```
Asp Gly Trp Ala Lys Ala Asn Trp Lys Glu Trp Gly Phe Gln Asn Arg
65                  70                  75                  80
Pro Pro Thr Ser Val Leu Arg Ser Phe Asp Gly Pro Ala Leu Gln Leu
                85                  90                  95
His Asp Ile Pro Pro Ile Asp Ala Ile Leu Leu Ser His Glu Asp His
            100                 105                 110
Val Asp Asn Leu Asp Pro Phe Gly Arg Gln Leu Leu Asp Gly Arg Arg
        115                 120                 125
Val Tyr Thr Thr Pro Asp Gly Ala His Asn Leu Gln Pro Arg Pro Gly
    130                 135                 140
Val Val Gly Leu Lys Pro Trp Gln Thr Val Ser Ala Gln Ile Gly Gly
145                 150                 155                 160
Lys Asp Phe Arg Ile Thr Gly Thr Pro Cys Lys His Phe Pro Gly Gly
                165                 170                 175
Glu Val Thr Gly Phe Ile Val Glu Cys Glu Ser Phe Gly Val Asp Glu
            180                 185                 190
Thr Gly Leu Pro Asn Val Val Tyr Phe Ser Gly Asp Thr Val Trp Ile
        195                 200                 205
Asp Glu Leu Val Glu Ile Lys Asn Lys Trp His Val Ser Val Ala Val
    210                 215                 220
Leu Asn Leu Gly Asn Ala Leu Phe Glu Tyr Pro Arg Gly Met Leu Gln
225                 230                 235                 240
Ile Thr Phe Asp Gly Lys Gln Ala Ala His Phe Met Arg Ala Thr Gly
                245                 250                 255
Ala Asp Ile Met Val Pro Ile His Phe Glu Ser Trp Glu His Phe Thr
            260                 265                 270
Glu His Arg Glu Asp Leu Gln Lys Val Phe Asp Lys Glu Gly Ile Ala
        275                 280                 285
Glu Asn Val Cys Trp Leu Val Pro Gly Val Glu Lys Arg Val Ile
    290                 295                 300
```

<210> 27648
<211> 60
<212> PRT
<213> A.fumigatus

<400> 27648

```
Ser His Gln Ile Lys Pro Cys Pro Arg Thr Thr Thr Ala Ile Gly Lys
1               5                   10                  15
Asn Leu His Ala Pro Leu Ser Glu His His Ile His His Ile Ser Gln
            20                  25                  30
Leu Leu Ser Ser Asn Leu Pro Leu Ala Glu Ile Gln Phe Arg Ser Ser
        35                  40                  45
Arg Leu Ser Asn Pro Ala Pro Leu Ser Leu Ser Ser
    50                  55                  60
```

<210> 27649
<211> 192
<212> PRT
<213> A.fumigatus

<400> 27649

```
Leu Thr Ser Pro Pro Pro Arg Arg Ser Ser Thr Leu Met Gly Cys Gly
1               5                   10                  15
Ser Ser Gln Thr Pro Phe Ser Val Leu Leu Ala Arg Asn Met Ser Thr
            20                  25                  30
```

```
Met Val Gly Pro Arg Pro Thr Gly Arg Asn Gly Ala Ser Lys Thr Val
        35                  40                  45
His Arg Pro Leu Ser Cys Ala Ala Ser Met Val Leu Pro Ser Ser Cys
    50                  55                  60
Thr Thr Ser Pro Arg Ser Met Pro Ser Phe Ser Ala Thr Lys Thr Met
65                  70                  75                  80
Leu Thr Ile Ser Thr Pro Leu Val Ala Ser Ser Ser Met Val Ala Val
                85                  90                  95
Ser Thr Pro Pro Pro Met Val Arg Thr Ile Ser Ser His Ala Leu Val
            100                 105                 110
Ser Ser Ala Ser Ser Pro Gly Arg Leu Ser Gln Pro Arg Ser Val Ala
        115                 120                 125
Arg Thr Ser Gly Leu Leu Val Arg Pro Ala Ser Thr Ser Pro Ala Ala
    130                 135                 140
Arg Ser Gln Ala Ser Leu Trp Asn Val Ser Pro Ser Ala Ser Met Arg
145                 150                 155                 160
Pro Ala Phe Pro Thr Ser Ser Ile Ser Pro Ala Thr Arg Cys Gly Ser
                165                 170                 175
Met Ser Trp Trp Lys Ser Arg Thr Ser Gly Met Tyr Leu Trp Arg Phe
            180                 185                 190
```

<210> 27650
<211> 122
<212> PRT
<213> A.fumigatus

```
<400> 27650
Thr Gln Ala Trp Val Asp Met Tyr His Lys Leu Asp Pro Lys Glu His
1               5                   10                  15
Pro Ser Ser Ile Met Thr Ala Phe Asp Ser His Gly Lys Gln Val Gly
            20                  25                  30
Trp Thr Leu Met Leu Ser Pro Ser Ser Pro Val Leu Gln Gln Asn Trp
        35                  40                  45
Ala Phe Pro Pro Leu Cys Gly Pro Lys Thr Gly Leu Ile Gly Cys Val
    50                  55                  60
Gly Val Asp Glu Glu Tyr Arg Lys Ala Gly Val Gly Leu Ala Leu Leu
65                  70                  75                  80
Cys His Ala Ile Glu Asp Met Lys Gln Arg Gly Val Glu Gly Val Phe
                85                  90                  95
Val Asp Trp Val Ser Leu Glu Gly Trp Tyr Glu Gln Leu Gly Phe Lys
            100                 105                 110
Ile Trp Arg Ser Tyr Arg Thr Gly Gln Met
        115                 120
```

<210> 27651
<211> 184
<212> PRT
<213> A.fumigatus

```
<400> 27651
Ser Ser Thr Val Val Ala Gln Ala Gly Ala Ser Asn Thr Glu Ala Leu
1               5                   10                  15
Phe Ala Ser Trp Gly Phe Gly Leu Val Asn Phe Leu Phe Ala Phe Pro
            20                  25                  30
Ala Val Phe Thr Ile Asp Thr Phe Gly Arg Arg Thr Leu Leu Leu Phe
        35                  40                  45
```

```
Thr Phe Pro Gln Met Ala Trp Thr Leu Leu Ala Ala Ala Phe Cys Phe
    50                  55                  60
Tyr Ile Pro Glu Glu Ser Lys Ala His Leu Ala Cys Ile Ala Leu Phe
65                  70                  75                  80
Val Phe Leu Phe Ala Ala Phe Tyr Ser Pro Gly Glu Gly Pro Val Pro
                85                  90                  95
Phe Thr Tyr Ser Ala Glu Val Phe Pro Leu Ser His Arg Gly Lys Cys
            100                 105                 110
Ala Phe Cys Ile Leu His Leu Leu Trp Asp Ser Ser Ala Asn Tyr Cys
        115                 120                 125
His Arg Gly Trp Asn Val Leu Gly Gly Arg Tyr Leu Pro Trp Leu Gly
    130                 135                 140
Cys Ser Phe Val His His Val Pro Thr His Ala Ser Cys Asp Asp Pro
145                 150                 155                 160
His Trp Arg Leu Leu Phe Leu Cys Val Ser Ala Cys Pro Ile Ser Ser
                165                 170                 175
Leu Cys Phe Ser Asp Val Trp Ala
            180
```

<210> 27652
<211> 174
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27652

```
Thr Leu Ser Arg Xaa Asn His Arg Arg Leu Ser Leu Lys Arg Val Pro
1               5                   10                  15
Ala Ile Pro Lys Pro Phe Leu Pro Leu Gly Ala Ser Val Trp Ser Thr
            20                  25                  30
Ser Phe Ser Leu Ser Pro Gln Cys Ser Pro Ser Thr Leu Leu Asp Val
        35                  40                  45
Ala Pro Phe Phe Phe Ser Leu Ser Leu Arg Trp Leu Gly Leu Cys Ser
    50                  55                  60
Gln Leu Pro Ser Ala Phe Ile Phe Arg Arg Asn Pro Lys Leu Ile Trp
65                  70                  75                  80
His Val Ser His Ser Ser Cys Ser Cys Leu Arg His Ser Thr Leu Arg
                85                  90                  95
Ala Lys Asp Pro Phe His Ser Leu Ile Leu Gln Arg Phe Ser Leu Ser
            100                 105                 110
Pro Ile Val Val Ser Val His Phe Ala Phe Cys Ile Phe Cys Gly Thr
        115                 120                 125
Arg Gln Leu Ile Thr Val Thr Glu Val Gly Met Ser Trp Ala Val Ala
    130                 135                 140
Thr Cys Leu Gly Trp Ala Ala Val Leu Ser Ile Thr Phe Pro Arg Met
145                 150                 155                 160
Leu Ala Val Met Thr Pro Thr Gly Ala Phe Cys Phe Tyr Ala
                165                 170
```

<210> 27653
<211> 95
<212> PRT

<213> A.fumigatus

<400> 27653
Pro Met Cys Ser Gly Leu Asn Val Thr Ala Leu Val Met Ile Phe Leu
1 5 10 15
Trp Val Pro Glu Thr Lys Gln Arg Thr Leu Glu Glu Leu Asp Tyr Ile
20 25 30
Phe Ala Val Pro Thr Thr Lys His Met His Tyr Gln Cys Phe Lys Val
35 40 45
Leu Pro Trp Trp Ile Gln Arg Tyr Ile Phe Arg Arg Asp Val Lys Leu
50 55 60
Glu Pro Leu Tyr Lys Leu Asp Leu Thr Ala His Asp Glu Lys Val Ala
65 70 75 80
Ser Arg Glu Gly Gly Gly Gln Val Ile Ser Pro Asn Thr Glu Met
85 90 95

<210> 27654
<211> 85
<212> PRT
<213> A.fumigatus

<400> 27654
Phe Arg Leu Gln Ala Gly Leu His Leu Ala Gly Ser Ile Ala Ala Pro
1 5 10 15
Asp Leu Glu Pro Glu Leu Leu Val Pro Ser Leu Lys Thr Asp Pro Ile
20 25 30
His Lys Asp Ser Phe Asp Ser Thr Leu Leu His Val Leu Asp Arg Val
35 40 45
Ala Glu Glu Ser Lys Ser Asp Ser Cys Leu Thr Ile Phe Phe Ile Asp
50 55 60
Ser Asn Ala Ala Asp Gln Pro Gly Leu Gly Ala Thr Glu Gly Trp Glu
65 70 75 80
Gly Pro Val Leu Leu
85

<210> 27655
<211> 82
<212> PRT
<213> A.fumigatus

<400> 27655
Lys Thr Met Val Ser Val Ile Leu Cys Val Phe Leu Leu Ser Tyr Val
1 5 10 15
Tyr Gly Glu Gly Lys Ser Asn Tyr Phe Lys Gly Ser Ile Leu Val Leu
20 25 30
Thr Tyr Leu Val Val Val Ile Gly Phe Tyr Leu Ala Gly Tyr Ser Asn
35 40 45
Val Asp Thr Met Gly Val Asp Arg Phe Asp Thr Leu Ala Leu Gly Pro
50 55 60
Ile Arg Ser Glu Asn Phe His Thr Ile Gly Gln Pro Thr Arg Gly Met
65 70 75 80
Ala Phe

<210> 27656
<211> 230

<212> PRT
<213> A.fumigatus

<400> 27656
Ala Phe Pro Thr Arg Ala Ile Phe Lys Cys Arg Ser Arg Asn Lys Thr
1 5 10 15
Lys Tyr Phe Thr Asp Asn Phe Glu Arg Asn Ile Gly Lys Glu Ile Gly
20 25 30
Ser Gly Thr Gly Ser Pro Gln Gly Phe His Thr Trp Val Pro His Val
35 40 45
Ile Phe Met Gly Asn Phe Trp Gly Asn Arg Ser Pro Ile Ala Asp Pro
50 55 60
Asn Met Lys Gly Ser Ile Ile Gly Met Ala Asn Asp Lys Thr Val Asp
65 70 75 80
Gly Leu Ala Ile Tyr Tyr Tyr Ala Thr Leu Glu Phe Ile Ala Leu Gln
85 90 95
Thr Arg Gln Ile Val Glu Thr Met Asn Lys Ala Gly His Ser Ile Thr
100 105 110
Ser Ile Phe Met Ser Gly Ser Gln Cys Gln Asn Asp Val Leu Val Arg
115 120 125
Leu Ile Ala Ser Ala Cys Asp Met Pro Val Leu Ile Pro Arg Tyr Ile
130 135 140
His Ala Ala Val Cys His Gly Ala Ala Met Leu Gly Ala Lys Ala Ala
145 150 155 160
Ser Ala Asp Ala Glu Gly Lys Thr Glu Asp Leu Trp Glu Ile Met Asp
165 170 175
Arg Met Ser Lys Pro Gly Lys Lys Val Val Pro Thr Glu Asp Lys Asn
180 185 190
Glu Lys Ala Leu Leu Asn Val Lys Tyr Lys Val Phe Leu Glu Gln Cys
195 200 205
Tyr Lys Gln Leu Glu Tyr Arg Lys Leu Val Asp Glu Thr Val Ser Ser
210 215 220
Trp Lys Thr Gly Asp Thr
225 230

<210> 27657
<211> 70
<212> PRT
<213> A.fumigatus

<400> 27657
Ala Ile Gly Ala Ser Lys Ser Phe Lys Leu Leu Arg Ala Tyr His Arg
1 5 10 15
Lys Pro Phe Ile Tyr Ile Tyr Asp Ser Asn Gly Val Glu Glu Tyr Pro
20 25 30
Pro Ser Arg Ser Ser Ile Gln Tyr Val Asn Pro Gln Asn Lys Leu Ser
35 40 45
Pro Gln Leu Thr Ile Pro Pro Leu Gly Thr Tyr Glu Thr Thr Thr Met
50 55 60
Leu Ser Asn Thr Pro Gly
65 70

<210> 27658
<211> 65
<212> PRT
<213> A.fumigatus

<400> 27658
Leu Pro Val Pro Gly Ser Ser Gln Arg Phe Ile Asp Lys Ser Arg Ser
1 5 10 15
Leu Thr Ala Asp Cys Val Ala Tyr Asp Leu Glu Asp Ser Val Thr Pro
20 25 30
His Lys Lys Ala Glu Ala Arg Ser Leu Val Arg Arg Ala Leu Asp Leu
35 40 45
Pro Gly Ser Ile Trp His Pro Arg Thr Arg Arg Ser His Gln Leu Gly
50 55 60
Arg
65

<210> 27659
<211> 227
<212> PRT
<213> A.fumigatus

<400> 27659
Leu His Thr Arg Lys Arg Lys Pro Ala Arg Trp Cys Gly Glu Arg Leu
1 5 10 15
Thr Cys Leu Ala Pro Ser Gly Ile Arg Glu Arg Ala Val Arg Ile Asn
20 25 30
Ser Val Asp Ser Gly Leu Ala Leu Ala Asp Leu Thr Glu Val Val Ser
35 40 45
Glu Thr Ser Pro Ser Pro Lys Val Asn Asn Pro Ala Asn Glu Thr Lys
50 55 60
Gln Leu Gln Ser Pro Asn Leu Ser Thr Ile Val Ile Pro Lys Val Asp
65 70 75 80
Ser Ala Ser Asp Leu Thr Phe Val Thr Asp Val Val Ser His Thr Leu
85 90 95
Ser Gln Gln Ala Arg Ser Gln Asp Ala Ala Ser Arg Pro Arg Leu Ser
100 105 110
Leu Leu Ala Leu Val Glu Ser Ala Lys Ser Leu Thr Tyr Leu Thr Gln
115 120 125
Ile Cys Ala Ala Thr Pro Leu Leu Gln Gly Leu Ile Phe Ala Ala Glu
130 135 140
Asp Phe Ala Leu Asp Leu Ser Leu Thr Arg Thr Pro Ser Leu Thr Glu
145 150 155 160
Phe Leu Phe Ala Arg Ser Ala Ile Val Ser Ala Ala Arg Ala Ala Asn
165 170 175
Leu Pro Ser Thr Ile Asp Leu Val Cys Thr Ala Tyr Lys Ser Thr Lys
180 185 190
Ser Asp Gly Ser Pro Pro Ala Ala Leu Glu Glu Glu Cys Arg Gly Gly
195 200 205
Lys Gln Leu Gly Phe His Gly Ser Leu Gln Pro Gly Gly Gln Glu Pro
210 215 220
Arg Ser Ala
225

<210> 27660
<211> 138
<212> PRT
<213> A.fumigatus

<400> 27660

```
Val Ser Gln Leu Leu Glu Arg Leu Ser Val Thr Pro Ser His Ser Phe
1               5                  10                  15
Ser Ser Ala Asn Thr Val His Ser Val Leu Val Phe Ile Leu Thr Leu
            20                  25                  30
Leu Leu Leu Ser Ala Asp Phe Tyr Tyr Leu Lys Asn Ile Ala Gly Arg
        35                  40                  45
Arg Leu Val Gly Leu Arg Trp Trp Asn Glu Val Asn Thr Ala Thr Gly
    50                  55                  60
Asp Ser His Trp Val Phe Glu Ser Ser Asp Pro Ala Thr Arg Thr Ile
65                  70                  75                  80
Ser Ala Thr Asp Lys Arg Phe Phe Trp Leu Ser Leu Tyr Val Thr Leu
                85                  90                  95
Ala Leu Trp Ile Gly Leu Ala Val Leu Ala Ile Val Arg Leu Ser Ser
            100                 105                 110
Val Ile Trp Leu Ser Leu Val Gly Glu Ser Ser Tyr Ala Asp Ile Asp
        115                 120                 125
Ile Asp Cys Cys Ile Ala Lys Val Glu Arg
    130                 135
```

<210> 27661
<211> 515
<212> PRT
<213> A.fumigatus

<400> 27661

```
Asp Glu Asp Pro Arg Glu Arg Met Phe Tyr Asn Ala Leu Ile Lys Phe
1               5                  10                  15
Arg Asn Glu Gln Leu Glu Asn Tyr Gln Gly Gln Pro Leu Glu Tyr Ser
            20                  25                  30
Ala Ser Asp Tyr His His Ile Ser Arg Leu Pro Ala Ser Ser Ala Asn
        35                  40                  45
Arg Arg Lys His Ala Arg Val Gln Gly Gly Ser Arg Arg Gln Gly Gln
    50                  55                  60
Asn Ser Thr Thr Thr Thr Thr Ala Thr Thr Thr Ser Asn Ser Ser Ser
65                  70                  75                  80
Lys Gln Pro Gln Ser Lys Ser Arg Ala Leu Lys Ser Ser Thr Thr Glu
                85                  90                  95
Lys Ser Tyr Asp Pro Phe Arg Ser Pro Arg His Ile Ile Ala Thr Pro
            100                 105                 110
Glu Val Gln Cys Ala Gln Val Thr Ile His Arg Asn Gly Pro Glu Ala
        115                 120                 125
Asn Thr Lys Glu Met Ser Glu Ala Val Pro Asp Leu Asp Asp Asp Met
    130                 135                 140
Lys Glu Glu Glu Val Glu Asp Ile Asp Cys Leu Pro Ser Ser Pro Phe
145                 150                 155                 160
Ser Ile Val Pro Asn Lys Lys Ser Lys Ala Ser Phe Thr Arg Ser Phe
                165                 170                 175
Gln Ser Arg Ala Ser His Ser Ser Ala Arg Arg Val Met Asn Thr Thr
            180                 185                 190
Pro Thr Pro Arg Ser Ala Ser Tyr Lys Arg Asn Val Leu Phe Leu His
        195                 200                 205
His Gln Asn Arg Ser Gln Ala Ser Met Ser Ala Arg Pro Arg Lys Ala
    210                 215                 220
Arg Ala Asn Ala Ser Ser Ile Ser Arg Gln Glu Ser Asp Cys Ser Ile
225                 230                 235                 240
Lys Ser Asp Glu Asp Gly Val Leu Ser Ser Asp Arg Cys Gly Ser Pro
```

```
                245                 250                 255
Leu Leu Pro Val Gln Pro Leu Val Val Arg Gly Ala Gly Ile Thr Ile
            260                 265                 270
Lys Asn Cys Pro Gln Val Lys Arg Val Cys Asp Ala Asp Ile Ile Trp
        275                 280                 285
Arg Asp Glu Ala Arg Lys Val Ser His Glu Leu Ser Gln Ile Cys Glu
    290                 295                 300
Glu Ala Phe Asn Gly Gly Ser Leu Ser Thr Gly Cys Thr Thr Ser Ile
305                 310                 315                 320
Gly Ser Glu Thr Pro Ala Thr Ser Leu Ser Met Val Ser Ala Gly Asp
                325                 330                 335
Ser Gln Asn Gln Ile Thr Gly Ser Asn Ile Lys Ser Asn Gln Pro Ser
            340                 345                 350
Asn Arg Ala Arg Asp Ser Pro Asn Thr Tyr Thr Ala Thr Glu Leu Thr
        355                 360                 365
Glu Thr Arg Arg Lys Leu Ile Gln His Ser Thr Gln Asp Gly Thr Glu
    370                 375                 380
Ser Val Pro Gly Tyr Leu Ser Ala Val Ile Asn His Leu Asp Arg Leu
385                 390                 395                 400
Ile Ala Gln Asp Arg Ile Lys Glu Arg Gly Lys Arg Asp Lys Ser Lys
                405                 410                 415
Glu Asn Gly Asn Ser Thr Tyr Asp Ser Leu Gln Arg Ser Ser Ile Asp
            420                 425                 430
Thr Gly Asn Leu Pro Ile Ile Ser Glu Glu Arg Ser Asn Ser Leu Ala
        435                 440                 445
Glu Ser Glu Met Arg Asn Gly Gln Asp Val Thr Arg His Asn Ser Asp
    450                 455                 460
Ser Ala Ser Ser Ile Gln Thr Lys Arg Gln Ser Gly Asp Gly Lys Ala
465                 470                 475                 480
Thr Ile Arg Met Val Pro Gln Ser Ser Gln Gln Cys Leu Glu Glu Ile
                485                 490                 495
Lys Pro Leu Asn Ile Arg Lys Lys Arg Gln Ala Ser Asn Glu Ser Pro
            500                 505                 510
Gln Pro Arg
        515
```

<210> 27662
<211> 391
<212> PRT
<213> A.fumigatus

<400> 27662

```
Gly Arg Gly Leu Ile Val Asn Val Asp Val Ser Asn Ser Cys Phe Trp
1               5                   10                  15
Ala Arg Thr Ser Phe Met Gly Ala Ala Met Ala Ile Leu Asp Cys Arg
            20                  25                  30
Asp His Gln His Leu Met His Leu Leu Lys Pro Val Ala Asp Gly His
        35                  40                  45
Gly Gly Val Thr Glu Ser Thr Gly Phe Tyr Glu Val His Arg Arg Leu
    50                  55                  60
Arg Lys Leu Gly Val Gln Pro His Tyr Lys Gly Cys Pro Cys Leu Gly
65                  70                  75                  80
Val Asp Phe Ile Val Lys Gly Leu Leu Asn Ala Asn Ala Arg Gln Tyr
                85                  90                  95
Thr Ile Glu Ile Lys Asp Lys Ala Thr Gly Lys Thr Gln Lys Met Ser
            100                 105                 110
```

```
Val Glu Ala Tyr Phe Lys Arg Lys Tyr Asn Leu Thr Leu Asn Tyr Trp
        115                 120                 125
Glu Leu Pro Met Val Glu Met Thr Lys Lys Gly Val Val Tyr Pro Met
    130                 135                 140
Glu Val Leu Thr Ile His Gly Leu His Arg Tyr Pro Trp Lys Leu Asn
145                 150                 155                 160
Glu Tyr Gln Thr Ser Ala Met Ile Lys Tyr Ala Ala Ser Arg Pro Ala
                165                 170                 175
Asp Arg Leu Asn Ser Ile His Lys Ser Lys Ala Met Leu Asp His Ala
            180                 185                 190
Lys Asp Pro Val Leu Asn Thr Phe Gly Leu Ala Ile Asp Asn Asn Met
        195                 200                 205
Ile Arg Thr Lys Ala Arg Leu Leu Pro Ser Pro Asp Ile Gln Phe Gly
    210                 215                 220
Gly Asn Gln Arg Leu Ser Pro Gly Thr Asn Gly Arg Trp Asp Leu Arg
225                 230                 235                 240
Gly Lys Arg Phe Tyr Gln Pro Asn Lys Arg Pro Leu Glu Ala Trp Gly
                245                 250                 255
Val Gly Phe Phe Pro Gly Lys Arg Asn Ala Ile Asn Gln Thr Gln Val
            260                 265                 270
Gln Gln Phe Cys Asp Leu Leu Val Lys Thr Tyr Ala Gly His Gly Gly
        275                 280                 285
Met Ile Lys Asn Arg Pro His Ile Leu Glu Leu Arg Glu Asp Ile Gly
    290                 295                 300
Glu Ala Ile Lys Arg Leu Tyr Asn Thr Thr Gly Gln Arg Phe Gln Lys
305                 310                 315                 320
Asp Pro Gln Leu Leu Leu Ile Ile Val Pro Asp Lys Asn Ser Phe Thr
                325                 330                 335
Tyr Thr Arg Ile Lys Lys Ser Cys Asp Cys Arg Trp Gly Val Pro Ser
            340                 345                 350
Gln Val Leu Gln Ser Gly His Cys Val Lys Leu Asn Pro Gln Tyr Ala
        355                 360                 365
Ser Asn Val Leu Met Lys Val Asn Ala Gln Leu Gly Trp His Gln Leu
    370                 375                 380
Leu Gly Cys Thr Gln Ser Tyr
385                 390
```

<210> 27663
<211> 142
<212> PRT
<213> A.fumigatus

<400> 27663

```
Ile Ala Cys Pro Ser Ser Pro Val Val Lys Thr Lys Leu Glu Gly Gly
1               5                   10                  15
Leu Arg His Leu Arg Ile Gln Asn Ala Asp Glu Val Ala Lys Tyr Ser
            20                  25                  30
Val Pro Val Glu Thr Val Ala Arg Pro Asn His Asn Gln Thr Gly Lys
        35                  40                  45
Glu Ile Glu Val Leu Met Asn Ala Tyr Pro Ile Thr Lys Phe Pro Thr
    50                  55                  60
Arg Asn Val Tyr Gln Tyr Asp Val Ser Ile Ser Trp Tyr Arg Thr Lys
65                  70                  75                  80
Ala Ile Thr Gly Ala Ala Pro Phe Asn Lys Pro Lys Val Gln Ile Gly
                85                  90                  95
Asn Gly Val Glu Lys Asn Ala Val Ile Lys Lys Val Trp Asn Cys Asn
```

```
            100                 105                 110
Ala Arg Lys Ala Ala Leu Lys Gln Ile Val Phe Asp Gly Gln Lys Leu
        115                 120                 125
Ala Trp Tyr Val Leu Thr Pro Thr Cys Pro Leu Ser Asn His
    130                 135                 140
```

<210> 27664
<211> 84
<212> PRT
<213> A.fumigatus

<400> 27664

```
Leu Arg Ser Arg Thr Arg Pro Ser Ser Tyr Pro Ile Glu Leu Ser Ile
1               5                   10                  15
Ser Leu Ser Phe Asn Glu Ser Gly Tyr Ala His Pro Thr Asn Asp Ile
            20                  25                  30
Leu Gly Phe Val His Lys Val Ala Asp Ala Ser Lys His Ser Glu Leu
        35                  40                  45
Trp Met Lys Phe Ser Trp Val Phe Tyr Lys Ala Asp Val Thr Ala Leu
    50                  55                  60
Val Gly Lys Leu Glu Gly Arg Glu Lys Asp Leu Asn Leu Val Leu Thr
65                  70                  75                  80
Phe Ile Ala Ala
```

<210> 27665
<211> 141
<212> PRT
<213> A.fumigatus

<400> 27665

```
Phe Ile Ser Ala Asn Met Lys Lys Gln Leu Phe His Leu Ala Gly Asp
1               5                   10                  15
Val Arg Pro Val Val Leu Ala Ala Lys Val Leu Lys Val Leu Leu Glu
            20                  25                  30
Glu Ser Thr His Leu Asn Asp Thr Val Gly His Ala Leu Asp Leu Ala
        35                  40                  45
Gln Pro Leu Leu Val Glu Leu Arg Val Ile His Asp Gly Arg Gly Asp
    50                  55                  60
Ala Ser Thr Val Asn Gly Arg Val Gly Val Glu Gly Thr Asp Glu Asp
65                  70                  75                  80
Leu Asp Leu Arg Ile Asp Ser Leu Leu Leu Leu Ser Gly Phe Ala Asp
                85                  90                  95
Glu Arg Glu Ser Thr Asn Thr Phe Ala Val Glu Thr Leu Val Val Gln
            100                 105                 110
His Gly Gln Ser Leu Lys Cys Phe His Glu Val Glu Gln Pro Glu Leu
        115                 120                 125
Thr Met Phe Leu Ala Lys Leu Trp His Arg Ala Met Leu
    130                 135                 140
```

<210> 27666
<211> 163
<212> PRT
<213> A.fumigatus

<400> 27666

```
Thr Leu Arg Gln Gly Gly Ser Gln His Cys Pro Val Pro Glu Phe Arg
1               5                  10                  15
Gln Glu His Gly Lys Leu Gly Leu Leu Asn Leu Met Glu Thr Phe Gln
            20                  25                  30
Gly Leu Thr Met Leu Asn His Gln Gly Leu Tyr Gly Glu Arg Val Gly
        35                  40                  45
Ala Phe Ser Leu Val Cys Glu Ser Ala Glu Glu Lys Lys Arg Val Asp
    50                  55                  60
Ser Gln Ile Lys Ile Leu Ile Arg Pro Phe Tyr Ser Asn Pro Pro Val
65                  70                  75                  80
His Gly Ala Arg Ile Ala Ser Thr Ile Met Asn Asp Pro Glu Leu Asn
                85                  90                  95
Gln Gln Trp Leu Gly Glu Val Lys Gly Met Ala Asp Arg Ile Ile Glu
            100                 105                 110
Met Arg Ala Leu Leu Lys Lys Asn Leu Glu Asp Leu Gly Ser Lys His
        115                 120                 125
Asp Gly Ser His Ile Pro Ser Gln Val Lys Lys Leu Phe Phe His Val
    130                 135                 140
Cys Arg Asn Glu Ser Met Leu Ile Tyr Asp Arg Leu Ala Cys Leu Pro
145                 150                 155                 160
Thr Leu Ala
```

<210> 27667
<211> 232
<212> PRT
<213> A.fumigatus

<400> 27667

```
Ser Glu Arg Val Gly Asp Asp Lys Gly Lys Pro Tyr Val Leu Pro Ser
1               5                  10                  15
Val Arg Ala Ala Glu Asp Lys Val Val Ala Ser Arg Leu Asp Lys Glu
            20                  25                  30
Tyr Ala Gly Ile Thr Gly Ile Pro Ser Phe Thr Lys Ala Ala Ala Glu
        35                  40                  45
Leu Ala Tyr Gly Ser Asp Ser Ala Val Ile Lys Glu Asp Arg Leu Val
    50                  55                  60
Ile Thr Gln Thr Ile Ser Gly Thr Gly Ala Leu Arg Ile Gly Gly Ala
65                  70                  75                  80
Phe Leu Gln Arg Phe Tyr Pro His Ala Lys Lys Ile Tyr Leu Pro Thr
                85                  90                  95
Pro Ser Trp Ala Asn His Ala Ala Val Phe Lys Asp Ser Gly Leu Asp
            100                 105                 110
Val Ala Ser Tyr Arg Tyr Tyr Asn Lys Asp Thr Ile Gly Leu Asp Phe
        115                 120                 125
Glu Gly Leu Ile Ala Asp Ile Lys Ala Ala Pro Asn Asn Ser Ile Ile
    130                 135                 140
Leu Leu His Ala Cys Ala His Asn Pro Thr Gly Val Asp Pro Thr Gln
145                 150                 155                 160
Asp Gln Trp Arg Gln Ile Ser Asp Val Met Lys Glu Lys Gly His Phe
                165                 170                 175
Ala Phe Phe Asp Met Ala Tyr Gln Gly Phe Ala Ser Gly Asn Ala Asp
            180                 185                 190
Arg Asp Ala Phe Ala Pro Arg His Phe Val Lys Glu Gly His Asn Ile
        195                 200                 205
Ala Leu Cys Gln Ser Phe Ala Lys Asn Met Val Ser Ser Gly Cys Ser
```

```
    210                 215                 220
Thr Ser Trp Lys His Phe Arg Asp
225                 230

<210> 27668
<211> 536
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (133),(151)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27668
Tyr Gln Pro Pro Asn Leu Cys Ser Ser Cys Lys Pro Ser Cys Ser Val
1               5                  10                  15
Met Ser Glu Ser Gln Ser Arg Pro Val Ser Leu Thr Arg Tyr Arg Pro
            20                  25                  30
Ala Leu Tyr Leu Leu Thr Gly Val Ala Ala Ala Tyr Ala Leu Val Tyr
        35                  40                  45
Ile His Asn Asn Ile Leu Phe Pro Ser Ser Pro Gln Thr Pro Leu Arg
    50                  55                  60
Arg Arg Arg Ala Val Arg Arg Arg Arg Thr Gly Pro Asp Glu Ser Asp
65                  70                  75                  80
Val Ser Asn Thr Pro Ser Tyr Arg Ala Ile Ala His Leu Glu Gln Leu
                85                  90                  95
Glu Arg Gln Asn Gly Val Tyr Gly Thr Phe Arg Ile Glu Thr Glu Asp
            100                 105                 110
Gly Pro Arg Val Glu Ser Gly Leu Leu Pro Ser Phe Leu Ala Thr Arg
        115                 120                 125
Asp Gln Leu Met Xaa Glu Val Gly Val Pro Gln Ala His Ala Lys Arg
    130                 135                 140
Met Arg Glu Met Met Glu Xaa Thr Phe Leu Glu Ser Phe Leu Ala Leu
145                 150                 155                 160
Asp Phe Pro Ser Ala His Thr Ile Glu Glu Gly Ser Ala Glu Arg Asn
                165                 170                 175
Tyr Leu Ile Glu Gln Leu Gln Arg Arg Gly Ile Ser Arg Thr Gly Ile
            180                 185                 190
Glu Arg Ala Leu Ala Arg Phe Asn Glu Asp Asp Asn Tyr Gly Glu Glu
        195                 200                 205
Leu Arg Arg Arg Arg Gln Asn Gly Glu Arg Val Thr Leu Ser Thr Ser
    210                 215                 220
Thr Phe Pro Glu Glu Ser Val Pro Leu Gln Asn Leu Asp Gly Gly Glu
225                 230                 235                 240
Thr Val Val Asp Asp Gln Ser Val Phe Ser Trp Arg Glu Gly Asn Asn
                245                 250                 255
Glu Ser Ser Pro Ala Pro Glu Gly Gln Asn Leu Leu Asn Leu Leu Tyr
            260                 265                 270
His Ile Ala Glu Asp Gln Ser Arg Arg Asp Gly Tyr Ile His Arg Gln
        275                 280                 285
Val Thr Cys Asn Ser Cys Gly Ala Met Pro Ile Gln Gly Ile Arg Tyr
    290                 295                 300
Arg Cys Ala Asn Cys Ile Asp Tyr Asp Leu Cys Glu Thr Cys Glu Ala
305                 310                 315                 320
Met Gln Val His Ile Lys Thr His Leu Phe Tyr Lys Val Arg Ile Pro
```

```
                325                 330                 335
Ala Pro Phe Leu Gly Asn Pro Arg Gln Ser Gln Pro Val Trp Tyr Pro
            340                 345                 350
Gly Lys Pro Ala Met Met Pro Arg Ser Leu Pro Arg Ala Leu Ala Lys
        355                 360                 365
Arg Leu Met Met Glu Thr Asn Phe Glu Asn Thr Glu Leu Asp Ala Leu
    370                 375                 380
Trp Asp Gln Phe Arg Cys Leu Ala Ser Tyr Glu Trp Pro Asp Asp Pro
385                 390                 395                 400
Asn Lys Leu Cys Met Ala Ile Asp Arg Lys Thr Phe Asp Arg Cys Phe
                405                 410                 415
Val Pro His Thr Ser Ile Arg Pro Pro Pro Pro Cys Leu Ile Tyr Asp
            420                 425                 430
Arg Met Phe Ala Phe Tyr Asp Thr Asn Asn Asp Gly Leu Ile Gly Phe
        435                 440                 445
Glu Glu Phe Leu Lys Gly Leu Ala Ser Leu Asn Asn Lys Ser Asn Asp
    450                 455                 460
Glu Arg Leu Arg Arg Val Phe Arg Gly Tyr Asp Leu Asp Gly Asp Gly
465                 470                 475                 480
Tyr Val Glu Arg Lys Asp Phe Leu Arg Val Phe Arg Ala Tyr Tyr Ala
                485                 490                 495
Leu Ser Arg Glu Leu Thr Arg Asp Met Ile Ala Gly Met Glu Asp Asp
            500                 505                 510
Phe Leu Glu Gly Gly Ala Arg Asp Val Val Leu Val Phe Thr Thr Gly
        515                 520                 525
Leu Glu Gly Ala Ala Gln Arg Arg
    530                 535

<210> 27669
<211> 117
<212> PRT
<213> A.fumigatus

<400> 27669
Ala Pro Tyr Lys Thr Trp Gln Arg Ile Tyr Asp Tyr Asp Phe Thr Thr
1               5                   10                  15
Asn Leu Thr Asp Ala Gln Ala Lys His Ile Ile Gly Ala Thr Ala Pro
            20                  25                  30
Leu Trp Ser Glu Gln Val Asp Asp Val Thr Val Ser Ser Lys Phe Trp
        35                  40                  45
Pro Arg Ala Ala Ala Leu Ala Glu Leu Val Trp Ser Gly Asn Arg Asp
    50                  55                  60
Ala Asn Gly Lys Lys Arg Thr Thr Leu Met Thr Gln Arg Ile Leu Asn
65                  70                  75                  80
Phe Arg Glu Tyr Leu Leu Ala Asn Gly Ile Gln Ala Gly Asn Leu Val
                85                  90                  95
Pro Lys Tyr Cys Leu Gln His Pro His Ala Cys Asp Leu Tyr Tyr Asp
            100                 105                 110
Gln Ser Ala Val Ala
        115

<210> 27670
<211> 62
<212> PRT
<213> A.fumigatus
```

<400> 27670
Tyr Ala Gly His Arg Gln Ala Leu Ala Gln Trp Ser Ser Arg Leu Cys
1 5 10 15
Lys Gln Val Gly Ala Gly Ala Thr Leu Ser Thr Leu Lys Leu Pro Lys
20 25 30
Ile Ile Ile Lys Met Leu Lys Thr Cys Leu Glu Asn Ser Met Glu Ala
35 40 45
Gln Gln Asp Leu His Glu Ser Cys Gln Leu Ile Ser Thr Phe
50 55 60

<210> 27671
<211> 115
<212> PRT
<213> A.fumigatus

<400> 27671
Asp Phe Thr Gly Gly Arg Met Cys Ala Val Gln Gly Leu Glu Gly Ala
1 5 10 15
Ala Gly Ser Ala Gly Glu Ala Gly Ala Ser Pro Ala Ala Gly Gly His
20 25 30
Gly Gly Cys Ile Glu Asp Gly Gly Gly Val Thr Thr Ile Glu Asp Leu
35 40 45
Val Glu Ser Leu Asp Gly Arg Leu Glu Glu Ala Val Tyr Leu Val Gly
50 55 60
Ala Gly Lys Leu Lys Glu Gly Ala Lys Asn Leu Gly Arg Ala Lys Gly
65 70 75 80
Arg Ser Asp Gly Trp Glu Arg Arg Gly Val Gln Val Val Asp Glu Asp
85 90 95
Ser Asp Ser Glu Lys Cys Val Gly Glu Val Gln Asn Thr Arg Ser Arg
100 105 110
Gly Arg Gly
115

<210> 27672
<211> 409
<212> PRT
<213> A.fumigatus

<400> 27672
Asn Ile Pro Lys Pro Asn Phe Leu Gly Cys Gln Gly Trp Ser Ser Arg
1 5 10 15
Cys Gly Phe Pro Asp Gly Arg Leu Ile Glu Lys Pro Met His Ser Ala
20 25 30
Ala Ser Pro Pro Gly Leu Arg Phe Pro Asn Gly Gly Val Ile Asn Gly
35 40 45
His Phe Val Val Ser Gly Thr Tyr Leu Thr Ser Ser Lys Gln Glu Tyr
50 55 60
Ala Leu Trp Ala Leu Asp Leu Lys Thr Leu Thr Trp Gly Arg Ile Asp
65 70 75 80
Ala Gly Gly Ser Val Phe Gly His Gly Ser Trp Asn Arg Gly Val Leu
85 90 95
Trp Ala Arg Arg Asn Thr Phe Val Val Leu Gly His Arg Lys Arg Ser
100 105 110
Leu Val Glu Asp Tyr Asn His Arg Arg Ile Asn Phe Ser His Val Cys
115 120 125
Met Val Glu Leu Glu Ala Phe Gly Leu Tyr Asn Asn Pro Cys Arg Thr

```
    130                 135                 140
Ala Pro Thr Ser Gly Tyr Ile Ser His Ser Ala Pro Ser Val Pro Ala
145                 150                 155                 160
Ser Leu Gln His Lys Leu Thr Gln Leu Thr Ser Gly Gly Arg Pro Phe
                165                 170                 175
Ser Pro Ala Ser Asp Glu Leu Gly Lys Leu Ala Gln Ser Leu Pro Glu
            180                 185                 190
Ile Ala Asp Met Glu Leu Gln Ala Ala Gly Gly Glu Arg Ile Pro Val
        195                 200                 205
Asn Ser Arg Ile Leu Ser Arg Arg Trp Gly Pro Tyr Phe Ile Gln Leu
    210                 215                 220
Leu Arg Glu Ser Ser Asp Thr Gly Val Ser Asp Thr Ala Thr Leu Arg
225                 230                 235                 240
Gly Ala Ile Pro Met Tyr Pro Ser Arg Asn Ser Ser Ile Thr Ile Thr
                245                 250                 255
Pro Ser Ile Gly Gln Asn Ser Ser Tyr Ser Ser Ala Ser Thr Leu Val
            260                 265                 270
Ser Asn His Ser Asn Pro Ser Lys Ser Leu Leu Ser Asn Leu Glu Ile
        275                 280                 285
Pro Phe Ala His Thr Leu Pro Pro Thr Ser Arg Pro Arg Val Leu Tyr
    290                 295                 300
Leu Pro His Thr Phe Leu Thr Ile Arg Val Leu Val Tyr Tyr Leu Tyr
305                 310                 315                 320
Thr Ser Ser Leu Pro Pro Val Gly Ser Ser Leu Cys Thr Pro Gln Ile
                325                 330                 335
Leu Cys Ser Leu Leu Gln Leu Ala Arg Pro Tyr Gln Val Asp Gly Leu
            340                 345                 350
Leu Glu Ala Thr Val Glu Arg Leu His Gln Ile Leu Asp Gly Arg Asn
        355                 360                 365
Ala Ala Ala Val Phe Asn Ala Ala Ala Met Ala Ala Gly Gly Gly Arg
    370                 375                 380
Gly Thr Gly Phe Thr Ser Gly Pro Gly Gly Thr Leu Glu Ala Leu Asn
385                 390                 395                 400
Gly Ala His Ala Ala Ala Ser Glu Ile
                405
```

<210> 27673
<211> 67
<212> PRT
<213> A.fumigatus

<400> 27673

```
Gly Ser Asn Arg Pro Tyr Val Ser Ser Phe Arg Tyr Ser Pro Cys His
1               5                   10                  15
Asn Cys Pro Ser Gly Glu Tyr Ala His Ala Val Ser His Phe Thr Asp
            20                  25                  30
Tyr Thr Phe Met Leu Trp Thr Gly His Met Lys Arg Asp Ala Ala Trp
        35                  40                  45
Ser Leu Lys Ile Tyr Ile Ala Pro Gln Leu Ile Ala Tyr Pro Leu Leu
    50                  55                  60
Leu Leu Asp
65
```

<210> 27674
<211> 206
<212> PRT

<213> A.fumigatus

<400> 27674
Leu Pro Ala Phe Leu Pro Ser Tyr Pro Ser Leu Pro Thr Val Lys Thr
1 5 10 15
His Ile Phe Glu Ile Phe Ser Tyr Leu Phe His Ser Leu Tyr Thr Gln
20 25 30
Pro Glu Cys Leu Ala Asn Ser Ser Ser Val Val Thr Ser Arg Cys Met
35 40 45
Ser Ser Asp Ser Met Pro Arg Asn Pro Pro Arg Ser Phe Thr Ile Pro
50 55 60
Ala Cys Asn Cys Thr Ala Thr Asp Ile Val Asp Ala Met Ile Gly Thr
65 70 75 80
Val Ser Leu Thr Pro Ser Ser Pro Ser Leu Arg Thr Ser Thr Lys Ala
85 90 95
Ser Ser Thr Pro Pro Ser Arg Ser Ser Ser Pro Pro Pro Leu Ser Thr
100 105 110
Ser Ser Ser Pro Ala Lys Leu Pro Thr Pro Arg Leu Ala Leu Leu Pro
115 120 125
Arg Met Ser Ser Thr Ser Pro Thr Val Leu Ser Pro Val Lys Leu Ala
130 135 140
Leu Ser Ser Ser Arg Met Leu Arg Leu Thr Gly Ser Leu Ser Asp Thr
145 150 155 160
Ala Ser Val Val Ser Ser Leu Arg Arg Leu Thr Arg Tyr Val Thr Ser
165 170 175
Arg Asp Leu Leu Cys Gln Ile Glu Asn Val Arg Leu Thr Cys Leu Phe
180 185 190
Ser Ser Leu Leu Ala Arg Pro Arg Leu Pro Leu Met Val Ala
195 200 205

<210> 27675
<211> 74
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (19),(23),(61),(73)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27675
Gln His Asn Ala Gly Pro Ser Ala Pro Ala Arg Ser Leu Pro Pro Ser
1 5 10 15
Arg Pro Xaa Glu Val His Xaa Ala Ile Arg Lys Trp Leu Ser Asp Asp
20 25 30
Val Ser Ala Glu Ala Ser Glu Asn Val Arg Ile Ile Tyr Gly Gly Ser
35 40 45
Val Arg Glu Lys Asn Trp Arg Glu Leu Arg Lys Pro Xaa Arg Cys Gly
50 55 60
Arg Phe Ser Trp Leu Ala Val Ala Xaa Leu
65 70

<210> 27676
<211> 111
<212> PRT
<213> A.fumigatus

<400> 27676
His Cys Arg Arg Asn Asp Arg Asn Gly Val Thr Asp Thr Ile Ile Ser
1 5 10 15
Ile Val Lys Asn Leu Asn Glu Gly Gln Leu Asp Pro Ser Val Glu Val
20 25 30
Val Ile Ser Pro Ser Ala Leu Tyr Leu Leu Leu Ala Arg Gln Ala Ala
35 40 45
Asp Pro Lys Ile Gly Val Ala Ala Gln Asn Val Phe Asp Lys Pro Asn
50 55 60
Gly Ala Phe Thr Gly Glu Ile Ser Val Glu Gln Leu Lys Asp Ala Lys
65 70 75 80
Ile Asp Trp Val Ile Ile Gly His Ser Glu Arg Arg Val Ile Leu Lys
85 90 95
Glu Thr Asp Glu Val Arg Tyr Leu Pro Gly Ser Ala Leu Pro Asp
100 105 110

<210> 27677
<211> 237
<212> PRT
<213> A.fumigatus

<400> 27677
Cys Glu Trp Tyr Val Gly Ile Glu Asn Glu Asp Leu Ala His Trp Gly
1 5 10 15
Ser Val Ser Leu Pro Gly Gly Val Phe Pro Ser Thr Gln Cys Gln Thr
20 25 30
Gly His Leu Ser Gly Asn Thr Asp Thr Thr Phe Val Gln Gln Ala Asn
35 40 45
Ser Val Leu Ile Ala Leu Ala Leu Leu Ser Glu Gln Ile Thr Leu Gly
50 55 60
Asn Asp His Ile Ile Glu Val Glu His Ala Gly Ala Ala Ser Pro Asp
65 70 75 80
Thr Gln Leu Leu Leu Leu Leu Gly Asn Gly Glu Ser Arg Gly Ile Leu
85 90 95
Leu Asp His Lys Gly Cys Asp Ser Leu Val Ala Leu Ala Gly Ile Gln
100 105 110
Val Arg Lys Asp Asp Glu His Pro Ser Leu His Gly Val Gly Asn Pro
115 120 125
His Leu Gly Ser Ile Gln Leu Val Pro Ile Arg Arg Leu Phe Arg Leu
130 135 140
Gly Leu Gln Gly Glu Arg Ile Gly Ser Gly Arg Arg Leu Arg Glu Thr
145 150 155 160
Lys Arg Thr Asp Gly Val Arg Ser Glu Leu Arg Gln Pro Arg Leu Leu
165 170 175
Glu Arg Gly Val Gly Pro Leu Val Glu Gly Arg Ile Asp Glu Arg Val
180 185 190
Val His Ile His Gln Asp Thr Asn Ala Gly Val Asp Ala Gly Gln Phe
195 200 205
Leu Asp Gly Asn Asn Ser Gly Gly Glu Val His Thr Gly Ser Ala Val
210 215 220
Phe Leu Gly Asp Leu Asp Thr His Gln Pro Leu Val Phe
225 230 235

<210> 27678
<211> 217

<212> PRT
<213> A.fumigatus

<400> 27678
Glu Asp Gln Gly Leu Met Gly Ile Glu Ile Pro Glu Glu Tyr Gly Gly
1 5 10 15
Ala Gly Met Asn Phe Thr Ser Ala Ile Val Ala Ile Glu Glu Leu Ala
20 25 30
Arg Val Asp Pro Ser Val Ser Val Leu Val Asp Val His Asn Thr Leu
35 40 45
Val Asn Thr Ala Phe Asn Lys Trp Ala Asp Ala Ala Leu Lys Lys Thr
50 55 60
Trp Leu Pro Lys Leu Ala Thr Asp Thr Val Gly Ser Phe Cys Leu Ser
65 70 75 80
Glu Pro Ala Ser Gly Ser Asp Ala Phe Ala Leu Gln Thr Lys Ala Glu
85 90 95
Lys Thr Ala Asp Gly Tyr Lys Leu Asn Gly Ser Lys Met Trp Ile Thr
100 105 110
Asn Ser Met Glu Ala Gly Val Phe Ile Val Phe Ala Asn Leu Asp Pro
115 120 125
Ser Lys Gly Tyr Lys Gly Ile Thr Ala Phe Val Val Glu Lys Asp Thr
130 135 140
Pro Gly Phe Ser Ile Ala Lys Lys Glu Lys Lys Leu Gly Ile Arg Ala
145 150 155 160
Ser Ser Thr Cys Val Leu Asn Phe Asp Asp Val Val Ile Pro Lys Gly
165 170 175
Asn Leu Leu Gly Glu Glu Gly Gln Gly Tyr Lys Tyr Ala Ile Gly Leu
180 185 190
Leu Asn Glu Gly Arg Ile Gly Ile Ala Ala Gln Met Thr Gly Leu Ala
195 200 205
Leu Gly Ala Trp Glu Asn Ala Ala Arg
210 215

<210> 27679
<211> 175
<212> PRT
<213> A.fumigatus

<400> 27679
Val Arg Tyr Trp Leu Ala Glu Arg Arg Ser Tyr Arg Tyr Cys Arg Ser
1 5 10 15
Asp Asp Arg Ser Gly Ile Gly Cys Leu Gly Lys Arg Arg Gln Val Ser
20 25 30
Ser His Ser Pro Ser Glu Gln Asp Pro His Phe Leu Ser Gln Arg Thr
35 40 45
Thr His Ile Asn Gly Ser Tyr Val Trp Asn Asp Arg Arg Gln Phe Gly
50 55 60
Gln Leu Ile Gly Thr Phe Gln Gly Met Gln His Gln Leu Ala Gln Ala
65 70 75 80
Tyr Val Glu Ile Ala Ala Ala Arg Ala Leu Val Tyr Asn Ala Ala Arg
85 90 95
Lys Lys Glu Ala Gly Gln Asp Phe Val Gln Asp Ala Ala Met Ala Lys
100 105 110
Leu Tyr Ala Ser Gln Val Ala Gly Arg Val Ala Ser Ser Ala Val Glu
115 120 125
Trp Met Gly Gly Met Gly Phe Val Arg Glu Gly Ile Ala Glu Lys Met

```
    130                 135                 140
Phe Arg Asp Ser Lys Ile Gly Ala Ile Tyr Glu Gly Thr Ser Asn Ile
145                 150                 155                 160
Gln Leu Gln Thr Ile Ala Lys Leu Leu Gln Lys Gln Tyr Thr Lys
                165                 170                 175

<210> 27680
<211> 91
<212> PRT
<213> A.fumigatus

<400> 27680
Leu Thr Leu Ile Ala Gly Thr Val Thr Asp Glu Ser Leu Gln Asp Ala
1               5                   10                  15
Val Pro Thr Asp Tyr His Gly Ile Ser Phe Asp Glu Trp Leu Asp Leu
            20                  25                  30
Phe Leu Gln Tyr Ala Leu Val Val Ser Gly Gln Gly Glu Pro Asp Glu
        35                  40                  45
Ala Tyr Asp Ser Leu Ala Ala Ala Ala Asp Ala Ser Ile Trp Tyr His
    50                  55                  60
Ser Lys Pro Cys Thr Arg Leu Ile His Val Cys Trp Phe Ser Lys Leu
65                  70                  75                  80
Pro Leu Ala Pro Leu Ser Arg Ser Met Val Tyr
                85                  90

<210> 27681
<211> 184
<212> PRT
<213> A.fumigatus

<400> 27681
Asn Ser Cys Cys Gly Arg Ser Arg Pro Trp Thr Phe Pro Phe Arg Met
1               5                   10                  15
Ala Pro Met Thr Pro Asp Pro Ala Lys Gln Ser Ala Ser Gln Ser Thr
            20                  25                  30
Glu Ser Ala Arg Arg Ser Pro Pro Ala Thr Ser Gln Ala Lys Pro Phe
        35                  40                  45
Pro Leu Ile Asn Trp Thr Ser Pro Cys Leu Cys Tyr Met Ala Thr Ser
    50                  55                  60
Tyr Ile Pro Ala Thr Val Ser Thr Gln Leu Ser Thr Thr Phe Ser Val
65                  70                  75                  80
His Thr Ile Ser Thr Thr Arg Thr Leu Leu Ser Tyr Ser Pro Leu Pro
                85                  90                  95
Ser Ala Thr Ser Thr Thr Arg Ser Asn Ala Ser Pro Thr Thr Val Thr
            100                 105                 110
Thr Ser Ser Cys Arg Ala Ser His Ser Cys Thr Asn Thr Val Ala Phe
        115                 120                 125
Ala Ser Glu Arg Glu Ala Ser Ser Arg Asn Gly Arg Arg Trp Ser Leu
    130                 135                 140
Thr Leu Leu Ala Tyr Gly Ile Tyr Ser Ala Ser Arg Ile Ser Leu Ser
145                 150                 155                 160
Lys Asp Thr Ser Val Ser Trp Arg Leu Gly Ser Arg Ser Arg Pro Asn
                165                 170                 175
Leu Arg Ile Arg Ser Leu Ser Arg
            180
```

<210> 27682
<211> 245
<212> PRT
<213> A.fumigatus

<400> 27682
Pro Ser Pro Pro Cys Gly Arg Arg His Tyr Thr Pro Ile Gln Gln Thr
1 5 10 15
Thr Glu Tyr Ala Asp Ile Ser Tyr Phe Met Ala Met Gly Asp Cys Phe
20 25 30
Met Gln Leu Gly Asn Ile Glu Glu Ala Glu Asn Cys Tyr Leu Thr Val
35 40 45
Ala Asp Tyr Asp Thr Arg Asn Ile Glu Ser Arg Ala Gln Leu Ala Lys
50 55 60
Leu Tyr Glu Ser Ile Gly Met Thr Glu Gln Ala Leu Lys Tyr Val Asn
65 70 75 80
Glu Ala Val Leu Leu Gly Arg Gln Glu Thr Arg Thr His Arg Arg Arg
85 90 95
Lys Asp Thr Arg Leu Glu Gln Leu Ala Leu Glu Phe Arg Thr Glu Thr
100 105 110
Asp Pro Glu Leu Pro Gly Leu Arg Ile Ala Val Pro Pro Glu Arg Ala
115 120 125
Glu Gly Leu Ala Pro Thr Leu Thr Thr Thr Ser Val Asn Ala Thr Arg
130 135 140
Arg Lys Val Gln Glu Ala Glu Glu Glu Arg Thr Glu Leu Val Gln Phe
145 150 155 160
Leu Tyr Gly Lys Leu Leu Asp Ile His Pro Arg Val Lys Glu Gly Asn
165 170 175
Ala Glu Ala Ile Glu Asp Trp Leu Asp Ile Ala Asp Ala Leu Leu Arg
180 185 190
Glu Phe Arg Ser Asn Lys Val Phe Tyr Pro Phe Gln Arg Asn Ile Val
195 200 205
Phe Leu Gly Tyr Ser Arg Glu Ala Gln Arg Lys Ala Gly Lys Tyr Lys
210 215 220
Asn Arg Thr Leu Met Asp Glu Met Gln Glu Met Ala Ser Arg Leu Gln
225 230 235 240
Glu Ser Leu Gly Met
245

<210> 27683
<211> 268
<212> PRT
<213> A.fumigatus

<400> 27683
Val Ala Pro Cys Thr Phe Val Ser Leu Asp Gly Ile Leu Thr Arg Thr
1 5 10 15
Ala Cys Ala Leu Lys Ala Gln Asp Glu Glu Thr Leu Ala Asn Glu Ala
20 25 30
Arg Trp Phe Ile Lys Glu Tyr Gln Phe Val Thr Asp Thr Tyr Arg Leu
35 40 45
Phe Ser Met Leu Ser Arg Leu Cys Gly Asp Pro His Arg Ser Leu Phe
50 55 60
His Ser Ser Pro Asn Met Lys Phe Met Leu Arg Gln Ile Lys Ala Met
65 70 75 80
Asp Phe Ser Ile Pro Asp Gly Pro Asn Asp Ser Arg Pro Ser Lys Ala

```
                85                  90                  95
Val Arg Glu Ser Ile Tyr Arg Glu Arg Ala Thr Leu Thr Thr Arg Asp
            100                 105                 110
Glu Ser Gly Glu Ala Ile Pro Ala Asp Gln Leu Asp Val Ala Leu Leu
        115                 120                 125
Val Leu Tyr Gly His Ile Leu Tyr Ser Gly Asn Ser Phe Tyr Pro Ala
    130                 135                 140
Leu Asn Tyr Phe Phe Arg Ala Tyr Asp Leu Asp Asp Gln Asn Pro Ala
145                 150                 155                 160
Val Leu Leu Ser Ile Ala Leu Cys Tyr Ile His His Ser Leu Lys Arg
                165                 170                 175
Gln Ser Asp Asn Arg His Tyr Leu Ile Met Gln Gly Leu Ser Phe Met
            180                 185                 190
His Glu Tyr Arg Arg Val Arg Glu Arg Lys Gly Ser Leu Leu Gln Glu
        195                 200                 205
Arg Gln Glu Met Glu Phe Asn Phe Ala Arg Val Trp His Leu Leu Gly
    210                 215                 220
Leu Ala His Leu Ala Ile Glu Gly Tyr Gln Arg Val Leu Ala Leu Gly
225                 230                 235                 240
Glu Gln Ile Gln Thr Glu Ser Gln Asn Lys Ile Pro Gln Pro Leu Thr
                245                 250                 255
Thr Asn Ala Asp Pro Ala Asp Ser Ser Asp Gly Leu
            260                 265
```

<210> 27684
<211> 87
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (23)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27684

```
Lys Ser Phe Asn Glu Tyr Ser Lys Ser Leu Thr Gly Phe Ile Ala Ser
1               5                   10                  15
Ile Gln Lys Ile Leu Asn Xaa Asn His Glu Pro Gln Ser Thr Asn Asn
            20                  25                  30
Ser Pro His Asp Ile Ser Ala Gln Gly Leu Ile Ser Thr Pro Ile Leu
        35                  40                  45
Asn Glu Asp Gly Asp Pro Ile Trp Lys Val Leu Val Phe Asp Asn Met
    50                  55                  60
Gly Arg Asp Val Ile Ser Ser Val Leu Arg Val Asn Asp Leu Arg Ala
65                  70                  75                  80
Trp Gly Val Thr Ile His Leu
                85
```

<210> 27685
<211> 175
<212> PRT
<213> A.fumigatus

<400> 27685

```
Cys Thr Ser Cys Lys Arg Pro Ser Ser Leu Gly Cys His Tyr Ser Ser
1               5                   10                  15
```

```
Val Gly Ser Ser Trp Cys Lys Glu His Arg Ile Ala Ala Asn His Leu
            20                  25                  30
Ser Ser Arg Asn Leu Asn Phe Thr Arg Tyr Pro Ile Pro Asp Val Pro
        35                  40                  45
Val Val Tyr Leu Val Glu Pro Thr Pro Ala Asn Ile Gln Ala Ile Thr
    50                  55                  60
Asn Asp Leu Ser Arg Gly Leu Tyr Ser Pro Ala Tyr Val Asn Phe Leu
65                  70                  75                  80
Ser Ser Ile Pro Arg Pro Leu Leu Glu Asp Phe Ala Ser Gln Ile Ala
                85                  90                  95
Ser Thr Gly Thr Ala Glu His Val Ala Gln Val Tyr Asp Gln Tyr Leu
            100                 105                 110
Asn Phe Ile Val Ala Glu Pro Asp Leu Phe Ser Leu Gly Leu Gly Asn
        115                 120                 125
Asp Ala Tyr Trp Lys Ile Asn Ser Ala Lys Thr Ser Asp Glu Glu Leu
    130                 135                 140
Asp Gly Ile Val Asp Lys Ile Val Ser Gly Leu Phe Ser Val Ser Val
145                 150                 155                 160
Thr Met Gly Met Phe Gln Thr Ser Pro Arg Ser Arg Ile Ser Arg
                165                 170                 175
```

<210> 27686
<211> 496
<212> PRT
<213> A.fumigatus

```
<400> 27686
Thr Gly Ala Ile Pro Ile Ile Arg Cys Pro Lys Gly Gly Ala Ala Glu
1               5                   10                  15
Leu Ile Ala Thr Lys Leu Asp Arg Lys Leu Arg Asp His Ile Leu Asn
            20                  25                  30
Ser Lys Asp Asn Leu Phe Ser Gly Asn Lys Lys Thr Ala Ala Gly Val
        35                  40                  45
Pro Ser Ser Arg Pro Val Leu Ile Ile Val Asn Arg Asn Val Asp Leu
    50                  55                  60
Val Pro Met Leu Ser His Ser Trp Thr Tyr Gln Ser Leu Val Gln Asp
65                  70                  75                  80
Val Leu Gln Met Arg Leu Asn Arg Ile Thr Val Glu Thr Pro Ile Asp
                85                  90                  95
Glu Thr Asn Pro Ala Lys Gly Val Thr Lys Lys Val Tyr Asp Leu Asn
            100                 105                 110
Ser Asn Asp Phe Phe Trp Lys Arg Asn Ala Gly Ala Pro Phe Pro Gln
        115                 120                 125
Val Ala Glu Asp Ile Asp Ala Glu Leu Thr Arg Tyr Lys Glu Asp Ala
    130                 135                 140
Asn Glu Ile Thr Lys Lys Thr Gly Ala Ser Ser Ile Glu Asp Leu Gln
145                 150                 155                 160
Asn Asp Thr Ser Ala Ser Ala Gln His Leu Lys Ala Ala Ile Thr Leu
                165                 170                 175
Leu Pro Glu Leu Arg Glu Arg Lys Ala Ile Leu Asp Met His Met Asn
            180                 185                 190
Ile Ala Thr Ala Leu Leu Lys Gly Ile Lys Asp Arg Gln Leu Asp Asn
        195                 200                 205
Phe Phe Glu Leu Glu Glu Asn Ile Thr Lys Gln Ser Lys Thr Gln Ile
    210                 215                 220
Met Glu Leu Ile Asn Asp Pro Ala Lys Gly Ser Asn Pro Thr Asp Lys
```

```
225                 230                 235                 240
Leu Arg Leu Phe Leu Ile Trp Phe Leu Ser Thr Glu Ser Asp Leu Ser
                245                 250                 255
Arg Ala Asp Leu Ser Gln Phe Glu Glu Ala Leu Arg Arg Ala Gly Val
            260                 265                 270
Glu Asp Ile Ser Pro Leu Thr Tyr Val Arg Gln Val Arg Glu Leu Thr
        275                 280                 285
Arg Met Thr Met Met Thr Thr Ala Ala Pro Gln Gln Gln Ser Ser Asp
    290                 295                 300
Leu Phe Arg Gly Phe Ser Ser Leu Ser Asn Arg Leu Thr Asp Arg Ile
305                 310                 315                 320
Thr Ser Gly Ala Leu Gly Ala Asn Phe Asp Ser Leu Ile Ser Gly Val
                325                 330                 335
Lys Asn Phe Leu Pro Ala Asn Lys Asp Leu Thr Leu Thr Lys Ile Thr
            340                 345                 350
Glu Ser Ile Met Asp Pro Ser Ser Ala Ser Ser Ser Ala Ile Ala Lys
        355                 360                 365
Thr Glu Asn Tyr Leu Tyr Phe Asp Pro Arg Ser Ala Asn Ala Arg Gly
    370                 375                 380
Ala Ile Pro Pro Ala Ser Ala Ala Arg Asn Pro Gln Ala Pro Gly Ala
385                 390                 395                 400
Leu Gly Gly Val Glu Arg Gly Thr Ser Ala Thr Phe Gly Gln Arg Arg
                405                 410                 415
Gln Ala Phe Asn Glu Ala Ile Val Phe Thr Val Gly Gly Gly Ser Met
            420                 425                 430
Asp Glu Tyr Gly Asn Leu Gln Asp Trp Val Arg Gln Thr Ser Gly Gln
        435                 440                 445
Pro Gly Asp Gly Ser Gly Ala Gly Ile Arg Ala Gly Val Gly Ala Met
    450                 455                 460
Gly Gly Ala Arg Arg Arg Val Val Tyr Gly Ser Thr Glu Leu Met Asn
465                 470                 475                 480
Ala Asn Glu Phe Leu Thr Glu Ser Leu Ser Lys Leu Gly Arg Glu Ser
                485                 490                 495

<210> 27687
<211> 60
<212> PRT
<213> A.fumigatus

<400> 27687
Asn Gln Pro Asp Lys Ser Leu Ala Pro Thr Ser Ser Val Phe Leu Val
1               5                   10                  15
Glu Phe Ser Asn Ala Glu Leu Glu Asp Leu Ser Pro Ser Thr Lys Ser
            20                  25                  30
Ser Tyr Val Leu Gly Trp Ser Ala Lys Ser Cys Leu Thr Glu Arg Trp
        35                  40                  45
Gly Cys Arg Arg Ile Ile Ser Val Phe Ala Arg Arg
    50                  55                  60

<210> 27688
<211> 513
<212> PRT
<213> A.fumigatus

<400> 27688
Pro Val Ala Ser Gln Asn Leu Thr Ser Pro Met Leu Gln Asn Cys Asp
```

```
1               5                   10                  15
His Ser Ser Met Pro Gly Ser Thr Ala Val Ala Thr Asp Asn Leu Glu
            20                  25                  30
Pro Thr Ser Ile Pro Thr Ser Ser Val Ala Gln Asp Asn Arg Arg Gln
        35                  40                  45
Pro Asp Lys Asp Ile Pro Pro Ser His Asp Asn Ala Val Asp Thr Leu
    50                  55                  60
Pro Asn Leu Ser Ser Gln Ile Thr Asp Thr Leu Thr Pro Leu Pro Glu
65                  70                  75                  80
Arg Asn Arg Leu Thr Ser Ala His Thr Pro Ser His Arg Arg Ala Asn
                85                  90                  95
Thr Glu Ile Ile Arg Arg Gln Pro His Leu Ser Val Lys Gln Leu Phe
            100                 105                 110
Ala Asp Gln Pro Lys Thr Tyr Glu Asp Leu Val Asp Gly Asp Arg Ser
        115                 120                 125
Ser Ser Ser Ala Leu Glu Asn Ser Thr Arg Lys Thr Leu Glu Val Gly
    130                 135                 140
Ala Arg Leu Leu Ser Gly Trp Phe Gln Gly Lys Ser Glu Pro Val Asn
145                 150                 155                 160
Leu Thr Met Val Pro Gln Ser Ala His Gln Asp Ala Leu Gly Leu Ala
                165                 170                 175
Pro Ser Gly Ala Phe Leu Asn Arg Ala Ser Lys Arg Ala Ser Ser Pro
            180                 185                 190
Leu Lys Gln Val Thr Ser Thr Asn Pro Phe Asn Phe Phe Ala Phe Lys
        195                 200                 205
Arg Gln Gly Glu Gly Arg Pro Gln Leu Pro Glu Pro Ala Asp Asp Glu
    210                 215                 220
Ile Leu Asn Met Asp Ile Thr Ala Ala Leu Phe Pro Pro Glu Ser Leu
225                 230                 235                 240
Asp Leu Asp Gly Gln Glu Ala Phe Ser Ala Leu Arg Thr Asn Ala Asp
                245                 250                 255
Asn Leu Leu Arg Arg Leu Gln Ala Ala Tyr Lys Glu Arg Thr Phe Ala
            260                 265                 270
Leu His Glu Ala Leu Ala Asp Lys Asn Glu Lys Gln Glu Glu Leu Glu
        275                 280                 285
Glu Thr Arg Thr Arg Val Gly His Leu Lys Val Gln Leu Asp Gly Met
    290                 295                 300
Ala Glu Lys Val Leu Gln Gln Glu Lys Ala Met Lys Ala Met Ala Glu
305                 310                 315                 320
Glu Leu Glu Gln Glu Arg Gln Leu Arg Arg Arg Glu Asp Asp Ala Arg
                325                 330                 335
Arg Arg Ser Val Met Leu Val Arg Ser Ser Asp Glu Glu Ser Leu Ser
            340                 345                 350
Asp Val Gly Ala Glu Leu Gln Thr Pro Lys Arg Ser Leu Lys Arg Ala
        355                 360                 365
Ser Asn Gly Thr Tyr Thr Ser Asp Ser Gly Phe Asp Ser Gly Asp Glu
    370                 375                 380
Ser Leu Ala Glu Ser Ile Phe Ser Arg Arg Asp Gly Leu Glu Ser Pro
385                 390                 395                 400
Thr Ser Thr Ile Pro Pro Ser Pro Asn Ile Ser Gln Ile Ala Leu Ser
                405                 410                 415
Val Pro Thr Ser Thr Pro Ile Gln Pro Ser Ala Lys Glu Leu Lys Pro
            420                 425                 430
Ala Gln Ala Pro Pro Val Arg Gln Ser Thr Tyr Asp Arg Val Leu Lys
        435                 440                 445
Gly Leu Ala Ser Thr Gly Ile Thr Ser Ser Trp Met Gly His Thr Ser
```

```
    450                 455                 460
Thr Ser Lys Cys Asn Ile Cys His Gly Ile Pro Ala Ser Glu Ala Trp
465                 470                 475                 480
Gly Val Leu Gly Val Ile Lys Glu Glu Asn Arg Gly Leu Lys Leu Arg
                485                 490                 495
Leu Ser Glu Leu Glu Leu Val Val Asp Asp Cys Leu Ser Leu Val Gly
            500                 505                 510
Ser
```

<210> 27689
<211> 99
<212> PRT
<213> A.fumigatus

<400> 27689

```
Ile Ala Asp Thr Lys Thr Gln Phe Glu Ala Ser Gln Gln Trp His Leu
1               5                   10                  15
Tyr Glu Arg Phe Arg Leu Arg Leu Trp Arg Arg Lys Ser Arg Arg Lys
            20                  25                  30
Tyr Leu Leu Ser Pro Gly Trp Pro Arg Ile Pro Asp Val Asn Asp Pro
        35                  40                  45
Thr Val Ala Glu His Ile Ser Asn Cys Ser Ile Cys Pro Tyr Val Asp
    50                  55                  60
Pro Tyr Thr Ala Glu Arg Lys Arg Val Glu Thr Gly Ser Gly Ala Thr
65                  70                  75                  80
Gly Ala Ser Val Tyr Val Arg Ser Arg Ala Glu Gly Thr Cys Leu Tyr
                85                  90                  95
Gly Tyr His
```

<210> 27690
<211> 65
<212> PRT
<213> A.fumigatus

<400> 27690

```
Ala Leu Tyr Ser Leu Tyr Arg Ala Leu Cys Leu Trp Gln Arg Asp Ile
1               5                   10                  15
Leu Lys Ala Leu Lys Glu Ile Gly Leu Gln Arg Ile Asn Thr Asp Leu
            20                  25                  30
Tyr Leu Tyr Ile Asp Asn Lys Thr Ile Ile Leu Val Phe Val Asp Asn
        35                  40                  45
Ile Leu Phe Leu Tyr Tyr Tyr Lys Ser Lys Lys Tyr Ala Asp Asn Leu
    50                  55                  60
Ile
65
```

<210> 27691
<211> 333
<212> PRT
<213> A.fumigatus

<400> 27691

```
Ala Arg Tyr Leu Pro His Cys Ala Asp Pro Ser Ser Pro Val Gly Glu
1               5                   10                  15
```

```
Asp Ile Asp Pro Ala Ala Leu Asn Met Ser Thr Lys Arg Lys Arg Gly
            20                  25                  30
Cys Asp Glu Glu Asp His Asp Pro Ser Lys Cys Ser Pro Gln Pro Leu
        35                  40                  45
Lys Thr Ser Arg Met Ala Val Thr Val Val Thr Ser Asn Met Ala Ser
    50                  55                  60
Pro Met Pro Ser Ser Thr Leu Lys Ala Pro Leu Gln Lys Pro Lys Ser
65                  70                  75                  80
Thr Pro Ala Leu Lys Pro Ala Gly Arg Ser Pro Arg Gly Lys Ser Cys
                85                  90                  95
Lys Ala Phe Ala Arg Arg Ser Ala Ile Gly Lys Ser Arg Pro Glu Pro
            100                 105                 110
Thr Gly Arg Lys Ser Ile Ser Arg Pro Phe Ser Ile Ala Thr Val Leu
        115                 120                 125
Gly Asn Ala Gln Pro Lys Ser Gln Thr Ala Pro Lys Thr Pro Ala Ser
    130                 135                 140
Trp Ser Phe Glu Ile His Val Asp Ser Glu Gln Glu Glu Met Thr Asn
145                 150                 155                 160
Met Met Gln His Ser Thr Cys Val Leu Asp Ile Ser Asp Asp Glu Gly
                165                 170                 175
Lys Ala Glu Phe Ser Ser Arg Gly Lys Glu Asn Ile Pro Pro Ser Glu
            180                 185                 190
Leu Glu Ile Asp Leu Ser Arg Thr Arg Glu Arg Glu Thr Ser Val Leu
        195                 200                 205
Arg Lys Thr Glu Met Ala Asp Glu Pro Arg Ser Pro Leu Gly Glu Leu
    210                 215                 220
Asn Ala Ala Asp Tyr Tyr Gly Glu Asp Cys His Ala Phe Ser Tyr Ala
225                 230                 235                 240
Val Ile Tyr Asp Glu Asp Glu Thr Ala Ser Glu Ile Lys Thr Pro Leu
                245                 250                 255
Pro Pro Leu Pro Arg Asn Pro Thr His Pro Ser Arg Thr Lys Leu Ser
            260                 265                 270
Ser Val Ser Ser Ile Ser Ser Ile Leu Ala Ala Thr Gln Pro Val Lys
        275                 280                 285
Ala Thr Ala Ser Thr Lys Ser Glu Ala Glu Ile Glu Ile Trp Glu Ser
    290                 295                 300
Glu Ser Thr Ala Asp Asp Ser Glu Lys Ala Ile Glu Ser Asn Pro Ser
305                 310                 315                 320
Asp Glu Leu Ser Ser Ser Thr Ala Lys Ser Ile Asn Val
                325                 330
```

<210> 27692
<211> 148
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (82),(138)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27692

```
Ala Ser Ser Leu Ser Ala Cys Ser Ser Ala Ser Ser Ser Pro Ser Pro
1               5                   10                  15
Ser Leu Ser Ser Ser Ser Pro Thr Ser Ser Leu His Cys Thr Arg Phe
            20                  25                  30
```

```
Pro Arg Ala Thr Ser Ala Ala Thr Pro Pro Ala Glu Gly Val Ala Phe
        35                  40                  45
Glu Arg Thr Leu Ala Pro Ala Ala Ser Ser Cys Pro Phe Gln Asp Ala
    50                  55                  60
Leu Ile Asp Ala Arg Ile Ser Val Ala Ser Cys Ile Ser Arg Glu Asp
65                  70                  75                  80
Val Xaa Ser Gly Ser Ser Val Lys Ser Ala Ser Glu Pro Ser Gly Ala
                85                  90                  95
Thr Trp Ser Gly Lys Arg Arg Thr Arg Ala Asn Ser Arg Ser Ser Ala
            100                 105                 110
Thr Arg Pro Ser Ser Met Leu Cys Thr Leu Ala Arg Met Asn Val Leu
        115                 120                 125
Ala Leu Pro Asn Val Pro Leu Pro Lys Xaa Pro Val Asp Gly Glu Phe
    130                 135                 140
Ala Gly Val Leu
145

<210> 27693
<211> 210
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5),(8),(29),(86)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27693
Pro Val Pro Gly Xaa Pro Ser Xaa Ser Pro Asp Pro Pro Thr Pro Arg
1               5                   10                  15
Val Leu Gln Arg Thr Pro Ala Asn Ser Pro Ser Thr Xaa Cys Phe Gly
            20                  25                  30
Ser Gly Thr Phe Gly Lys Ala Arg Thr Phe Met Arg Ala Lys Val Gln
        35                  40                  45
Ser Met Leu Asp Gly Arg Val Ala Asp Glu Arg Glu Phe Ala Arg Val
    50                  55                  60
Leu Arg Phe Pro Asp His Val Ala Pro Asp Gly Ser Leu Ala Asp Phe
65                  70                  75                  80
Thr Leu Asp Pro Glu Xaa Thr Ser Ser Arg Glu Met Gln Leu Ala Thr
                85                  90                  95
Asp Ile Arg Ala Ser Ile Lys Ala Ser Trp Lys Gly Gln Leu Asp Ala
            100                 105                 110
Ala Gly Ala Ser Val Arg Ser Asn Ala Thr Pro Ser Ala Gly Gly Val
        115                 120                 125
Ala Ala Asp Val Ala Arg Gly Lys Arg Val Gln Trp Ser Glu Asp Val
    130                 135                 140
Gly Glu Glu Glu Glu Ser Glu Gly Glu Gly Glu Glu Glu Ala Leu Glu
145                 150                 155                 160
Gln Ala Glu Arg Leu Glu Ala Gln Val Ala Ala Ala Ala Glu Ala Val
                165                 170                 175
Glu Ala Ala Ala Met Ala Ala Asp Glu Asp Glu Ala Asn Asp Leu Asp
            180                 185                 190
Gln Glu Glu Ser Asp Val Gly Asp Asp Met Asp Val Asp Glu Pro Ala
        195                 200                 205
Lys Pro
    210
```

<210> 27694
<211> 337
<212> PRT
<213> A.fumigatus

<400> 27694
Met Arg Ile Glu Trp Pro Leu Pro Ala Pro Arg Glu Asp Thr Ile Ile
1 5 10 15
Gly Ala Lys Asp Gly Leu Gly Val Glu Cys Leu Lys Gly Ser Gly Leu
20 25 30
Ile Ala Gly Ala Thr Ser Arg Ala Tyr Glu Asp Ile Phe Thr Ile Thr
35 40 45
Leu Val Thr Cys Arg Ser Val Gly Ile Gly Ala Tyr Leu Val Arg Leu
50 55 60
Gly Gln Arg Ala Ile Gln Val Glu Gly Gln Pro Ile Ile Leu Thr Gly
65 70 75 80
Ala Pro Ala Ile Asn Lys Leu Leu Gly Arg Glu Val Tyr Thr Ser Asn
85 90 95
Leu Gln Leu Gly Gly Thr Gln Ile Met Tyr Lys Asn Gly Val Ser His
100 105 110
Met Thr Ala Thr Asp Asp Phe Glu Gly Val Gln Lys Ile Val Glu Trp
115 120 125
Met Ser Phe Val Pro Asp Lys Lys Gly Ala Pro Ile Pro Ile Leu Pro
130 135 140
Trp Ser Asp Asp Trp Asp Arg Asp Val Ala Tyr Tyr Pro Pro Ser Lys
145 150 155 160
Gln Ala Tyr Asp Val Arg Trp Leu Ile Ala Gly Lys Lys Asp Glu Glu
165 170 175
Gly Phe Leu Pro Gly Leu Phe Asp Ala Gly Ser Phe Glu Glu Ala Leu
180 185 190
Gly Gly Trp Ala Arg Thr Val Val Val Gly Arg Ala Arg Leu Gly Gly
195 200 205
Ile Pro Met Gly Val Ile Ala Val Glu Thr Arg Ser Val Glu Asn Val
210 215 220
Thr Pro Ala Asp Pro Ala Asn Pro Asp Ser Met Glu Val Ile Ser Gln
225 230 235 240
Glu Ala Gly Gly Val Trp Tyr Pro Asn Ser Ala Phe Lys Thr Ala Gln
245 250 255
Ala Leu Arg Asp Phe Asn Asn Gly Glu Gln Leu Pro Val Met Ile Leu
260 265 270
Ala Asn Trp Arg Gly Phe Ser Gly Gly Gln Arg Asp Met Tyr Asn Glu
275 280 285
Val Leu Lys Tyr Gly Ser Tyr Ile Val Asp Ala Leu Val Lys Tyr Glu
290 295 300
Gln Pro Ile Phe Val Tyr Ile Pro Pro Phe Gly Glu Leu Arg Gly Gly
305 310 315 320
Ser Trp Val Ser His Leu Leu Phe Leu Cys His Val Gln Val Phe Lys
325 330 335
Tyr

<210> 27695
<211> 118
<212> PRT
<213> A.fumigatus

<400> 27695
Val Val Ile Asp Pro Thr Ile Asn Pro Asp Gln Met Glu Met Tyr Ala
1 5 10 15
Asp Glu Glu Ala Arg Gly Gly Val Leu Glu Pro Glu Gly Ile Val Asn
20 25 30
Ile Lys Tyr Arg Arg Glu Lys Gln Leu Asp Thr Met Ala Arg Leu Asp
35 40 45
Ala Thr Tyr Gly Glu Leu Arg Arg Ala Leu Glu Asp Pro Ser Leu Ser
50 55 60
Lys Glu Gln Leu Ser Glu Ile Lys Ala Lys Met Ala Ala Arg Glu Glu
65 70 75 80
Gln Leu Leu Pro Val Tyr Leu Gln Ile Ala Leu Gln Phe Ala Asp Leu
85 90 95
His Asp Arg Ala Gly Arg Leu Val Pro Lys Ala Thr Ser Leu Gln Ser
100 105 110
Ala Ala Glu Ile Asn Val
115

<210> 27696
<211> 63
<212> PRT
<213> A.fumigatus

<400> 27696
Ala Met Ser Thr Thr Pro Arg Pro Lys Gln Leu Asp Ile Ser Val Thr
1 5 10 15
Gly Glu Phe Glu Thr Trp Phe Ser Asp Lys Asp Gln Leu Phe Tyr Gln
20 25 30
Phe Gln Gln Ser Tyr Ser Thr Phe Asn Gly Ser Thr Asp Tyr His Asn
35 40 45
Thr Pro Asp Phe Thr Cys Tyr Arg Leu Trp Ile Asn Pro Gly Leu
50 55 60

<210> 27697
<211> 206
<212> PRT
<213> A.fumigatus

<400> 27697
Asp Ala Leu Pro Glu Gly Lys Met Glu Asp Ala Val Met His Leu Lys
1 5 10 15
Met Leu Val Ser Ser Lys Val Leu Gly Lys Asp Thr Leu Asp Thr Thr
20 25 30
Asp Ser Ile Ala Val Asp Gly Ser Lys Glu Leu Thr Cys Asp Ile Phe
35 40 45
Asp Gln Leu Arg Pro Thr Glu Trp Leu Asp Glu Trp Thr Leu Tyr Leu
50 55 60
Ala Met Lys Ile Ser Asp Arg Pro Pro Tyr Val Arg Phe Asp Thr Ser
65 70 75 80
Ile Leu Leu Glu Tyr Gln Pro Asp Lys Ile Lys Lys Asn Arg Lys Ile
85 90 95
Glu Lys Val Thr Asn Glu Ser Ser Asp Cys Glu Leu Val Glu Val Arg
100 105 110
Lys Thr Thr Pro Leu Ala Glu Trp Ala Lys Lys Ile Ala Glu Asp Gln
115 120 125

```
Gln Ser Val Gln Glu Lys Leu Val Tyr Phe Arg Pro Ile Asn Tyr Arg
    130                 135                 140
Asn His Phe Thr Leu Leu Glu Ile Asn Thr Arg Glu Gly Val Ile Arg
145                 150                 155                 160
His Tyr Asp Ser Leu Ala Val Gly Gly Ile Lys Lys Thr Val Ile Ser
                165                 170                 175
Arg Leu Val Lys Lys Glu Phe Gly Ser Phe Gly Phe Arg Tyr Glu Glu
            180                 185                 190
Ala Val Ser Ile Arg Lys Thr Ser Val Ser Val Ala Thr Asn
        195                 200                 205

<210> 27698
<211> 74
<212> PRT
<213> A.fumigatus

<400> 27698
Tyr Pro Asn Arg Gly Ser Val Gln Pro Arg Gly Glu Asp Leu Leu Gln
1               5                   10                  15
Glu Leu Thr Asn Leu Arg Arg Ser Ser Asp Ile Asp Cys Thr Ile Thr
            20                  25                  30
Arg Val Arg Phe Asn Pro Lys Phe Gly Thr Asn Ser Phe Thr Ala Val
        35                  40                  45
Val Asp Gly Val Val Gln Ser Lys Arg Thr Lys Arg Gly Phe Ile His
    50                  55                  60
Phe Glu Ser Glu Ala Asn Gly Ser Leu Arg
65                  70

<210> 27699
<211> 203
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (203)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27699
Ser Ile Asp His Pro Asn Pro Ile Ser Met Ala Leu Pro Gln Leu Leu
1               5                   10                  15
Ser Pro Lys Pro Phe Leu Thr Glu Cys Gly Met Glu Thr Ser Leu Val
            20                  25                  30
Tyr Lys Asp Lys Val His Leu Pro Cys Phe Ser Ser Leu Pro Leu Val
        35                  40                  45
Asp Ser Asp Ser Ser Arg Lys Leu Ile Ser His Tyr Tyr Asp Ser Tyr
    50                  55                  60
Ile Ser Ile Ala Ala Ala Asn Gly Thr Gly Ile Val Leu Asp Thr Arg
65                  70                  75                  80
Thr Trp Arg Gly Ala Thr Pro Trp Ala Gln Pro Met Gly Leu Ser Ala
                85                  90                  95
Asp Lys Leu Leu Glu Leu Asn Arg Ala Ala Val Arg Leu Ala Lys Glu
            100                 105                 110
Ala Arg Asn Arg Ala Val Gly Gly Glu Asn Asn Ile Pro Val Val Ile
        115                 120                 125
Ser Gly Thr Met Gly Pro Leu Arg Asp Ala Tyr Val Asp Thr Ser Glu
```

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10/14/99

```
    130                 135                 140
Leu Ile Thr Leu Glu Asp Ala Arg Glu Gly Tyr Arg Glu Gln Val Glu
145                 150                 155                 160
Val Leu Ala Asp Ala Gly Val Asp Met Leu Ala Ile Met Thr Val Thr
                165                 170                 175
Asn Leu Asn Glu Ala Ile Ala Val Val Glu Leu Ala Lys Glu Val Arg
            180                 185                 190
Leu Pro Val Val Val Ser Phe Ser Ile Glu Xaa
        195                 200
```

<210> 27700
<211> 79
<212> PRT
<213> A.fumigatus

<400> 27700

```
Gln Ile Ser Arg Leu Ile Ile Tyr Glu Gly Tyr Arg Glu Val Tyr Leu
1               5                   10                  15
Thr Leu Met Ser Pro Gly Thr Gly Tyr Val Glu Tyr Leu Glu Arg Thr
            20                  25                  30
Glu Pro Ala Thr Thr Ala Asn Pro Glu Glu Phe Val Tyr Met Asp Thr
        35                  40                  45
Phe Gly Pro Trp His Ile Asp Asn Gln Val Gln Leu Arg Ser Leu Cys
    50                  55                  60
Leu Ala Leu Leu Ala Phe Leu Ser Ala Ala Glu Glu Val Ala Ser
65                  70                  75
```

<210> 27701
<211> 155
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (14)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27701

```
Pro Ser Pro Asn Pro Ser Gln Gln Ser Asn Gly His Gln Xaa Ser Ile
1               5                   10                  15
Leu Asn Asp Thr Thr Thr Gly Asn Arg Thr Ser Phe Ala Asn Ser Thr
            20                  25                  30
Thr Ala Ile Ala Ser Phe Arg Phe Val Thr Val Met Ile Ala Asn Met
        35                  40                  45
Ser Thr Pro Ala Ser Ala Ser Thr Ser Thr Cys Ser Leu Tyr Pro Ser
    50                  55                  60
Arg Ala Ser Ser Ser Val Ile Asn Ser Leu Val Ser Thr Tyr Ala Ser
65                  70                  75                  80
Arg Arg Gly Pro Ile Val Pro Leu Ile Thr Thr Gly Ile Leu Phe Ser
                85                  90                  95
Pro Pro Thr Ala Leu Phe Leu Ala Ser Leu Ala Ser Arg Thr Ala Ala
            100                 105                 110
Arg Leu Ser Ser Arg Ser Leu Ser Ala Glu Arg Pro Met Gly Cys Ala
        115                 120                 125
Gln Gly Val Ala Pro Arg Gln Val Arg Val Ser Lys Thr Ile Pro Val
    130                 135                 140
```

```
Pro Leu Ala Ala Ala Met Glu Met Tyr Glu Ser
145                 150                 155

<210> 27702
<211> 100
<212> PRT
<213> A.fumigatus

<400> 27702
Val Arg Leu Tyr Met Thr Ala Asp Pro Ser Ser Pro Asp Gly Glu Asp
1               5                   10                  15
Ser Gly Pro Leu Phe Ser Pro Val Ser Arg Ala Ser Trp Gly Glu Glu
            20                  25                  30
Leu Ser Ser Trp Gly Lys Gln Leu Thr Asp Arg Cys Val Tyr Val Ile
        35                  40                  45
Asp Phe Thr Ala Gln Met Lys Asn Leu Ile Asp Asn Gly Ile Val Glu
    50                  55                  60
Cys Tyr Ser Pro Leu Val Asp Val Lys Gly Ser Tyr Thr Ala Gln Phe
65                  70                  75                  80
Glu His Thr Ile Leu Leu His Ser Gly Gly Lys Glu Phe Ile Ser Arg
                85                  90                  95
Gly Asp Asp Tyr
            100

<210> 27703
<211> 184
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (2),(5)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27703
Trp Xaa Thr Glu Xaa Arg Val Val Ser Phe Gln Pro Arg Gly Glu Asp
1               5                   10                  15
Arg Thr Ala His Gln Asp Leu Gly Gln Pro Ala Val Val Glu Glu Arg
            20                  25                  30
Arg Tyr Asp Arg Thr Gly Gln Glu Gln Leu Met Leu Ala Ser Gly Thr
        35                  40                  45
Glu Thr Leu Pro Gly Gly Val Arg Arg Ile Thr Asp Leu Asp Asp Glu
    50                  55                  60
Thr Gly Ala Thr Thr Tyr Asp Ala Gly Thr Gln Tyr Gly Ile Pro Thr
65                  70                  75                  80
Gly Ser Ala Asn Glu Arg Glu Glu Ser Ser His Gly Asp Glu Trp Trp
                85                  90                  95
Ser Ser Ser Val Gly Arg Ser Ser Tyr Asp Ile Gly Pro Pro Leu Pro
            100                 105                 110
Gly Ala Arg Thr Tyr Asn Ala Tyr Thr Gly Ala Tyr Glu Glu Gln Arg
        115                 120                 125
Ala Asp Tyr Asp Ala Asp Gly Val Pro Arg Tyr Arg Asp Arg Gly Arg
    130                 135                 140
Gly Arg Gly Gln Gly Gln Ser Gly Tyr Ser Ala Glu Gln Arg Ala Ser
145                 150                 155                 160
Arg Glu Phe Glu Thr Asp Gln Gly Thr Arg Leu Lys Arg Glu Thr Asp
```

```
                165                 170                 175
Val Asp Met Ser Asp Val Leu Met
            180

<210> 27704
<211> 316
<212> PRT
<213> A.fumigatus

<400> 27704
Cys Leu Cys His Pro Val Cys Arg Val Pro Ala Asp Asp Gln Ser Ile
1               5                  10                  15
Gly Ile Met Arg Pro Gly Thr Tyr Val Leu Leu Ile Thr Ser Pro Phe
            20                  25                  30
Asn Ala Leu Leu Asn Tyr Leu Phe Cys Tyr Thr Phe Lys Met Gly Leu
        35                  40                  45
Leu Gly Ala Pro Leu Ala Thr Gly Ile Ser Tyr Trp Leu Ser Phe Ala
    50                  55                  60
Leu Leu Val Leu Tyr Ala Arg Phe Ile Ala Gly Ser Glu Cys Trp Gly
65                  70                  75                  80
Gly Trp Ser Arg Glu Ala Phe Asn Asn Leu Gly Thr Phe Ala Arg Leu
                85                  90                  95
Ala Phe Leu Gly Val Ile His Val Gly Thr Glu Trp Trp Ala Phe Glu
            100                 105                 110
Ile Val Ala Leu Ala Ala Gly Arg Leu Gly Thr Ile Pro Leu Ala Ala
        115                 120                 125
Gln Ser Val Ile Met Thr Ala Asp Gln Val Leu Asn Thr Ile Pro Phe
    130                 135                 140
Gly Val Gly Val Ala Ala Ser Ala Arg Val Gly Asn Leu Leu Gly Ala
145                 150                 155                 160
Arg Asp Ala Gly Gly Ala Ala Arg Ala Ala Asn Thr Ala Ala Trp Leu
                165                 170                 175
Ser Met Val Leu Gly Gly Val Val Leu Ala Val Leu Met Gly Thr Arg
            180                 185                 190
Asp Asp Phe Ala Arg Ile Phe Asn Asp Asp Glu Gly Val Val Arg Leu
        195                 200                 205
Thr Ala Glu Val Leu Pro Tyr Val Ala Leu Phe Gln Ile Ala Asp Gly
    210                 215                 220
Leu Asn Gly Ser Cys Gly Gly Ser Leu Arg Gly Met Gly Arg Gln His
225                 230                 235                 240
Val Gly Ala Met Val Asn Leu Val Ser Tyr Tyr Cys Gly Ala Leu Pro
                245                 250                 255
Leu Gly Ile Trp Leu Ala Phe His Gly Trp Gly Leu Lys Gly Leu Trp
            260                 265                 270
Val Gly Gln Cys Ile Ala Leu Tyr Ile Val Gly Ala Leu Glu Trp Leu
        275                 280                 285
Ile Val Ala Phe Ser Asn Trp Glu Met Glu Val Glu Lys Ala Phe Arg
    290                 295                 300
Arg Met Asp Val His Glu Arg Leu Glu Thr Gly Leu
305                 310                 315

<210> 27705
<211> 141
<212> PRT
<213> A.fumigatus
```

<400> 27705
Gly Val Gly His Thr Leu Cys Val Asp Phe Ser Ser Leu Leu Val Asn
1 5 10 15
Thr Phe Ser Leu Met Phe Ala Met Ile Thr Ala Trp Met Ile Ala Leu
20 25 30
Gly Gly Thr Thr Ala Leu Asp Thr Leu Ala Ser Ser Ser Phe Thr Gly
35 40 45
Ser Ser Asn Asn His Asp Leu Gly Ile Leu Leu Gln Arg Gly Phe Phe
50 55 60
Val Leu Gly Leu Phe Tyr Ile Pro Val Ala Ile Leu Trp Ala Cys Ser
65 70 75 80
Glu His Val Phe Val Phe Leu Gly Gln Asp Gln Val Leu Ser Arg Glu
85 90 95
Ser Ala Arg Phe Leu Thr Cys Leu Ile Pro Gly Gly Leu Gly Tyr Ile
100 105 110
Tyr Phe Glu Val Met Asn Lys Tyr Leu Gln Ala Gln Gly Asn Val Phe
115 120 125
Ala Ile Leu Ser Val Glu Phe Pro Leu Thr Ile Ser Arg
130 135 140

<210> 27706
<211> 80
<212> PRT
<213> A.fumigatus

<400> 27706
Pro Arg Pro Phe Asn Arg Arg Lys Val Gly Lys Gly Asp Thr Arg Thr
1 5 10 15
Met Gly Thr Thr Asn Asn Ala Thr Ile Phe Phe Thr Val Ile Leu Met
20 25 30
Leu Cys Met Leu Asp Lys Ile Leu Asp Glu Val Thr Ala His Gly Ile
35 40 45
Leu Val Thr Arg Val Ser Phe Gly Ser Cys Leu Thr Val Pro Val Pro
50 55 60
Pro Val Ala Thr Met Leu Cys His Arg Thr Tyr Ala Lys Asp Glu Ser
65 70 75 80

<210> 27707
<211> 77
<212> PRT
<213> A.fumigatus

<400> 27707
Thr Asn Ser Asn Gln Glu Phe Leu Arg Arg Pro Thr Ser Pro Ala Asp
1 5 10 15
Trp Trp Pro Glu Pro Ser Thr Asn Val Leu Gly Gly Arg Asp Leu Ala
20 25 30
Arg Ala Thr His Gly Thr Trp Met Gly Val Thr Lys Glu Gly Lys Ile
35 40 45
Ala Val Leu Thr Asn Tyr Arg Glu Asn Thr Ala Asp Glu Pro Ser Gly
50 55 60
Val His Ser Arg Gly Leu Ile Val Asn Ser Trp Leu Thr
65 70 75

<210> 27708
<211> 81

<212> PRT
<213> A.fumigatus

<400> 27708
Pro Gln Ala Ala Asn Pro Thr Pro Met Ala Leu Cys Pro Cys Phe Glu
1 5 10 15
Ile Val Ile Asn Leu Asn Ile Glu Trp Arg Asn Phe Glu Ser Phe Cys
20 25 30
Phe Ser Trp Pro Gly Ile Ala Tyr Cys Val Ala Val Asp Tyr Pro Ser
35 40 45
Arg Val Leu Val Leu Pro Thr Ser Tyr Ser Cys Ala Gln Gln Gln Leu
50 55 60
His Leu Ala Leu Thr Leu His Ser Ser Pro Ser Tyr His Pro Ser Ala
65 70 75 80
Gly

<210> 27709
<211> 65
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (50)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27709
Ser Ala Leu Ile Ile Tyr Tyr Pro Met Gly Gly Asn Ala Thr Thr Ile
1 5 10 15
Phe Ile Pro Cys Trp Leu Gly Leu Arg Ser Gln Cys Ala Ser Phe Glu
20 25 30
Pro Cys Ile Thr Ile Ile Asn Ile Asp Leu Arg Phe Trp Glu Arg Cys
35 40 45
Pro Xaa His Tyr Leu Ser Tyr Glu Asp Leu Phe Leu Lys Ile Tyr Tyr
50 55 60
Ala
65

<210> 27710
<211> 111
<212> PRT
<213> A.fumigatus

<400> 27710
Pro Leu Gln Lys Thr Lys Pro Glu Ala Glu Gly Thr Pro Leu His Gly
1 5 10 15
Leu Leu Ser Leu Gly Leu Pro Arg Ile Pro Gln Arg Pro Ser Glu Cys
20 25 30
His Asn His Lys Lys Gln Ser Asn Trp Ser His Ile Ser Leu Ser Val
35 40 45
Val Phe Thr Val Leu Phe Leu Ser Phe Pro Pro Arg Phe Leu Pro Asn
50 55 60
Lys Leu Lys Phe Ser Gln Tyr Tyr Trp Leu Leu Leu His Thr Gln Ile
65 70 75 80
Asn Tyr Phe Tyr Ile Ile Thr Ile Ile Thr Val Leu Ile Ile Thr Asn

```
                85                  90                  95
Ile Ile Ile Phe Trp Thr Thr Thr Ser Leu Phe Ala Thr Ala Asp
            100                 105                 110

<210> 27711
<211> 76
<212> PRT
<213> A.fumigatus

<400> 27711
Met Val Gly Cys Val Thr Gly Pro Leu Ala Gly Leu Gly Pro Leu Thr
1               5                   10                  15
Ile Pro Asn Ser Ala Ala Glu Ala Gly Thr Gly Trp Asn Trp Lys Phe
            20                  25                  30
Arg Cys Leu Ser Glu Phe Thr Leu Thr Asp Ile Leu Pro His Pro Asn
        35                  40                  45
Asn Asn Asp Pro Ala Leu Val Ser Gly Leu Ser Pro Phe Ser Pro Pro
    50                  55                  60
Leu Ser Pro Pro Gly Gly Cys Pro Trp Gly Arg Gln
65                  70                  75

<210> 27712
<211> 97
<212> PRT
<213> A.fumigatus

<400> 27712
Trp Ala Asn Ile Asp Thr Arg Lys Thr Leu Trp Ala Val Ala Glu Asn
1               5                   10                  15
Phe Arg Tyr Met Thr Lys Phe Leu Arg Thr Ala Glu Glu Val Gln Lys
            20                  25                  30
Leu Gly Arg Val Lys Asn Phe Arg Val Asn Phe His Ala Leu Val Ser
        35                  40                  45
Thr Asp Ser Lys Tyr Phe Ser Lys Leu Tyr Arg Leu Arg Ser Thr Ser
    50                  55                  60
His Asp Tyr Leu Val Arg Asp Leu Thr Arg Glu Lys Pro Arg Gly Ala
65                  70                  75                  80
Lys His Pro Asp Thr Arg Val Asp Ser Ser Trp Thr Ala Glu Ser Met
                85                  90                  95
Ser


<210> 27713
<211> 172
<212> PRT
<213> A.fumigatus

<400> 27713
Ser Asn Glu Gly Glu Thr Ala Trp Arg Gln Thr Pro Gly Tyr Gln Gly
1               5                   10                  15
Gly Phe Ile Leu Asp Gly Gly Val His Val Val Ala Ala Leu Arg Leu
            20                  25                  30
Ile Leu Gly Ser Asn Asp Pro Val Ala Thr Ile Ser Ala Gln Ser Cys
        35                  40                  45
Leu Gln Gln Gln His Leu Pro Pro Leu Asp Thr Val Asn Ala Val Met
    50                  55                  60
```

```
Lys Thr Lys Ser Gly Ala Thr Gly Val Leu Ser Leu Ser Phe Gly Ser
65                  70                  75                  80
Ala Phe Asp Asp Ser Val Phe Glu Phe Asp Cys Glu Gly Gly Val Val
                85                  90                  95
Ala Leu Asn Ser Asp Thr Leu Thr Ile Lys Gly Glu Ser Asn Glu Leu
            100                 105                 110
Ala Phe Asp Gly Arg Gly Val Ser Arg Glu Val Ala Val Phe Ala Thr
        115                 120                 125
Thr Ile Ala Ser Gly Gly Ser Val Asp Lys Arg Gln Ser Pro Glu Glu
    130                 135                 140
Ala Leu Ala Asp Leu Glu Ile Met Glu Lys Met Leu Thr Ser Gly Glu
145                 150                 155                 160
Arg Asp Gly Glu Arg Gln Thr Val Glu Leu Gln Val
                165                 170
```

<210> 27714
<211> 63
<212> PRT
<213> A.fumigatus

<400> 27714

```
Thr Gly Thr Lys Arg Phe Phe Arg His Gln Ser Asp Arg Phe Lys Cys
1               5                   10                  15
Val Pro Glu Ser Trp Arg Lys Pro Lys Gly Ile Asp Asn Arg Val Arg
            20                  25                  30
Arg Arg Phe Lys Gly Asn Ile Pro Met Pro Ser Val Arg Ser Asn Ser
        35                  40                  45
Ser Asp Pro Ala Ala Ser Asp Ser Ile Ile Ser Thr Arg Gln Ile
    50                  55                  60
```

<210> 27715
<211> 140
<212> PRT
<213> A.fumigatus

<400> 27715

```
Leu Tyr Ser Asp Pro Ser Pro Arg Gly Glu His Trp Asn Arg Arg Ser
1               5                   10                  15
Thr Pro Phe Ser Ala Pro Ala Arg Gly Asn Gly His Ser His Gly His
            20                  25                  30
Gly His Ser Ala Thr Met Thr Arg Met Arg Lys Asp Glu Glu Asn Lys
        35                  40                  45
Lys Asp Val His His Pro Ala Pro Leu His Gly Ile Phe Val Ser Gly
    50                  55                  60
Lys Lys Leu Gly Ser Asn Phe Phe Val Leu Leu Phe His His Ser Tyr
65                  70                  75                  80
Ser Thr Ile Tyr Ala Ser Thr Val Thr Arg Pro Leu Gly Leu Val Thr
                85                  90                  95
Leu Thr Pro Ser Ala Leu Ala Leu Ala Met Ile Ser Thr Arg Leu Arg
            100                 105                 110
Glu Glu Thr Ala Glu Ala Ile Leu Ser Ile Asn Gln Tyr Leu Leu Phe
        115                 120                 125
Val Asp Gly Thr Val Asn Ala Thr Tyr Ser Ala Ala
    130                 135                 140
```

<210> 27716

<211> 248
<212> PRT
<213> A.fumigatus

<400> 27716
Thr Thr Gly Arg Arg Asp Glu Arg Gly Pro Asp Val Ser Val Phe Val
1 5 10 15
Gly Pro Val Ile Asp Ile Ala Tyr Thr Ile Gly Leu His Arg Asp Gly
20 25 30
Ala Asp Asp Lys Leu Pro Pro Phe Asp Val Glu Met Arg Arg Arg Leu
35 40 45
Trp Trp His Ile Val Thr Leu Asp Val Arg Ile Ala Glu Asp Ser Ser
50 55 60
Thr Glu Pro Arg Thr Ser Leu Leu Ser Phe Ser Thr Lys Met Pro Ser
65 70 75 80
Asn Thr His Asp Ile Cys Leu Asp Pro Asp Met Gly Ser Thr Pro Val
85 90 95
Cys Gln Phe Gly Lys Thr Glu Met Thr Phe Ser Leu Ile Arg Phe Thr
100 105 110
Val Thr Glu Phe Ala Leu Arg Ser Leu Phe Gly Lys Gln Ser Trp Lys
115 120 125
Val Ala Asp Cys Ala Pro Leu Asp Arg Gln Arg Arg Ile Asn Glu Leu
130 135 140
Asp Gln Leu Lys Glu Arg Leu Glu Val Arg Tyr Leu Ser Cys Cys Asp
145 150 155 160
Glu Thr Ile Pro Phe Asp Phe Val Val Ala Glu Ser Thr Arg Leu Val
165 170 175
Leu Ala Lys Ile Gly Met Tyr Leu Arg Arg Pro Pro Leu Thr Glu His
180 185 190
Asn Thr Ala Gln Pro Phe Glu Pro Thr Tyr Trp Lys Glu Cys Val Asp
195 200 205
Ile Arg Trp Ala Cys Ile Phe Pro Ser Pro Val Arg Glu Arg Gly Lys
210 215 220
Gly Gly Phe Gly Tyr Phe Lys Pro Asn Phe Glu Trp Gly Gly Leu Ala
225 230 235 240
Glu Phe Leu Trp Leu Ala Leu Leu
245

<210> 27717
<211> 86
<212> PRT
<213> A.fumigatus

<400> 27717
Asp Arg Cys Asp Met Ala Asp Leu Val Glu Ile Val Asp Cys Leu Arg
1 5 10 15
Leu Ser Leu Ala Gly Ser Lys Glu Thr Leu Ser Thr Ser Asp Ser Ala
20 25 30
Gln Gly Gly Ser Lys Val Thr Trp Leu Val Ala Ala Met Thr Pro Trp
35 40 45
Phe Ser Phe Ser Ser Ser Cys Gly Ser Leu Thr Val Arg Ser Ile Asn
50 55 60
Phe Arg Met Asn Ser Ser Asp Ser Ala Glu Asn Leu His Phe Phe Arg
65 70 75 80
Met Ser Gly Pro Tyr Leu
85

<210> 27718
<211> 533
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (346),(347)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27718

```
Arg Leu Ile Gly Pro Ala Gln Ser His Pro Leu Ala Arg Met Gly Ala
1               5                  10                  15
Ser Ser Gln Ser Ala Ser Ala Asp Thr Ile Glu His Val His Pro Thr
            20                  25                  30
Arg Ile Ser His Trp Arg Met Val Tyr Asp Gln Gly Ala Leu Thr Gln
        35                  40                  45
Glu Ile Ile Asp Tyr Arg Phe Ala Gly Ser Gly Thr Glu Glu Asp Pro
    50                  55                  60
Tyr Leu Val Thr Trp Ile Leu Asn Asp Pro Arg Asn Pro Leu Glu Phe
65                  70                  75                  80
Ser Ala Thr Lys Lys Trp Thr Tyr Thr Met Val Met Ala Trp Ala Thr
                85                  90                  95
Leu Ala Val Ser Leu Val Ser Ser Ala Tyr Thr Gly Gly Met Gln Gln
            100                 105                 110
Ile Met Glu Gln Phe Glu Val Gly Thr Glu Val Ala Thr Leu Gly Val
        115                 120                 125
Ser Thr Phe Val Leu Gly Phe Ala Ile Gly Pro Leu Leu Phe Ala Pro
    130                 135                 140
Met Ser Glu Leu Trp Gly Arg Gln Tyr Leu Phe Leu Val Ser Tyr Cys
145                 150                 155                 160
Gly Leu Thr Ile Phe Asn Ala Ala Ser Ala Gly Ser Pro Asn Ile Gln
                165                 170                 175
Ala Leu Ile Val Phe Arg Phe Leu Ala Gly Ala Phe Gly Ser Ser Pro
            180                 185                 190
Leu Thr Asn Ala Gly Gly Val Ile Ala Asp Leu Phe Ser Ala Asn Gln
        195                 200                 205
Arg Gly Leu Ala Met Ser Leu Phe Ala Ser Ala Pro Phe Leu Gly Pro
    210                 215                 220
Val Leu Gly Pro Ile Ile Gly Gly Phe Leu Gly Met Thr Glu Gly Trp
225                 230                 235                 240
Lys Trp Val Met Gly Phe Leu Ala Ile Phe Ser Gly Ala Leu Trp Ile
                245                 250                 255
Ile Ala Gly Leu Ile Val Pro Glu Thr Tyr Ala Pro Val Leu Leu Arg
            260                 265                 270
Arg Arg Ala Met Lys Leu Ser Glu Leu Thr Gly Lys Val Tyr Lys Ser
        275                 280                 285
Arg Ile Glu Ala Glu Gln Gly Lys Lys Thr Leu Gly His Ser Leu Lys
    290                 295                 300
Ile Ser Leu Ser Arg Pro Trp Ile Leu Leu Phe Arg Glu Pro Ile Val
305                 310                 315                 320
Leu Leu Leu Ser Glu Tyr Met Ala Ile Glu Asn Gly Asn Tyr Lys Lys
                325                 330                 335
Lys Lys Gly Ala Ile Pro Ile Glu Gly Xaa Xaa Gln Arg Gly Trp Asn
            340                 345                 350
```

```
Gln Gly Val Ser Gly Leu Ala Phe Leu Gly Ile Met Ile Gly Met Met
        355                 360                 365
Cys Ala Val Ala Phe Ser Ile Tyr Asp Asn Lys Arg Tyr Ile Arg Ala
    370                 375                 380
Gln Glu Ala His Lys Gly Phe Ala Pro Pro Glu Ala Arg Leu Pro Pro
385                 390                 395                 400
Cys Leu Val Ala Ser Val Ala Ile Pro Ile Gly Leu Phe Trp Phe Ala
                405                 410                 415
Trp Thr Asn Tyr Pro Ser Ile His Tyr Leu Ala Ser Ile Ser Ala Gly
            420                 425                 430
Val Pro Phe Gly Phe Gly Met Val Leu Ala Phe Leu Ser Leu Met Asn
        435                 440                 445
Tyr Leu Ile Asp Ala Tyr Thr Ile Tyr Ala Ala Ser Val Leu Ala Ala
    450                 455                 460
Ser Ala Val Leu Arg Ser Ile Phe Gly Ala Ala Phe Pro Leu Phe Val
465                 470                 475                 480
Lys Tyr Met Tyr Ser Ser Leu Gly Arg Ser Phe Phe Phe Leu Val Leu
                485                 490                 495
Leu Phe Arg Arg Lys Leu Ile Gly Ser Arg Tyr Ser Leu Gly Leu Val
            500                 505                 510
His Ser Cys Leu Pro Gly Thr Gly Leu Cys Pro Leu Ser Ile Pro Leu
        515                 520                 525
Leu Gln Val Arg Ala
    530
```

<210> 27719
<211> 141
<212> PRT
<213> A.fumigatus

<400> 27719

```
Ser Gly Pro Gly Ile His Trp Ala Ser Ser Ile Pro Ala Phe Leu Ala
1               5                   10                  15
Leu Ala Cys Val Pro Phe Pro Phe Leu Phe Tyr Lys Tyr Gly Pro Asp
            20                  25                  30
Ile Arg Lys Lys Cys Lys Phe Ser Ala Glu Ser Asp Glu Phe Met Arg
        35                  40                  45
Lys Leu Met Glu Arg Thr Val Lys Glu Pro Gln Glu Glu Glu Lys Glu
    50                  55                  60
Asn Gln Gly Val Met Ala Ala Thr Ser Gln Val Thr Leu Glu Pro Pro
65                  70                  75                  80
Cys Ala Glu Ser Glu Val Asp Arg Val Ser Leu Asp Pro Ala Lys Leu
                85                  90                  95
Ser Arg Arg Gln Ser Thr Ile Ser Thr Lys Ser Ala Met Ser His Arg
            100                 105                 110
Ser Gln Lys Leu Val Thr Ser Gln Asp Val Tyr Asp Ala Asn Pro Phe
        115                 120                 125
Asp Ile Asp Arg Val Asn Thr Arg Asp Ser Phe Lys Asp
    130                 135                 140
```

<210> 27720
<211> 185
<212> PRT
<213> A.fumigatus

<400> 27720

```
Ile Gly Lys Arg Thr Ala Asn Asp Arg Ala Gln Asp Arg Ala Asp Thr
1               5                  10                  15
Pro Asp Glu Ala Ser Ser Pro His Val Gln Arg Pro Leu Leu Tyr Gly
            20                  25                  30
Ser Gly Gly Arg Gln Glu Ser His Glu Ser Asp Ile His Ala Arg Ala
        35                  40                  45
Arg His Ala Thr Asp Gly Thr Ala Asn Asp Gln Gly Val His Val Gly
    50                  55                  60
Arg Ser Ala Ala Asp Gly Gly Ser His Phe Lys Asp Lys Asp Arg Gln
65                  70                  75                  80
Asp Val Gly Pro Phe Cys Val Glu Leu Thr Lys Asp Phe Ala Pro Asp
                85                  90                  95
Gln Ile Arg Pro Arg Arg Ala Asp Gln Glu Ser Asp Thr Asp Pro Trp
            100                 105                 110
Glu Leu Phe Asp Arg Val Glu Met Ala His Asn Asp Gly Leu His Val
        115                 120                 125
Gly His Asn Gly Val Val Glu Gly Glu Glu Glu Leu Arg Ala Val Asn
    130                 135                 140
Gly Gln His Asp Lys Glu Pro Phe Pro Pro Gly Asp Leu Ser Arg Arg
145                 150                 155                 160
Gly Leu Gly Ile Leu Trp His Arg Val Pro Ser Ser Leu Cys Phe Arg
                165                 170                 175
Ile Arg Val Arg Arg Asp Arg Leu Phe
            180                 185
```

<210> 27721
<211> 229
<212> PRT
<213> A.fumigatus

<400> 27721

```
Ile Leu Ser Pro Met Ser Asp Thr Met Ala Ala Asp Asn Gln Pro Ala
1               5                  10                  15
Ala Gly Leu Ala Ser Lys Asp Ser Asn Arg Ser Pro Thr Glu Arg Glu
            20                  25                  30
Leu Ser Glu Lys Ala Ile Ser Thr Asp Ser Asp Pro Glu Ala Gln Arg
        35                  40                  45
Gly Gly Asp Ser Val Pro Glu Asp Pro Lys Ser Pro Pro Arg Glu Ile
    50                  55                  60
Thr Gly Trp Lys Trp Phe Leu Val Val Leu Ser Ile Tyr Ser Ser Gln
65                  70                  75                  80
Phe Leu Phe Ala Leu Asp Asn Thr Ile Val Ala Asn Val Gln Pro Val
                85                  90                  95
Ile Val Gly His Phe Asn Ser Val Glu Lys Leu Pro Trp Ile Ser Val
            100                 105                 110
Ala Phe Leu Ile Gly Ala Ala Gly Thr Asn Leu Ile Trp Gly Lys Val
        115                 120                 125
Phe Gly Gln Phe Asn Ala Lys Trp Thr Tyr Ile Leu Ser Val Phe Val
    130                 135                 140
Phe Glu Val Gly Ser Ala Val Cys Gly Ala Ala Pro Asn Met Asn Ala
145                 150                 155                 160
Leu Ile Ile Gly Arg Ala Ile Cys Gly Val Ser Gly Ser Gly Met Tyr
                165                 170                 175
Val Gly Leu Met Thr Leu Leu Ala Ala Thr Thr Thr Ile Gln Glu Arg
            180                 185                 190
Pro Leu Tyr Val Gly Gly Gly Gly Phe Ile Trp Gly Val Gly Thr Val
```

```
        195                 200                 205
Leu Gly Pro Ile Ile Gly Gly Ala Phe Thr Asp Ser Ser Ala Gly Arg
    210                 215                 220
Arg Trp Ala Phe Leu
225

<210> 27722
<211> 189
<212> PRT
<213> A.fumigatus

<400> 27722
Asn Arg Leu Leu Gln Met Ile Arg Ser Gln Gln Ala Gln Leu Gln Gln
1               5                   10                  15
Leu Gln Gln Gln Gln Gln Gln Gln Ser Gly Ala Ala Val Glu Asp
            20                  25                  30
Ser Thr Pro Pro Ser Glu Arg Ser Ala Gly Val Pro Ile Ile Pro Pro
        35                  40                  45
Leu Pro Ala Ala Gly Ser Gly Arg Thr Ser Thr Gln Phe Pro Ser Ser
    50                  55                  60
Leu Ser Ser His Arg Ala Ser Arg Pro Ser Ser Gln Thr Ala Ser Pro
65                  70                  75                  80
Ser Leu Arg Pro Leu Pro Ser Ala Ser Leu His Gly Thr Ser Val Asp
                85                  90                  95
Ser Ser Arg Gly Pro Glu Gly Leu Asp Leu Val Ala Ser Thr Ser Glu
            100                 105                 110
Thr Ser Ser Arg Arg Gly Ser Arg Asp Glu Val Ala Phe Tyr Gln Ala
        115                 120                 125
Glu Ala Ser Met Leu Asn Arg Glu Asn Gln Met Leu Arg Gln Arg Ile
    130                 135                 140
Arg Glu Leu Gly Leu Ser Ala Val Phe Pro Pro Ser Val Ile Cys Ala
145                 150                 155                 160
Lys Ser Arg His Leu Phe Val Ser Tyr Val Cys Ser Glu Leu Lys Ile
                165                 170                 175
Gln Thr Leu Thr Lys Gln Lys Asn Asp Lys Leu Val Gly
            180                 185

<210> 27723
<211> 326
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (235),(252)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27723
Leu Gln His Lys Ile Gln Ser Gln Ser Thr Thr Glu Asp Lys His Phe
1               5                   10                  15
Asp Pro Leu Ala Gly Ile Leu Leu Ser Glu Leu Leu Lys Leu Thr Val
            20                  25                  30
Cys Leu Leu Cys Ile Ala His Thr Ala Glu Glu Pro Gln Pro Leu Leu
        35                  40                  45
Ala Thr Leu Lys Thr Asn His Glu Glu Ala Thr Leu Pro Ala Leu Leu
    50                  55                  60
```

```
Tyr Thr Ala Ala Ser Phe Ala Gln Ser Ile Gly Ala Ser Ser Leu Pro
65                  70                  75                  80
Leu Leu Gln Tyr Leu Ala Leu Ser Gln Thr Lys Leu Ile Leu Thr Pro
                85                  90                  95
Leu Leu Ala Thr Phe Leu Leu Asn Gln Arg Phe Thr Leu Gln His Trp
            100                 105                 110
Thr Ser Thr Leu Ala Met Thr Ala Gly Ile Ile Leu Ala Gln Thr Gly
        115                 120                 125
Ala Asn Ala Ala Ala Glu Thr Gln Pro Arg Thr Ala Ala Asn Pro Asn
    130                 135                 140
Ile His Ala His Pro Leu Leu Pro Gly Ile Leu Ala Met Leu Leu Ser
145                 150                 155                 160
Gly Ser Cys Val Ala Leu Gly Ser Leu Ser Ile Glu Arg Ser Leu Lys
                165                 170                 175
Arg Ala Ala Asn Asn Asn Thr Thr Thr Thr Ala Lys Gly Ser Ala Phe
            180                 185                 190
Phe Ile Arg Asn Ala Gln Phe Ala Ala His Ser Leu Leu Phe Ala Leu
        195                 200                 205
Leu Ser Phe Leu Trp Lys Glu Lys Cys Arg Ile Asp Gly Ser Arg Phe
    210                 215                 220
Leu Glu Gly Leu Asn Arg Leu Val Trp Val Xaa Val Val Leu Gln Ala
225                 230                 235                 240
Ser Gly Gly Phe Leu Val Ala Trp Cys Val Arg Xaa Thr Ser Ser Val
                245                 250                 255
Thr Lys Asn Tyr Ala Gln Gly Met Gly Phe Ala Ile Ala Ala Ala Gly
            260                 265                 270
Pro Leu Val Val Glu Ser Lys Asp Val Asp Gly Lys Val Ser Asp Leu
        275                 280                 285
Leu Gln Arg Gly Val Phe Gly Glu Cys Ile Ala Asp Ala Glu Val Gly
    290                 295                 300
Ser Phe Leu Ser Gly Leu Cys Leu Tyr Trp Gly Arg Ser Leu Gly Arg
305                 310                 315                 320
Pro Ser Gln Gly Arg Val
                325
```

<210> 27724
<211> 277
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (231),(248)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27724

```
Asn Pro Val Pro Val His Asn Arg Gly Gln Ala Leu Arg Ser Thr Gly
1               5                   10                  15
Arg His Pro Pro Leu Arg Thr Pro Gln Thr Asp Arg Leu Pro Pro Leu
            20                  25                  30
His Arg Pro His Ser Arg Arg Ala Pro Thr Pro Pro Arg Asn Pro Gln
        35                  40                  45
Asp Lys Pro Arg Arg Ser His Pro Pro Ser Pro Pro Leu His Arg Arg
    50                  55                  60
Ile Leu Arg Pro Lys His Arg Arg Leu Leu Pro Pro Pro Pro Pro Ile
65                  70                  75                  80
```

```
Pro Arg Pro Leu Pro Asp Gln Thr His Pro His Pro Thr Pro Arg Asn
                85                  90                  95
Leu Pro Pro Gln Pro Thr Ile His Pro Pro Ala Leu Asp Val His Pro
            100                 105                 110
Gly Tyr Asp Ser Gly Asp His Ser Arg Pro Asp Arg Arg Gln Arg Arg
        115                 120                 125
Ser Arg Asn Ala Ala Pro His Arg Ser Gln Pro Gln His Pro Arg Ala
    130                 135                 140
Ser Pro Pro Pro Arg His Pro Arg His Ala Ala Leu Trp Val Leu Arg
145                 150                 155                 160
Arg Thr Gly Lys Pro Leu His Arg Thr Ile Ala Gln Ala Arg Arg Glu
                165                 170                 175
Gln Gln His His Tyr Asp Arg Glu Gly Glu Arg Val Leu His Pro Gln
            180                 185                 190
Arg Thr Ile Arg Arg Ala Gln Ser Pro Leu Cys Thr Pro Leu Val Pro
        195                 200                 205
Leu Glu Arg Lys Val Pro Asn Arg Arg Ile Thr Leu Leu Gly Arg Pro
    210                 215                 220
Gln Ser Pro Gly Leu Gly Xaa Cys Gly Ala Pro Gly Val Arg Trp Val
225                 230                 235                 240
Pro Gly Gly Val Val Cys Glu Xaa Asp Glu Phe Cys Asp Glu Glu Leu
                245                 250                 255
Cys Ala Gly Asp Gly Val Cys Asp Cys Gly Cys Gly Ala Val Gly Cys
            260                 265                 270
Arg Val Glu Gly Cys
        275
```

<210> 27725
<211> 169
<212> PRT
<213> A.fumigatus

<400> 27725

```
Leu Trp Tyr Pro Gln Asp Asn Phe Thr Glu Gly Val Tyr Ile Asp Tyr
1               5                   10                  15
Arg Ala Phe Glu Ala Asn Asn Ile Thr Pro Arg Tyr Glu Phe Gly Phe
            20                  25                  30
Gly Leu Thr Tyr Ser Asn Phe Ser Tyr Ser Ala Leu Glu Val Glu Leu
        35                  40                  45
Val Pro Gly Ala Asn Ile Asp Tyr Leu Pro Pro Gly Ser Ala Ile Ala
    50                  55                  60
Glu Gly Gly Leu Pro Ser Leu Trp Asp Val Val Ala Thr Val Asn Cys
65                  70                  75                  80
Thr Val Ala Asn Thr Gly Ala Val Glu Ala Ala Glu Val Ala Gln Leu
                85                  90                  95
Tyr Val Gly Ile Pro Gly Ala Pro Ala Lys Gln Leu Arg Gly Phe Asn
            100                 105                 110
Lys Gln Ser Ile Lys Pro His Lys Lys Lys His Phe Thr Phe Asp Leu
        115                 120                 125
Thr Arg Arg Asp Leu Ser Thr Trp Asp Val Glu Lys Gln Thr Trp Gly
    130                 135                 140
Leu Gln Ser Gly Ser Tyr Pro Ile Tyr Val Gly Lys Ser Val Arg Asp
145                 150                 155                 160
Ile Gln Leu Thr Gly Thr Leu Gln Ile
                165
```

<210> 27726
<211> 127
<212> PRT
<213> A.fumigatus

<400> 27726
Ser Gly Thr Arg Arg Thr Thr Ser Pro Arg Ala Cys Thr Ser Thr Thr
1 5 10 15
Ala Arg Ser Arg Arg Thr Thr Ser Leu Arg Gly Met Ser Leu Ala Leu
20 25 30
Val Ser Arg Thr Ala Thr Ser His Thr Pro Arg Trp Lys Leu Ser Ser
35 40 45
Ser Pro Ala Gln Thr Ser Thr Ile Cys Pro Pro Ala Arg Pro Leu Pro
50 55 60
Arg Ala Val Ser Pro Leu Tyr Gly Thr Ser Trp Gln Pro Ser Thr Ala
65 70 75 80
Pro Trp Pro Ile Leu Ala Arg Trp Arg Arg Pro Arg Ser Pro Ser Cys
85 90 95
Met Leu Val Phe Leu Ala Pro Pro Pro Ser Asn Ser Glu Gly Ser Thr
100 105 110
Ser Ser Pro Ser Ser Arg Thr Arg Arg Ser Thr Leu Pro Leu Thr
115 120 125

<210> 27727
<211> 291
<212> PRT
<213> A.fumigatus

<400> 27727
Asp Ser Ser Ile Cys Lys Thr Ile Glu Lys Arg Thr Leu Thr Thr Cys
1 5 10 15
Ser Asp Ser Ile Ser Thr Ile Ala Lys Pro Ser Thr Ser Gln Val Pro
20 25 30
Ala Pro Arg Val Gly Ser Ala Ser Thr Thr Leu Asp Lys Lys Ile Tyr
35 40 45
Leu Phe Ser Gly Arg Gly Gly Leu Ala Met Ser Pro Ile Asp Glu Ala
50 55 60
Gly Ala Val Trp Glu Phe Thr Pro Gln Thr Ser Ser Trp Arg Leu Ile
65 70 75 80
Thr Pro Thr Ser Glu Ile His Pro Pro Pro Arg Ser Tyr His Cys Met
85 90 95
Thr Ser Asp Gly Ile Asp Thr Leu Tyr Leu His Ala Gly Cys Pro Glu
100 105 110
Thr Gly Arg Leu Ser Asp Leu Trp Ala Phe Arg Leu Ser Thr Arg Glu
115 120 125
Trp Thr Pro Leu Ala Ala Ala Pro Asp Pro Pro Arg Gly Gly Thr Ser
130 135 140
Ile Ala Phe Ala Asp Gly Ala Leu Tyr Arg Met Asn Gly Phe Asp Gly
145 150 155 160
Lys Met Glu Gln Gly Gly Ser Val Asp Val Tyr Ser Pro Gly Glu Asn
165 170 175
Val Trp Ser Ser Tyr Gly Phe Val Ala Asp Gly Val Ser Gly Pro Glu
180 185 190
Ala Arg Ser Val Ser Ala Leu Leu Pro Val Arg Thr Gly Glu Lys Val
195 200 205
Ala Leu Val Thr Leu Phe Gly Glu Arg Asp Pro Ser Ala Leu Gly His

```
    210                 215                 220
Gln Gly Ala Gly Lys Met Leu Asp Asp Val Trp Val Phe Asp Val Gln
225                 230                 235                 240
Glu Arg Ser Trp Arg Arg Val Asp Ala Gln Gly Glu Ala Pro Cys Ala
                245                 250                 255
Arg Gly Trp Phe Ala Ala Asp Val Leu Gly Glu Asn Ala Ile Val Val
            260                 265                 270
Gln Gly Gly Leu Asp Glu Ser Asn Arg Arg Leu Gly Asp Val Trp Ile
        275                 280                 285
Leu Ser Phe
    290
```

<210> 27728
<211> 82
<212> PRT
<213> A.fumigatus

<400> 27728

```
Gln Pro Ala Gln Thr Gln Tyr Gln Pro Ser Pro Asn Arg Gln His Arg
1               5                   10                  15
Arg Ser Pro Pro Arg Ala Trp Asp Pro Arg Pro Pro Pro Ser Thr Arg
            20                  25                  30
Arg Ser Thr Ser Ser Pro Ala Ala Ala Gly Ser Pro Cys Pro Pro Ser
        35                  40                  45
Thr Lys Pro Gly Gln Ser Gly Asn Leu Pro Pro Arg Pro His Pro Gly
    50                  55                  60
Asp Ser Ser Arg Pro Pro Arg Lys Ser Thr Leu His His Ala Ala Thr
65                  70                  75                  80
Thr Ala
```

<210> 27729
<211> 281
<212> PRT
<213> A.fumigatus

<400> 27729

```
Ser Lys Ala Pro Ile Lys Val Phe Phe Thr Gly Pro Gly Val Ile Thr
1               5                   10                  15
Ser Ala Thr Pro Thr Gly Asp Met Ser Val Asp Ser Val Arg Thr Ala
            20                  25                  30
Ile Leu Pro Leu Tyr Asn Gln Phe Gly Ile Phe Asn Asn Ile Glu Leu
        35                  40                  45
Arg Val Leu Arg Arg Ser Asn Pro Gly Pro Asn Gly Arg Gly Gly Gly
    50                  55                  60
Gly Glu Val Gln Leu Val Phe Gly His Gln Val Arg Leu Pro Lys Thr
65                  70                  75                  80
Leu His Leu Met Asn Pro Gly Arg Val Lys Lys Val Arg Gly Val Ala
                85                  90                  95
Tyr Ser Val Gly Val Ser Ala Ser Asn Asn Ala Arg Met Ile Asp Val
            100                 105                 110
Ala Arg Gly Ile Leu Asn Pro Leu Val Pro Asp Thr Tyr Ile Phe Ser
        115                 120                 125
Asp Val Ser Ser Ala Pro Leu Val Pro Asp Arg Asn Asn Pro Ser Ala
    130                 135                 140
Lys Lys Lys Ile Gly Leu Gly Phe Gly Leu Ser Leu Val Ala Glu Ser
```

```
145                 150                 155                 160
Ser Thr Gly Cys Leu Tyr Ser Ala Asp Val Ala Ser Pro Pro Ala Gly
                165                 170                 175
Gly Gln Ala Pro Glu Asp Ile Gly Lys Gln Cys Ala Tyr Gln Leu Leu
            180                 185                 190
Glu Thr Ile Ser Lys Gly Gly Cys Val Ala Pro Ala Ala Ala Ser Thr
        195                 200                 205
Met Leu Gly Leu Met Thr Met Gly Ser Glu Asp Val Gly Arg Leu Gln
    210                 215                 220
Phe Gly Arg Glu Val Ile Ala Asp Glu Ser Ile Ile Gln Leu Ala Arg
225                 230                 235                 240
Asp Leu Ala Lys Phe Gly Ala Pro Gly Trp Gly Leu Arg Asp Ala Thr
                245                 250                 255
Gly Glu Asn Glu Gln Gly Asp Val Ile Val Ser Val Val Gly Arg Gly
            260                 265                 270
Ile Gly Asn Val Gly Arg Lys Val Ala
        275                 280
```

<210> 27730
<211> 90
<212> PRT
<213> A.fumigatus

<400> 27730
Glu Ser Thr Leu Ile Leu Val Arg Val Cys Arg Pro Ser Asn Ser Arg
1 5 10 15
Leu Thr Thr Ser Phe Thr Ile Thr Val Asp Leu Tyr Gly Thr Asn Pro
20 25 30
Ile Ile Tyr Gly Lys Arg Leu Asn Tyr Leu Phe Ser Ala Asp Pro Ala
35 40 45
Val Phe Arg Leu Leu Val Ala Ser Ser Leu Phe Pro Ala Cys Ser Leu
50 55 60
Asp Thr Ser Gln Leu Pro Thr Val Phe Phe Ala Gln Ile Tyr Glu Val
65 70 75 80
Leu Cys Ala Leu Ser Arg Phe His Leu Gln
85 90

<210> 27731
<211> 66
<212> PRT
<213> A.fumigatus

<400> 27731
Val Trp Ile Phe Ile Leu Ser Tyr Ala Cys Arg Leu Leu Thr Ser Val
1 5 10 15
Ser Thr Glu Ser Pro Asn Gly Gly Glu Gln Asn Lys Arg Gly Ser Tyr
20 25 30
Tyr Gly Gly Lys Tyr Ala Leu Gln Thr Ser Pro Leu Lys Thr Ile Cys
35 40 45
Asn Arg Ser Asp Cys His Phe Val Met Gln Tyr Ala Asn Asn Arg Cys
50 55 60
Cys Met
65

<210> 27732
<211> 104
<212> PRT
<213> A.fumigatus

<400> 27732
Ala Ile Ser Gly Cys Gly Pro Arg Thr Val Asp Ser Gly Leu Ser Lys
1 5 10 15
Ser Tyr Ala Ala Gln Arg Pro Ile Trp Ala Asp Tyr Gln Tyr Val Leu
20 25 30
Thr Ala Cys Ala Ile Gly Cys Asn Phe Pro Leu Thr Val Phe Val Ile
35 40 45
Lys Ala Asp Pro Asp Leu Ser Asn Pro Thr Arg Pro Arg Phe Glu Arg
50 55 60
Pro Leu Glu Thr Ile Arg Ser Phe Glu Ala Ala Ile Glu Gly Thr Tyr
65 70 75 80
Ser Ser Arg Pro Val Ser Trp Ala Arg Thr Gly Glu Phe Gly Ser Leu
85 90 95
Phe Cys His Met His Ala Asp Cys
100

<210> 27733
<211> 404
<212> PRT
<213> A.fumigatus

<400> 27733
Ile Ala Arg Arg Ser Glu Asp Arg Ser Gln Ala Ala Trp Thr Leu Thr
1 5 10 15
Ala Val Ala Val Arg Leu Ala Lys Ala Leu Gly Leu His Arg Glu Arg
20 25 30
Asp Glu Thr Phe Phe Asn Gln Gln Met Arg Arg Arg Leu Trp Leu Thr
35 40 45
Ile Ser Leu Met Asp Leu Gln Ala Ser Phe Ser Gln Ala Ser Glu Pro
50 55 60
Leu Ile Ser Thr Glu Glu Ala Thr Ser Thr Phe Phe Leu Pro Lys His
65 70 75 80
Ile Asn Asp Ser Asp Leu Asp Pro Thr Met Thr His Glu Ile Pro Asp
85 90 95
Arg Glu Gly Leu Cys Asp Thr Thr Phe Ala Leu Val Thr Tyr His Ile
100 105 110
Gln Leu Ala Gly Arg Ala Leu Asn Phe Gly Thr Thr Ala Ser Pro Gln
115 120 125
His Lys Ala Ser Gln Gln Gln His Ala Gln Arg Phe Glu Glu Asn Ala
130 135 140
Leu Arg Leu Leu His Phe Cys Asp Pro Glu Ser Ser Pro Tyr Ala Trp
145 150 155 160
Phe Thr Trp His Gly Thr Gln Cys Leu Val Ser Gly Ala Arg Leu Ser
165 170 175
Ala Leu Arg Pro Leu Gln Leu Pro Gln Pro Ser Asn Gly Ser Ser Gln
180 185 190
Pro Pro Ser Ser Pro Ser Pro Arg Pro Gln Glu His Asn His Glu Leu
195 200 205
Leu Arg Leu Ala Leu Asn Val Leu Glu Lys Ala His Leu Met His Thr
210 215 220
Asp Pro Arg Gly Glu Gly Phe Arg Trp Tyr Val Thr Met Pro Trp His
225 230 235 240
Ala Leu Ala Val Ala Ile Asn Glu Cys Ser Leu Ser Pro Asp Val Val
245 250 255
Arg Ile Gln Ser Ala Trp Pro Thr Ile Glu Ala Cys Tyr Gln Leu Leu
260 265 270
Arg Arg Lys Gly Val Ala Gly Gln Glu Glu Ala Ile Gln Arg Pro Leu
275 280 285
Glu Lys Leu Ile Cys Gln Ala Arg Asp Lys Ala Ser Pro Leu Leu Gln
290 295 300
Leu Ala Arg Ser Ser Pro Thr Phe Ser Leu Gly Ser Ser Thr Gly Thr
305 310 315 320
Ser Ala Ala Pro Thr Pro Arg Ser Arg Ala Ser Ser Thr Pro Ser Asp
325 330 335
Thr Leu Ser Asp Leu Ser Trp Pro Thr Ala Phe Ser His Ala Pro Ser
340 345 350
Gln Leu Gly Met Glu Leu Ala Pro Val Gly Pro Val Gln Pro Phe Ala
355 360 365
Lys Leu Asp Leu Asp Ser Leu Leu Ser Gln Phe Asp Ile Gln Gly Gln
370 375 380
Pro Leu Leu Ala Gly Gln Ile Pro Arg Leu His His Gly Ala Gly Arg

385 390 395 400
Ile His Ala Lys

<210> 27734
<211> 73
<212> PRT
<213> A.fumigatus

<400> 27734
Pro Phe Val Met Pro Arg Gln Ala Met Thr Leu Ala Ser Pro Ser Arg
1 5 10 15
Thr Ser Thr Ser Cys Ser Ser Met Asn Thr Gly Phe Asp Thr Ile Ala
20 25 30
Asn Thr Ser Leu Arg Thr Lys His Cys Trp Gln Asn Tyr Val Asp Tyr
35 40 45
His Lys Cys Ile Asn Ala Lys Gly Glu Asp Phe Arg Pro Cys Arg Gln
50 55 60
Val Ile Ile Ser Ile Ala Gly Val Lys
65 70

<210> 27735
<211> 222
<212> PRT
<213> A.fumigatus

<400> 27735
Ser Thr Phe Gln Pro Arg Ala Glu Asp Lys Ser Arg Phe Thr Ser Ser
1 5 10 15
Ser Ser Pro Pro Gly Leu Pro Thr Leu Val Gly Ile Ala Cys Ala Ser
20 25 30
Gly Phe Ile Gly Gly Phe Ala Gly Asp Pro Ala Asp Val Leu Asn Val
35 40 45
Arg Met Gln His Asp Ala Ala Leu Pro Pro Ala Gln Arg Arg Asn Tyr
50 55 60
Lys His Ala Leu His Gly Leu Ile Gln Met Thr Arg Thr Glu Gly Ala
65 70 75 80
Ala Ser Leu Phe Arg Gly Val Trp Pro Asn Ser Thr Arg Ala Val Leu
85 90 95
Met Thr Ala Ser Gln Leu Ala Ser Tyr Asp Thr Phe Lys Arg Leu Cys
100 105 110
Leu Glu Lys Leu Gly Met Ser Asp Asn Leu Val Thr His Phe Thr Ala
115 120 125
Ser Leu Met Ala Gly Phe Val Ala Thr Thr Val Cys Ser Pro Val Asp
130 135 140
Val Ile Lys Thr Arg Val Met Thr Ala Ser Pro Ala Gln Thr Gln Gly
145 150 155 160
His Thr Leu Leu Gly Leu Leu Arg Asp Ile Tyr Arg Lys Glu Gly Phe
165 170 175
Ala Trp Ala Phe Arg Gly Trp Val Pro Ser Phe Ile Arg Leu Gly Pro
180 185 190
His Thr Ile Ala Thr Phe Ile Phe Leu Glu Glu His Lys Lys Leu Tyr
195 200 205
Arg Val Leu Lys Gly Ile Ser Gly Asp Asn Thr Ile Asn Val
210 215 220

<210> 27736
<211> 270
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (254)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27736

```
Val Ile Ile Ser Arg His Pro Ser Pro Cys Leu Thr Leu Gln Val Leu
1               5                  10                  15
Leu Ala Gln Gly Phe Cys Ile Gly Ile Gly Gly Gly Ile Ala Tyr Ile
            20                  25                  30
Pro Ala Met Val Val Ile Ser Ser Asn Phe Thr Thr Lys Arg Pro Ile
        35                  40                  45
Ala Ile Gly Cys Ala Ala Ile Gly Ser Ser Val Gly Ser Val Val Phe
    50                  55                  60
Pro Ile Met Phe Arg Gln Leu Gln Pro Arg Ile Gly Phe Pro Trp Thr
65                  70                  75                  80
Val Arg Ser Ile Gly Phe Ile Asn Leu Ile Leu Gly Leu Leu Ser Ile
                85                  90                  95
Leu Ile Leu Cys Arg Lys Pro Gly Lys Lys Ser Arg Ala Arg Ser Met
            100                 105                 110
Ile Glu Trp Arg Ala Phe Ser Asp Leu Pro Phe Met Leu Phe Ser Ile
        115                 120                 125
Ser Leu Thr Cys Val Met Leu Ala Tyr Tyr Ile Pro Leu Phe Tyr Val
    130                 135                 140
Pro Ser Tyr Ala Arg Thr Arg Leu His Thr Thr Arg Ser Leu Ser Phe
145                 150                 155                 160
Tyr Leu Val Ala Ile Ile Asn Gly Ala Ser Ala Phe Gly Arg Val Val
                165                 170                 175
Pro Tyr Leu Leu Ser Ala Tyr Ile Ala Pro Ile Ala Ile Leu Cys Leu
            180                 185                 190
Ala Ile Ala Gly Cys Ala Leu Ala His Val His Leu Glu Ser Arg Glu
        195                 200                 205
Arg Ile Phe Pro Ala Ser Ser Ser Gly Ala Gly Asn Trp Gly Phe Leu
    210                 215                 220
Thr Gly Trp Leu Leu Pro Ala Pro Pro Glu His Arg Pro Ser Thr Leu
225                 230                 235                 240
Cys Ser Asp Pro Asn Asn Leu Gly Pro Pro Trp Asp Tyr Xaa Gly Asn
                245                 250                 255
Gln Phe Leu Gly Ile Leu Val Gly Asp Ala Ile Pro Gly Ala
            260                 265                 270
```

<210> 27737
<211> 158
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (141)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27737
Ser Asn Gly Ala Pro Ser Ala Thr Ser Pro Ser Cys Ser Ser Arg Ser
1 5 10 15
Pro Ser Pro Ala Ser Cys Trp His Thr Thr Ser Arg Ser Ser Thr Ser
20 25 30
Pro Arg Thr Arg Ala Pro Gly Ser Thr Pro Pro Ala Ala Ser Pro Ser
35 40 45
Thr Trp Ser Pro Ser Ser Thr Ala Pro Pro Pro Ser Ala Ala Ser Ser
50 55 60
Pro Thr Ser Ser Ala Arg Thr Ser Arg Arg Ser Pro Ser Ser Val Trp
65 70 75 80
Pro Ser Pro Gly Ala His Ser Pro Met Phe Thr Trp Asn Pro Gly Asn
85 90 95
Glu Ser Phe Arg Leu His Arg Leu Gly Pro Val Thr Gly Gly Ser Leu
100 105 110
Pro Gly Gly Cys Tyr Arg Pro His Arg Asn Ile Gly Leu Gln Pro Cys
115 120 125
Val Arg Thr Gln Ile Thr Trp Asp Pro Leu Gly Ile Xaa Trp Gly Ile
130 135 140
Ser Ser Leu Glu Ser Trp Trp Gly Thr Pro Phe Gln Gly Arg
145 150 155

<210> 27738
<211> 64
<212> PRT
<213> A.fumigatus

<400> 27738
Pro Ala His Lys Ala Ile Ile Gly Ala Asn Asn Asn Ser Phe Asn Cys
1 5 10 15
Ser Cys Gln Leu Pro Arg Tyr Gln Glu Pro Asp Ile His Val Thr Gly
20 25 30
Val Ala Val Leu Asp Leu Asn Asn Leu Ile Phe Thr Trp Ser Leu Ser
35 40 45
Pro Pro Cys Tyr Asp Gly Gly Thr Phe His Trp Phe Thr Leu Cys Ala
50 55 60

<210> 27739
<211> 149
<212> PRT
<213> A.fumigatus

<400> 27739
Val Val Asp Leu His Phe Cys Lys Thr Thr Leu Ser Tyr Thr Pro Arg
1 5 10 15
Phe Pro Cys His Ser Leu Arg Thr Leu Ser Cys Leu Lys Lys Val Asn
20 25 30
Asn Ala Met Leu Arg Phe Leu Arg Ser Ala Met Thr Ser Leu Thr Thr
35 40 45
Pro Arg Val Pro Ile Pro Val Asn Gly Val Asp Tyr Arg Gly Lys Val
50 55 60
Val Leu Ala Pro Met Val Arg Ser Gly Glu Leu Pro Ser Arg Leu Leu
65 70 75 80
Ala Leu Lys Tyr Gly Ala Asp Leu Val Trp Gly Pro Glu Thr Val Asp
85 90 95
Arg Ser Leu Ile Gly Ala Thr Arg Arg Val Asn Pro Arg Asn Gly Cys

```
            100                 105                 110
Ile Glu Tyr Ile Arg Phe Pro Ser Asn Gly Gly Arg Pro Asp Lys Pro
        115                 120                 125
Ala Gln Glu Ser Ile Leu Tyr Arg Ile Asp Pro Val Arg Glu Lys Gly
    130                 135                 140
Lys Leu Cys Ser Ser
145
```

<210> 27740
<211> 79
<212> PRT
<213> A.fumigatus

<400> 27740

```
Gly Lys His Ala Ile His His Pro Leu Gln Phe Lys Asp Pro Ser Ile
1               5                   10                  15
Trp Gln Gly Met Ser Leu Arg Ile Met Cys Leu Lys His Asp Leu Phe
            20                  25                  30
Thr Arg Asp Lys Trp Met Ser Ile Val Glu Pro Met Lys Ser Asn Ser
        35                  40                  45
Ile Phe Leu Arg Ala Gln Ile Phe Trp Glu Leu Trp Ala Lys Thr Asn
    50                  55                  60
Ile Asn Pro Pro Leu Asp Gly His Val Phe Ser Ala Thr Arg Thr
65                  70                  75
```

<210> 27741
<211> 101
<212> PRT
<213> A.fumigatus

<400> 27741

```
Asp Leu Pro Tyr Lys Arg His Leu Val Pro Lys Ser Arg Gln Val Val
1               5                   10                  15
Leu Gln Val Gly Ser Thr Val Gly Leu Gly Leu Ser Cys Phe Gly Leu
            20                  25                  30
Ser Lys Leu Ser Ser Leu Val Tyr Ser Thr Asn Glu Gly Pro Gly Glu
        35                  40                  45
Arg Thr Gly Ile Tyr Cys Val Leu Phe Glu Ser Leu Cys Val Pro Gly
    50                  55                  60
Met Val Ser Leu Ser Glu Gly Gly Leu Ser His Asp Cys Glu Tyr Asp
65                  70                  75                  80
Ile Ala Gln Pro Cys Ala Thr Gln Lys Met Leu Ile Thr His Val Asp
                85                  90                  95
Leu Val Phe Leu Thr
            100
```

<210> 27742
<211> 143
<212> PRT
<213> A.fumigatus

<400> 27742

```
Gln Cys Ser Leu Ser Glu Glu Gly Gln Arg Ser Pro Pro Arg Gly Pro
1               5                   10                  15
Ala Ala Asp Arg Arg Arg Glu Pro Ser Arg Asp Arg Leu Gly Ser Arg
            20                  25                  30
```

```
Pro Arg Tyr Arg Ser Arg Asp Arg Asp Asp Tyr Arg Arg Arg Pro Ser
        35                  40                  45
Arg Ser Pro Pro Pro Arg Arg Gly Arg Pro Ala Tyr Arg Asp Arg Asp
    50                  55                  60
Arg Glu Gly Tyr Arg Ser Pro Gly Cys Ser Arg Ser Arg Ser Tyr Ser
65                  70                  75                  80
Arg Ser Arg Ser Pro Arg Arg Ser Arg Gln Pro Tyr His Glu Lys Glu
                85                  90                  95
Ser Arg Glu Val Met Met Asp Gly Leu Pro Val Asp Met Ala Glu Glu
            100                 105                 110
Asp Val Gly Lys Leu Leu Pro Pro Leu Lys Phe His Phe Trp Ser Phe
        115                 120                 125
Arg Thr Thr Leu His Val Thr Asn Thr Ser Leu Met Ala Arg Gly
    130                 135                 140

<210> 27743
<211> 64
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (52)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27743
Cys Ser Ser Ser Ile Ser Ser Phe Cys Cys Cys Ser Tyr Thr Ile Leu
1               5                   10                  15
Ser Pro Thr Ile Met Met Gln Ile Leu Pro Glu Val Thr Thr Leu Ser
            20                  25                  30
Phe Pro Ala Asp Trp Ile Phe Arg Ala Val Ile Arg Met Asp Gly Ala
        35                  40                  45
Cys Thr Val Xaa Arg Arg Ala Ser Arg Lys Ser Val Asn Arg Lys Arg
    50                  55                  60

<210> 27744
<211> 62
<212> PRT
<213> A.fumigatus

<400> 27744
Leu Arg Gln Gly Ile Tyr Leu Ala Gly Thr Ile Leu Met Asn Gln Pro
1               5                   10                  15
Trp Gly Ala Asp Gly Tyr Ser Thr Leu Asp Thr Thr Leu Leu Asp Gln
            20                  25                  30
His Phe Gly Asn Ile Asp Thr Trp Arg Asn Ala Ile Thr Glu Ile His
        35                  40                  45
Lys Arg Gly Met Tyr Val Ile Phe Asp Asn Thr Ile Ala Thr
    50                  55                  60

<210> 27745
<211> 224
<212> PRT
<213> A.fumigatus

<400> 27745
```

```
Val Ser Pro Asn Pro Ile Leu Cys Val Arg Thr Asp Ala Asn Thr Ser
1               5                  10                  15
Leu Gly Asp Leu Ile Gly Phe Glu Gly Tyr Leu Asn Thr Thr Thr Pro
            20                  25                  30
Phe Ser Val Lys Glu His Lys Ala Leu Trp Lys Thr Asp Arg Arg Tyr
        35                  40                  45
Val Asp Phe Asp Ile Gly Asn Asp Tyr Asn Ser Thr Cys Asp Tyr Pro
    50                  55                  60
Arg Phe Trp Tyr Glu Asp Gly Leu Pro Leu Pro Ser Glu Gln Ala Asp
65                  70                  75                  80
Gln Leu Val Gly Cys Tyr Asn Ser Asp Phe Asp Gln Tyr Gly Asp Ile
                85                  90                  95
Glu Ala Phe Gly Val Phe Pro Asp Trp Gln Arg Gln Leu Ala Lys Phe
            100                 105                 110
Ala Ser Val Gln Asp Arg Leu Arg Glu Trp Ile Pro Ser Val Arg Glu
        115                 120                 125
Arg Leu Ile Arg His Ser Cys Ile Ile Ile Ala Ser Leu Asp Ile Asp
    130                 135                 140
Gly Phe Arg Tyr Asp Lys Ala Thr Gln Ala Thr Val Asp Ala Leu Gly
145                 150                 155                 160
Glu Met Ser Met Ala Tyr Arg Glu Cys Ala Arg Ala Val Gly Lys Asn
                165                 170                 175
Asn Phe Phe Ile Ser Gly Glu Ile Thr Gly Gly Asp Tyr Phe Gly Ser
            180                 185                 190
Ile Tyr Leu Gly Arg Gly Arg Gln Gln Asn Gln Trp Leu Pro Asp Pro
        195                 200                 205
Ser Gln Gly Pro Lys Met Thr Asn Glu Ser Ser Ala Gln Tyr Phe Val
    210                 215                 220

<210> 27746
<211> 161
<212> PRT
<213> A.fumigatus

<400> 27746
Tyr Pro Leu Pro Ser Val His Gly Ser Thr Pro Thr Tyr Ser Tyr Pro
1               5                  10                  15
Pro His Cys Ser Glu Ala Ala Asn Arg Asn Pro Leu Pro Thr Met Lys
            20                  25                  30
Trp Gly Trp Thr Gly Ala Leu Leu Ala Trp Phe Ala Thr Thr Thr Ser
        35                  40                  45
Cys Trp Pro Tyr Asp Glu Ser Leu Val Gly Tyr Asn Leu Asn Glu Asn
    50                  55                  60
Lys Glu Ala Lys Ser Pro Val Glu Tyr Trp Gly Glu Trp Pro Asp His
65                  70                  75                  80
Lys Gly Lys Tyr Phe Pro Ser Pro Glu Asn Trp Arg Phe Pro Phe Tyr
                85                  90                  95
Thr Leu Phe Leu Asp Arg Phe Val Asn Gly Asp Pro Glu Asn Asp Asn
            100                 105                 110
Ile Asn Gly Thr Gln Phe Glu His Asp Ile Ser Ser Asn Gln Met Arg
        115                 120                 125
His Gly Gly Asp Val Ala Gly Leu Val Ala Thr Leu Asp Tyr Leu Gln
    130                 135                 140
Gly Met Gly Ile Lys Val Gly Phe Pro Asp Leu Thr Asp Leu Trp Pro
145                 150                 155                 160
Gln
```

<210> 27747
<211> 208
<212> PRT
<213> A.fumigatus

<400> 27747
Ala Ile Cys Tyr Leu Pro Met Ser Phe Pro His Thr Asn Phe Ile Gln
1 5 10 15
Thr Thr Asp Thr Leu Phe Ala Asp Gln Glu Ala Trp Phe Ser Ser Leu
20 25 30
Arg Trp Trp Thr Arg Thr Thr Met Asp Ser Arg Ser Asp Ile Asn Pro
35 40 45
Asp Trp Val Arg Arg Thr Leu Arg Leu Leu Val Glu Ala Asn Pro Arg
50 55 60
Asn Asp Asp Leu Ala Glu Tyr Ala Leu Ala Val Glu Leu Ala Cys Asn
65 70 75 80
Ser Lys Glu Ala Arg Lys Tyr Ala Lys Ser Leu Leu Lys Lys Arg Ser
85 90 95
Ser Asn Leu Arg Leu Tyr Asn Ala Tyr Ala Leu Ile Glu Cys Arg Ser
100 105 110
Gly Asn Pro Thr Gly Ala Glu His Val Trp Ala Thr Thr Leu Ser Met
115 120 125
Ser Lys Thr Phe Ser Asp His Asp Arg Val Asp Cys Ala Leu Leu Trp
130 135 140
Gln Ser Trp Thr Trp Glu Ser Leu Asn Ala Gln Asn Leu Ala Gln Ala
145 150 155 160
Ser His Leu Leu Leu Ser Ile Pro Gln Asn Ser Val Asp Leu Lys Ala
165 170 175
Val Pro Gly Ala Phe Ser Glu Thr Met Phe Ser Ala Thr Ser Leu Leu
180 185 190
Lys Ala Gln Asn Val Ser Ser Ile His Leu Phe Tyr Cys Thr Thr Ser
195 200 205

<210> 27748
<211> 441
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (9)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27748
Phe Ile Ser Gln Ala Thr Trp Arg Xaa Val Ser Asp Thr Asp Ser Ser
1 5 10 15
Asp Gly Gly Leu Arg Val Asp Pro Asp Glu Glu Ile Arg Ser Arg Asn
20 25 30
Ala Glu Leu Leu Arg Thr Val Asp Arg Asn Pro Arg Asp Ile Glu Ala
35 40 45
Trp Ile Leu Leu Ile Glu His Gln Glu Leu Leu Leu Arg Gly Ser Glu
50 55 60
Arg Asp Ser Arg Ala Leu Thr Ala Ala Glu Arg Lys Ser Leu Ala Asp
65 70 75 80

```
Ile Lys Leu Ser Leu Tyr Glu Lys Ala Leu Lys Lys Val Gly Asp Ser
                85                  90                  95
Pro Phe Lys Asp Val Leu Leu Leu Gly Leu Leu Glu Glu Gly Ala Lys
            100                 105                 110
Leu Trp Asp Thr Lys Glu Leu Ser Ser Gln Trp Gln Ala Val Leu Lys
        115                 120                 125
Ala Asn Ser Gln Phe Ile Ser Leu Trp Val Lys Tyr Leu Asp Phe Arg
    130                 135                 140
Gln Thr Glu Phe Leu Asp Phe Thr Tyr Glu Lys Cys Phe Asn Thr Tyr
145                 150                 155                 160
Leu Glu Cys Leu Lys Leu Asn Lys Leu Gly Pro Gly Glu Pro Gly Asn
                165                 170                 175
Gly His Val Gln Val Tyr Leu Phe Leu Arg Leu Thr Cys Phe Ile Arg
            180                 185                 190
Glu Ala Gly Phe Thr Glu His Ala Ala Gly Leu Trp Gln Gly Ile Leu
        195                 200                 205
Glu Thr Val Phe Phe Arg Pro Glu Asp Leu Ser Leu Ala Lys Asp Glu
    210                 215                 220
Glu Thr Leu Ser Ala Phe Ile Glu Phe Trp Glu Ser Glu Val Ala Arg
225                 230                 235                 240
Ile Gly Glu Leu Gly Ala Lys Gly Trp Arg Ser Gly Glu Asn Ala Leu
                245                 250                 255
Met Glu Pro Lys Ala Phe Ala Pro Gln Phe Lys Val Asn Thr Arg Ala
            260                 265                 270
Ile Phe Ala Ser Trp Thr Ala Cys Glu Arg Glu Arg Ile Ser Asn Ala
        275                 280                 285
Gln Ile Pro Gly Arg Ser Leu Asp Glu Ala Asp Glu Asp Asp Pro Tyr
    290                 295                 300
Arg Val Val Ile Ala Ser Asp Phe Arg Glu Val Leu Pro Leu Val Trp
305                 310                 315                 320
Asp Met Asp Leu Ala Asp Ala Leu Ile Asp Ser Phe Met Tyr Tyr Cys
                325                 330                 335
Gln Leu Pro Pro Leu Lys Ser Pro Glu Asn Leu Glu Ser Thr Ser Arg
            340                 345                 350
Trp Ala Gly Asp Asn Phe Leu Arg Asn Glu Phe Ile Ser Asn Thr Gly
        355                 360                 365
Thr Thr Met Asp Asp Phe Leu Gln Asn Gln Thr Asn Ser Ala Glu Pro
    370                 375                 380
Ser Ala Ile Ser Pro Cys Leu Phe Leu Ile Gln Ile Leu Ser Lys Pro
385                 390                 395                 400
Arg Ile Arg Cys Leu Gln Thr Lys Arg Pro Gly Phe His Leu Tyr Gly
                405                 410                 415
Gly Gly Arg Glu Pro Arg Trp Thr His Asp Pro Ile Ser Thr Pro Ile
            420                 425                 430
Gly Phe Gly Gly Leu Ser Gly Tyr Trp
        435                 440
```

<210> 27749
<211> 141
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (37),(49),(67),(85)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27749
Ile Ser Arg Arg Ser Pro Arg Ser Gly Trp Ser Thr Pro Trp Pro Thr
1 5 10 15
Met Val Ser Pro Gln Val Leu Tyr Pro Trp Ser Arg Gly Asp Arg Leu
20 25 30
Thr Val Pro Gly Xaa Asp Val Asn Ile Tyr Ala Ser Ser Ser Lys Asp
35 40 45
Xaa Trp Pro Leu Val Gly Asn His Glu Asn Thr Glu Ile Gly Gln Phe
50 55 60
Ile Ser Xaa Tyr Leu Asp Leu Asp Val Glu Asn Ile Thr Lys His Leu
65 70 75 80
Gln Ser Ser Ser Xaa Trp Ser Phe Ala Gly Gly Asp Val Glu Arg Pro
85 90 95
Tyr Ala Trp Leu Gly Asp Pro Leu Gly Ala Asp Val Arg Thr Glu Gly
100 105 110
Phe Asp Thr Tyr His Gly Glu Phe Arg Lys Arg Ser Met Asp Val Asp
115 120 125
Gly Met Glu Lys Arg Glu Cys Gly Cys Gly Gly Met His
130 135 140

<210> 27750
<211> 450
<212> PRT
<213> A.fumigatus

<400> 27750
Phe Glu Gly Lys Lys Asn Phe Cys Trp Glu Ser Gln Lys Lys Leu Glu
1 5 10 15
Lys Ser Met Gln Ala Ala Arg Leu Ala Ala Ser Glu Cys Glu Ser Leu
20 25 30
Val Gln Lys His Thr Asp Asp Ile Asn Lys Lys Thr Ala Glu Thr Ala
35 40 45
Lys Leu Glu Glu Glu Met Lys Ala Glu Glu Glu Glu Leu Ser Thr Ile
50 55 60
Arg Glu Gly Leu Lys Gly Lys Thr Gln Gly Leu Ser Glu Gln Ile Ala
65 70 75 80
Ala Lys Gln Lys Ser Leu Glu Pro Trp Asp Glu Arg Ile Asn Lys Lys
85 90 95
Leu Ser Ala Ile Ala Val Ala Gln Ser Glu Leu Asp Ile Leu Arg Glu
100 105 110
Arg Ser Asn Ala Gly Ala Val Gln Leu Glu Glu Ala Gln Ser Lys Val
115 120 125
Thr Ser Ile Glu Glu Thr Leu Ala Thr Lys Gln Thr Asp Leu Glu Glu
130 135 140
Arg Lys Ala Gln Lys Ala Thr Leu Glu Glu Glu Val Ala Ser Leu Lys
145 150 155 160
Arg Asp Leu Lys Lys Phe Thr Ser Arg Glu Thr Glu Val Arg Ala His
165 170 175
Val Ser Ser Ala Arg Gln Lys Ala Glu Glu Ala Arg Ala Ser Leu Ala
180 185 190
Ser Thr Gln Asn Arg Gly Ser Val Leu Ala Gly Leu Met Arg Leu Lys
195 200 205
Glu Ser Gly Arg Ile Asp Gly Phe His Gly Arg Leu Gly Asn Leu Gly
210 215 220
Thr Ile Asp Glu Lys Tyr Asp Val Ala Ile Ser Thr Ala Cys Pro Ala

225 230 235 240
Leu Asp Asn Met Val Val Asp Thr Val Glu Val Gly Gln Gln Cys Ile
245 250 255
Asp Tyr Leu Arg Lys Asn Asn Leu Gly Arg Ala Asn Phe Ile Leu Leu
260 265 270
Asp Arg Leu Pro Arg Arg Asp Met Ser Pro Ile Phe Thr Pro Glu Ser
275 280 285
Val Pro Arg Leu Phe Asp Leu Val Lys Pro Lys Asp Pro Lys Phe Ala
290 295 300
Pro Ala Phe Tyr Ser Val Met Gln Asn Thr Leu Val Ala Lys Asp Leu
305 310 315 320
Glu Gln Ala Asn Arg Ile Ala Tyr Gly Ala Arg Arg Trp Arg Val Val
325 330 335
Thr Leu Asp Gly Gln Leu Ile Asp Val Ser Gly Thr Met Ser Gly Gly
340 345 350
Gly Thr Arg Val Ala Arg Gly Gly Met Ser Ser Lys Gln Val Ala Glu
355 360 365
Val Ser Arg Glu Gln Val Ser Lys Leu Glu Ser Asp Leu Glu Glu Met
370 375 380
Glu Arg Lys Phe Gln Asn Phe Gln Asn Lys Gln Lys His Val Glu Ala
385 390 395 400
Ala Ile Arg Glu Lys Ser Glu Glu Ile Pro Arg Val Glu Thr Lys Ile
405 410 415
Gln Lys Ile Met Ile Glu Ile Glu Ser Ala Asn Arg Arg Ser Ser Arg
420 425 430
Cys Ser Ala Glu Ser Gln Gly Tyr Leu His Ala Gly Ala Gly Lys Tyr
435 440 445
Arg Ser
450

<210> 27751
<211> 482
<212> PRT
<213> A.fumigatus

<400> 27751
Phe Pro Leu Gln Arg Pro Leu Gln Pro Arg Gly Glu Asp Met Leu His
1 5 10 15
Arg Ala Ile Pro Gln Lys Ile Ala Gly Ile Met Asn Leu Cys Ala Ser
20 25 30
Asn His Lys His Leu Glu Pro Asp Asp Pro Ala Leu Val Glu Glu His
35 40 45
Lys Leu Leu Leu Ser Lys Phe Met Glu Pro Ser Ser Arg Gly Thr Lys
50 55 60
Glu Ile Glu Arg Val Ser Cys Asn Asn Phe Glu Thr Val Phe His Ser
65 70 75 80
Gln Thr Ser Met Ser Ser Ala Ser Asn Thr Ile Asn Asp Glu Phe Ser
85 90 95
Ala Val Thr Asn Pro Gly Val Thr Ser Gly Gly Arg Lys Asp Cys Asn
100 105 110
Ala Lys Val Ala Leu Gly Leu Pro Thr Ser Ala Arg Lys Arg Ser Thr
115 120 125
Ser Asn Leu Ser Ser Met Asp Lys Gln Thr Phe Ser Ser Ser Ala Ser
130 135 140
Ser Val Glu Arg Asp Ser Ser Ser Pro Gly Pro Ser Ser Thr Arg Ser
145 150 155 160

```
Leu Ala Pro Arg Thr Arg Arg Ser Thr Arg Ser Arg Asn Lys Gln Ile
                165                 170                 175
Asn Tyr Tyr Pro Val Ile Ser Leu Ser Glu Ser Asp Ser Gly Glu Gly
            180                 185                 190
Pro Ser Gly Ser Arg Asp Thr Lys Thr Val Asn Thr Ser Ser Gln Ala
        195                 200                 205
Arg Asn Arg Gln Ser His Lys Pro Ser Asn Gln Ser Ser Lys Arg Leu
    210                 215                 220
His His Leu Asn Ser Asn Thr Asp Pro Leu Ser Asp Ala Glu Ile Arg
225                 230                 235                 240
Ile Ile Tyr Ser Ser Arg Gly Val Gln Ile Arg Lys Leu Ser Phe Thr
                245                 250                 255
Ser Leu Asp His Leu Lys Asp Leu Lys His Ala Pro Phe Cys Pro Glu
            260                 265                 270
His Asn Pro Ala Lys Tyr Ala Arg Arg Tyr Arg Glu Ser Met Ile Val
        275                 280                 285
Ser Ser Glu Ile Leu His Val Asp Phe Asp Ser His Glu Met Thr Ala
    290                 295                 300
Met Leu Gly Leu Leu Ser Leu His Gly Cys Gln Tyr Ser Pro Thr Thr
305                 310                 315                 320
Glu Ile Ser Ile Ser Asp Gln Val Ile Ala Val Leu Ser Ser His Asp
                325                 330                 335
Val His Arg Asp Phe Ala Lys Lys Ile Ser Leu Leu Arg Glu Leu Ala
            340                 345                 350
Lys Tyr Ile Ser Asn Glu Ala Val Ile Asp Thr Ser Thr Trp Leu Trp
        355                 360                 365
Glu Val Leu Thr Ser Lys Val Arg Asn Lys Asn Gln Gln Ser Val Arg
    370                 375                 380
His Cys Leu Thr Gln Leu Leu Thr Leu Lys Gly Met Ala Gly Asp Gly
385                 390                 395                 400
Ala Leu Ser Ser Ser Pro Ala Val Ile Lys Gln Gln Leu Gln Ile Phe
                405                 410                 415
Leu Ser Cys Leu Pro His Ala Ser Ile Leu Tyr Arg Arg Gln Pro Ala
            420                 425                 430
Asp Ile Gly Ala Phe Ile Gln Ala Ala Arg Asn Gly His Leu Ser Ser
        435                 440                 445
Ser Pro Ser Ile Ile Gln Ala Ala Arg Val Thr Asp Ser Asn Ser Gly
    450                 455                 460
Ser Ser Val Phe Gly Pro Ile Arg Ala Leu Ile Thr Pro Pro Gly Trp
465                 470                 475                 480
Pro Lys
```

<210> 27752
<211> 272
<212> PRT
<213> A.fumigatus

<400> 27752

```
Ser Leu Asp Arg Ser Gln Ser Lys Met Asn Ser Thr Phe Asp Pro Trp
1               5                   10                  15
Thr Gln Asn Ile Thr Leu Thr Gln Ser Asp Gly Thr Thr Val Val Ser
            20                  25                  30
Ser Leu Ala Leu Ala Asp Asp Tyr Leu His Tyr Met Ile Arg Leu Gly
        35                  40                  45
Ile Asn Tyr Gly Ala Gln Leu Gly Ala Cys Ala Val Leu Phe Leu Val
```

```
    50                  55                  60
Leu Leu Leu Leu Thr Arg Pro Glu Lys Arg Val Ser Ser Val Phe Val
65                  70                  75                  80
Leu Asn Val Ser Ala Leu Leu Ala Asn Ile Ile Arg Leu Gly Cys Gln
                85                  90                  95
Leu Ser Tyr Phe Ser Thr Gly Phe Ala Arg Met Tyr Ala Leu Leu Ala
            100                 105                 110
Gly Asp Phe Ser Arg Val Ser Arg Gly Ala Tyr Ala Gly Gln Val Met
        115                 120                 125
Ala Ser Val Phe Phe Thr Ile Val Leu Ile Cys Val Glu Ala Ser Leu
    130                 135                 140
Val Leu Gln Val Gln Val Val Cys Ser Asn Leu Leu Arg Gln Tyr Arg
145                 150                 155                 160
Ile Leu Leu Leu Gly Ala Ser Thr Leu Ala Ala Leu Val Pro Ile Gly
                165                 170                 175
Val Arg Leu Thr Tyr Ser Val Met Asn Cys Met Val Ile Met His Ala
            180                 185                 190
Gly Thr Met Asp His Leu Asp Trp Leu Glu Ser Ala Thr Asn Ile Val
        195                 200                 205
Thr Thr Val Ser Ile Cys Phe Phe Cys Ala Val Phe Val Val Lys Leu
    210                 215                 220
Gly Leu Ala Ile Lys Met Arg Lys Arg Leu Gly Val Lys Lys Phe Gly
225                 230                 235                 240
Pro Met Arg Val Ile Phe Ile Met Gly Cys Gln Thr Met Thr Ile Pro
                245                 250                 255
Gly Lys Ala Arg Arg Arg Pro His His Pro Met Lys Glu Glu Ser Tyr
            260                 265                 270
```

<210> 27753
<211> 139
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (96),(109),(110),(111),(112),(125)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27753

```
Leu Pro Val Leu Arg Ile Trp Ile His Pro Thr Asn Arg Pro Pro Arg
1               5                   10                  15
Pro Asn Pro Thr Phe Val Gly Thr Arg Ile Asn Pro Ala Glu Ala Gly
            20                  25                  30
Asp His Cys Arg Thr Ala Ile Ala Tyr Thr Gly Val Lys Lys Arg Thr
        35                  40                  45
Asp Gln Arg Ala Ile Ile Glu Ile Arg Ala Ala Lys Gln Val Ala Ser
    50                  55                  60
Thr Leu Leu Ala Leu Ser Thr Ser Ser Gly Ile Ile Gly Ser Asp Val
65                  70                  75                  80
Asn Phe Asp Ser Lys Arg Lys Lys Thr Ala Asn Glu Asn Lys Leu Xaa
                85                  90                  95
Ile Lys Gly Val Ile Val Thr Ile Glu Ser Gly Asp Xaa Xaa Xaa Xaa
            100                 105                 110
Ser Ser Pro Asn Thr Lys Ile Val Trp Lys Lys Trp Xaa Ile Pro Asn
        115                 120                 125
Pro Trp Trp Leu Lys Pro Asn Tyr Ser Tyr Lys
```

130 135

<210> 27754
<211> 276
<212> PRT
<213> A.fumigatus

<400> 27754
Ser Thr Gln Ser Glu Lys Arg Thr Gly Asp Leu Leu Ser Ser Ser Asp
1 5 10 15
Leu Asp Asp Gly Ala Leu Val Cys Ser Phe Phe His Ala Ser Val Cys
20 25 30
Asn Gly Gly Pro Thr Met Val Ala Arg Leu Gly Arg Val Asp Pro Arg
35 40 45
Ser Asn Glu Arg Arg Val Arg Pro Trp Arg Pro Val Gly Arg Met Asp
50 55 60
Pro Tyr Ser Gln Asp Arg Gln Leu Leu Arg Val Gly Val Val Ala Ile
65 70 75 80
Asp Leu Lys Ser Pro Lys Thr Asn Leu Thr Cys Tyr Ser Ser Thr Leu
85 90 95
Ile Val Phe Leu Leu Phe Ala Leu Thr His Phe Ile Leu Ala Ile Leu
100 105 110
Ser Thr Pro Ser Ser Ala Thr Val Ala Tyr Val Val Ser Thr Phe Phe
115 120 125
Asn Gly Leu Phe Ile Gly Ala Ser Met Asn Tyr Ala Leu Ser His Met
130 135 140
Leu His Leu Thr Asn Met Asn Val His Tyr Ile Val Thr Ser Leu Leu
145 150 155 160
Gly Met Phe Arg Gly Ser Ala Gly Ser Phe Gly Ser Ala Ile Gly Gly
165 170 175
Gly Phe Phe Gln Arg Glu Leu Lys Lys Ala Leu Glu Lys Gly Phe Ser
180 185 190
Lys His Gly Leu Ser Gly Thr Asp Glu Leu Val Arg Lys Leu Leu Gly
195 200 205
Ser Pro Ala Leu Val Thr Asn Leu Ser Gly Leu Glu Lys Glu Val Ala
210 215 220
Ile Gln Ser Tyr Glu Gln Ala Val Lys Val Leu Ile Leu Gly Gly Cys
225 230 235 240
Val Leu Ala Leu Val Ala Thr Met Leu Gln Ala Cys Thr Gly Trp Arg
245 250 255
Ala Pro His Glu Val Glu Lys Asp Val His Gly Asp Leu Glu Asp Arg
260 265 270
Leu Asp Arg Glu
275

<210> 27755
<211> 121
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (2),(16)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27755

```
Ser Xaa Ala Ser Pro Asp Ser Ile Val Thr Ile Thr Pro Leu Ile Xaa
1               5                  10                  15
Ser Leu Phe Ser Phe Ala Val Phe Phe Leu Leu Glu Ser Lys Phe Thr
            20                  25                  30
Ser Glu Pro Ile Ile Pro Leu Glu Val Leu Lys Ala Arg Ser Val Leu
        35                  40                  45
Ala Thr Cys Leu Ala Ala Leu Ile Ser Met Met Ala Arg Trp Ser Val
    50                  55                  60
Leu Phe Phe Thr Pro Val Tyr Ala Met Ala Val Arg Gln Trp Ser Pro
65                  70                  75                  80
Ala Ser Ala Gly Leu Ile Leu Val Pro Thr Asn Val Gly Phe Gly Leu
                85                  90                  95
Gly Gly Leu Leu Val Gly Trp Ile His Ile Arg Lys Thr Gly Ser Tyr
            100                 105                 110
Tyr Val Trp Val Ser Leu Gln Leu Ile
        115                 120
```

<210> 27756
<211> 583
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (581)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27756

```
Lys Leu Thr Cys Ser Pro Arg Gly Lys Val Gly Ile Trp Arg Glu Leu
1               5                  10                  15
Trp Arg Asn Lys Ala Val Ala Pro Glu Val Ala Asp Val Leu Ile Trp
            20                  25                  30
Arg Leu Ala Ala Leu Asp Ser Cys His Trp Pro Glu Gly Gly Ile Pro
        35                  40                  45
Val Glu Met Arg Arg Gln Leu Asn Gly Lys Tyr Arg Val Phe Met Asp
    50                  55                  60
Glu Asp Leu Leu Asp Ser Leu Leu Phe Gln Tyr Leu Gly Leu Lys Trp
65                  70                  75                  80
Ser Val Thr Phe Lys Asn Ala Phe Lys Ala Phe Phe Arg Thr Arg Ala
                85                  90                  95
Trp Gln Ser Pro Arg Gln Gln Ile Ser Lys Glu Glu Arg Glu Arg Arg
            100                 105                 110
Arg Tyr Phe Leu Gly Ser Thr Gly Arg Gly Gly Cys Val Asn Asp Tyr
        115                 120                 125
Arg Arg Gln Met Tyr Glu Thr Gln Tyr Phe Met Thr Gln Leu Pro Ser
    130                 135                 140
Ser Val Glu Ala Gly Val Pro Glu Tyr Gly Asp Glu Ala Asn Ser Asp
145                 150                 155                 160
Asn Ile Thr Asp Gly Glu Lys Arg Lys Asn His Leu Glu Thr Lys His
                165                 170                 175
Ala Leu Leu His Leu Leu Ile Thr Glu Ser Ile Ile His Thr Thr Leu
            180                 185                 190
Tyr Gly Gln Phe Thr Ala Ile Cys Ser Asp Phe Lys Trp Phe Gly Ser
        195                 200                 205
Ser Leu Ser His Ala Thr Val Leu Ala Val Leu Glu Tyr Phe Gly Val
    210                 215                 220
```

```
Pro Gln Asn Trp Leu His Phe Phe Thr Val Phe Leu Glu Ala Pro Leu
225                 230                 235                 240
Lys Phe Thr Gln Asp Gly Glu Asn Ala Ala Val Gln Val Arg Arg Arg
                245                 250                 255
Gly Ala Pro Ile Ser His Thr Leu Ser Asp Cys Phe Ser Glu Thr Val
            260                 265                 270
Leu Phe Cys Met Asp Tyr Ala Val Asn Gln Ser Thr Glu Gly Ala Tyr
        275                 280                 285
Leu Tyr Arg Leu His Asp Asp Phe Trp Phe Trp Gly Arg Glu Gln Thr
    290                 295                 300
Cys Val Lys Ala Trp Gly Ala Met Thr Lys Phe Ala Lys Val Met Gly
305                 310                 315                 320
Leu Glu Phe Asn Glu Glu Lys Thr Gly Thr Val Arg Leu Thr Lys Pro
                325                 330                 335
Asn Pro Arg Gln Gly Ser Pro Val Pro Ala Glu Ser Glu His Ser Ser
            340                 345                 350
Ser Leu Pro Thr Gly Asp Ile Arg Trp Gly Phe Leu Lys Leu Asp Pro
        355                 360                 365
Gln Glu Gly Arg Phe Ile Ile Asp Gln Ser Arg Val Asp Gly His Ile
    370                 375                 380
Ala Glu Leu Gly His Gln Leu Ala Ala Cys Lys Ser Ile Phe Ala Trp
385                 390                 395                 400
Val Gln Ala Trp Asn Ser Tyr Phe Ala Arg Phe Phe Thr Asn Asn Phe
                405                 410                 415
Gly Lys Pro Ala Met Cys Phe Gly Arg Gly His Ile Asp Met Ala Ile
            420                 425                 430
Ser Thr Leu Ser Arg Ile Glu Arg Thr Leu Phe Pro Asp Gly Val Thr
        435                 440                 445
Ser His Leu Arg Gln Met Ile Ala Asp Arg Phe Gly Val Arg Asp Leu
    450                 455                 460
Pro Asp Gly Phe Phe Tyr Phe Pro Val Asp Leu Gly Gly Leu Gln Leu
465                 470                 475                 480
Leu Asn Pro Tyr Ile Pro Leu Leu Gly Met Arg Glu Asp Ile Lys Gln
                485                 490                 495
Thr Pro Gln Arg Arg Leu Gln Lys Ala Phe Leu Glu Asp Glu Asp Ala
            500                 505                 510
Trp Asp Ala Ala Lys Glu Arg Phe Glu Lys Asp Gly Pro Cys Ser Ala
        515                 520                 525
Ala Gln Ile Asp Phe Gly Asp Asp Asp Ser Pro Ala Thr Phe Met Ser
    530                 535                 540
Leu Asp Glu Phe Met Arg Tyr Pro Glu Ser Ser Ser Gln Ala Leu Leu
545                 550                 555                 560
Gln Ala Tyr Lys Glu Ser Ser Pro Arg Gly Trp Lys Asp Pro Arg Gln
                565                 570                 575
Arg Asn Ser Ile Xaa Asn Arg
            580
```

<210> 27757
<211> 64
<212> PRT
<213> A.fumigatus

<400> 27757

```
Arg Arg Ile Ser Thr Gly Ile Pro Pro Ser Gly Gln Trp Gln Leu Ser
1               5                   10                  15
Ser Ala Ala Arg Arg His Ile Asn Thr Ser Ala Thr Ser Gly Ala Thr
```

```
            20                  25                  30
Ala Leu Leu Arg His Asn Ser Leu Gln Ile Pro Thr Phe Pro Leu Gly
        35                  40                  45
Glu Gln Val Asn Phe Gln Leu Thr Asn Leu Glu Thr His Ser Lys Val
    50                  55                  60

<210> 27758
<211> 66
<212> PRT
<213> A.fumigatus

<400> 27758
Ser Pro Gln Ser Leu His Thr Val Gly Gly Ser Ala Leu Tyr Ile His
1               5                   10                  15
Ser Trp Phe Ser Asn Gly Ser Pro Lys Gly Lys Ser Lys Ala Ala Lys
            20                  25                  30
Val Trp Lys Lys Ile Leu Trp Lys Lys Leu Leu Ser Ile Gln Leu Leu
        35                  40                  45
Leu Ala Pro Ala Tyr Gly Arg Leu Gly Ala Lys Tyr Cys Trp Arg Arg
    50                  55                  60
Arg Met
65

<210> 27759
<211> 90
<212> PRT
<213> A.fumigatus

<400> 27759
Phe Ser Met Lys Cys Phe Ile Ala Val Lys Glu Phe Arg Ser Met Val
1               5                   10                  15
Arg Ile Ser Leu Tyr Leu Pro Thr Ala Lys Ser Ser Ile Trp Leu Asn
            20                  25                  30
Val Arg Glu Pro Cys Ser Tyr Arg Ile Asp Arg Ala Asn Leu Thr His
        35                  40                  45
Asn Ala Pro Gly Ile Gly Val Phe Pro Gly Val Leu Glu Pro Tyr Leu
    50                  55                  60
Thr Phe Thr Thr Tyr Asp Val Ala Ser Ser Thr Leu Leu Arg Gly Gly
65                  70                  75                  80
Arg Arg Gln Gly Arg Ala Gly Val Gly Cys
                85                  90

<210> 27760
<211> 154
<212> PRT
<213> A.fumigatus

<400> 27760
Gln Trp Thr Gly Trp Asp Leu Lys Lys Met Met Thr Thr Ala Arg Phe
1               5                   10                  15
Ala Asp Ile Asp Val Ser Ser Tyr Thr Thr Gly Tyr Asp Tyr Arg Phe
            20                  25                  30
Glu Pro Tyr Pro Glu Asp Tyr Tyr Glu Pro His Pro His Asp Cys Ser
        35                  40                  45
Val Val Thr Phe Arg Gly His Arg Val Leu Lys Thr Leu Ile Arg Cys
    50                  55                  60
```

```
His Phe Ser Pro Ser Ser Ser Thr Asn Ser Arg Tyr Val Tyr Thr Gly
65                  70                  75                  80
Ser Glu Asp Gly Lys Val Tyr Val Tyr Asn Leu Asp Ala Thr Leu Ala
                85                  90                  95
Gly Thr Ile Asp Val Gly Arg Ala Thr Leu Asn Ser Arg Pro Arg Asp
            100                 105                 110
Pro Asp Met Phe Thr Thr Ala Tyr Glu Ile Arg Ser Arg Ser Gly Glu
        115                 120                 125
Met Leu Trp Arg Thr Cys Val Arg Asp Ala Ser Trp His Pro Ser Ala
    130                 135                 140
Pro Val Leu Ser Gly Lys Ile Ile Leu Phe
145                 150
```

<210> 27761
<211> 117
<212> PRT
<213> A.fumigatus

<400> 27761

```
Ser Ile Ala His Gly Asn Met Ala Ser Ile Ile Val Leu Pro Thr Glu
1               5                   10                  15
Leu Leu Gly Arg Ile Ile Ser Phe Leu Asp Arg Ser Ser Leu Lys Ala
            20                  25                  30
Ile Arg Gln Thr Ser Arg Arg Leu Ser Gln Ile Ala Thr Pro Gln Leu
        35                  40                  45
Phe Ala Thr Leu Arg Leu Phe Pro Asp Glu Lys Ser Tyr Glu Ala Val
    50                  55                  60
Asp Arg Ile Thr Asp His Ala Thr Leu Lys Lys Met Val Lys Lys Val
65                  70                  75                  80
Tyr Val Asn Thr Cys Glu Asp Asp Tyr Val Ser Pro Tyr Leu Phe Leu
                85                  90                  95
Ala Asn Arg Gly Ala Pro His Thr Asn Arg Leu Arg Thr Thr Met Thr
            100                 105                 110
Arg Arg Lys Ser Asn
        115
```

<210> 27762
<211> 145
<212> PRT
<213> A.fumigatus

<400> 27762

```
Pro Asn Ala Asp Gln Ser Arg Lys Arg Gly Ile Leu Glu Ser Asp Leu
1               5                   10                  15
Leu Leu Ser Thr Phe Ala Asp Val Tyr Leu Lys Asp Met Thr Pro Glu
            20                  25                  30
Gln Leu Gln Glu Tyr Asp Arg Phe Leu Asp Glu Asn Asp Trp Asp Ile
        35                  40                  45
Tyr Tyr Trp Ala Thr Gln Asp Pro Pro Ser Ala Thr Asp Ser Pro Ala
    50                  55                  60
Glu Asp Thr Val Thr Glu Thr Trp Lys Arg Thr Gly Ala Lys Ser Gly
65                  70                  75                  80
Glu Trp Lys Gln Thr Val Gly Ala Tyr Lys Ala Ala Tyr Arg Pro Val
                85                  90                  95
Pro Ser Arg Trp Ala Asp Ser Glu Val Leu Arg Leu Leu Arg Gln His
            100                 105                 110
```

```
Val Arg Asp Lys Ser Ala Val Gly Phe His Ala Ala Lys Asn Lys Lys
        115                 120                 125
Thr Gly Gly Cys Gly Leu Gly Arg Met Pro Asp Ile Gln Val Phe Asp
    130                 135                 140
Lys
145

<210> 27763
<211> 306
<212> PRT
<213> A.fumigatus

<400> 27763
Gly Asp Arg Pro Gln Val Gly Val Thr Lys Arg Asn Gly Val Arg Leu
1               5                   10                  15
Ala Asn Glu Leu Arg Arg Gly Cys Arg Leu Gln Pro Tyr Arg Pro Trp
            20                  25                  30
Ala Ile His Ile Ser His Tyr Tyr Arg Ser Phe His Gln Ser Ala Thr
        35                  40                  45
Met Phe Lys Val Gly Asp Asp Phe Asp Lys Ile Gln Ala Ser Arg Pro
    50                  55                  60
Asp Phe Lys Arg Asp Ala Pro Val Thr Phe Ser Lys Pro Pro Asn Pro
65                  70                  75                  80
Asn Trp Lys Gln Gly Asp Gly Ala Asn Asp Gly Gly Glu Ser Leu Lys
                85                  90                  95
Lys Ser His Val Glu Ile Asp Pro Tyr Glu Glu Gly Arg Pro Val Ser
            100                 105                 110
Ser Asn Tyr Lys Leu Leu Ile Ser Gly Ile Val Pro Arg Pro Ile Ala
        115                 120                 125
Leu Ile Ser Thr Arg Ser Lys Asp Gly Lys Thr Thr Asn Leu Ala Pro
    130                 135                 140
Phe Ser Tyr Ala Gln Val Ile Asn His Asp Pro Pro Leu Phe Thr Val
145                 150                 155                 160
Gly Phe Val Gly Ser Leu Glu Lys Ala Lys Asp Ser Leu Arg Asn Met
                165                 170                 175
Val Glu Ser Gly Glu Cys Val Ile Asn Ile Ile Ser Glu His Phe Val
            180                 185                 190
Glu Ala Ala Asn Ala Thr Ala Ile Asn Ala Pro Tyr Gly Val Ser Glu
        195                 200                 205
Trp Glu Val Ser Gly Leu His Gln Ala Pro Cys Ser Val Val Gln Ala
    210                 215                 220
Ala Arg Val Lys Glu Ser Met Phe Ser Ile Glu Gly Lys Leu Val Glu
225                 230                 235                 240
Thr Lys Glu Phe Gln Ser Arg Thr Thr Gly Lys Lys Thr Gly Thr Leu
                245                 250                 255
Ala Ile Ile Glu Gly Val Arg Phe Trp Val Arg Asp Asp Ala Ile Asn
            260                 265                 270
Glu Asp Lys Ser Ile Ile Asp Leu Lys Val Leu Lys Pro Ile Ser Arg
        275                 280                 285
Leu Gly Gly Ile Ser Tyr Gly Arg Thr Val Ile Thr Thr Pro Leu Lys
    290                 295                 300
Ile Thr
305

<210> 27764
<211> 63
```

<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (48)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27764
Val Ser His Val Ala Ile Tyr Asn Arg Thr Arg Ala Pro Leu Ser Arg
1 5 10 15
Gly Lys Tyr Ala Tyr Leu Ile Asn Ala His Tyr Tyr Val Ala Asp Thr
20 25 30
Thr Thr Asn Lys Lys Val Leu Leu Ala Asp Gln Val Val Tyr Cys Xaa
35 40 45
Cys Val Ala Ile Ser Phe Asn Gly Leu Glu Ser Pro Leu Ser Gly
50 55 60

<210> 27765
<211> 212
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (37),(76)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27765
Pro Pro Arg Gln Gly Val Pro Ala Ser Ala Pro Phe Pro Ile Pro Ser
1 5 10 15
Pro Leu Arg Asn Asn Phe Pro Leu Pro Phe Val Gln Ser Arg Pro Phe
20 25 30
Thr Tyr Thr Ser Xaa Tyr Ala Ser Asp Pro Pro Pro Gln Leu Ala Gln
35 40 45
Phe Gln Gln Ala Gln Gln Ser Gln Gln Gln Pro Gly Leu His Ser Gln
50 55 60
Ser Gln His His Ser Pro Tyr Leu Pro His Asn Xaa Thr Ala Pro Pro
65 70 75 80
Gln Leu Gln Gln Gln Gln His Val Pro Pro Pro Leu Pro Gly Asn Pro
85 90 95
Gln Gln Pro Gln Gln Tyr Leu Pro Pro Asn Pro Gly Pro Pro Met Gln
100 105 110
Pro Pro Gln Gln Gln Gln Gln Leu Asn Tyr Asn Val Ala Pro Met Asn
115 120 125
Ala Gly Ser Thr Ser Met Glu Asp Pro Glu Ser Val Ser Phe Glu Glu
130 135 140
Arg Ala Ser Lys Ala Ile Asp Asp Phe Glu Ala Val Leu Leu Glu Asp
145 150 155 160
Tyr Glu Asp Lys Asn His Ile Lys Glu Val Leu Lys Ser Ala Arg Ala
165 170 175
Arg Ala Leu Gly His Ala Thr Glu Ser Ser Phe Pro Gly Gly Glu Pro
180 185 190
Lys Asp Glu Ala Val Ile Leu Asp Ala Leu Arg Thr Leu Ile Gly Gly
195 200 205
Leu Arg Asp Gln

210

<210> 27766
<211> 80
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (30)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27766
Leu Ser Phe Ser Arg Leu Ser Ser Arg Ser Asn Asn Gln Gly Cys Thr
1 5 10 15
Arg Ser Arg Asn Ile Thr His Arg Thr Phe His Thr Thr Xaa Pro His
20 25 30
Arg His Asn Phe Asn Asn Ser Ser Met Cys His Leu His Phe Arg Ala
35 40 45
Thr Leu Ser Asn His Ser Ser Ile Ser His Arg Thr Gln Asp His Arg
50 55 60
Cys Ser Leu Arg Ser Ser Asn Ser Ser Ser Ile Thr Met Leu Arg Pro
65 70 75 80

<210> 27767
<211> 189
<212> PRT
<213> A.fumigatus

<400> 27767
Tyr Thr His Ser Ala Asp Pro Ser Gly Pro Val Val Lys Thr Thr Ser
1 5 10 15
Ala Met Asn Thr Val Leu Asp Pro Val Thr Thr Tyr Gly Leu Thr Ala
20 25 30
Val Pro Ser Ser Cys Thr Thr Leu Phe Asn Gly Asn Ile Pro Ser Ser
35 40 45
Pro Pro Pro Phe Val Pro Thr Thr Gln Thr Pro Ile Pro Ser Thr Pro
50 55 60
Leu Ala Thr Arg Ile Asp Asn Tyr Ala Arg Glu Asn Leu Ser Glu Gln
65 70 75 80
Thr Tyr His His Ser Leu Arg Val Tyr His Phe Gly Leu Ala Ile Lys
85 90 95
Arg His Ala Phe Pro Thr Trp Ser Phe Thr Asp Glu Thr Tyr Phe Leu
100 105 110
Ala Cys Leu Leu His Asp Leu Gly Thr Thr Asp Lys Asn Thr Arg Lys
115 120 125
Thr Arg Leu Ser Phe Glu Phe Tyr Gly Gly Leu Leu Ala Leu Glu Val
130 135 140
Leu Gln Ser Ser Ala Glu His Pro Ala Asn His Phe Gly Val Arg Cys
145 150 155 160
Ser His Arg Asp Arg Arg Ala Glu Gly Ala Gly Arg Arg Val Ser Ser
165 170 175
Arg Leu Ser Ser Gly Thr Arg Ile Cys Ala Arg Lys Glu
180 185

<210> 27768

<211> 79
<212> PRT
<213> A.fumigatus

<400> 27768
Thr Ser Pro Ser Val Val Leu Ile Thr Trp Val Asp Asn Thr Gly Ala
1 5 10 15
Asn Glu His Leu Val Asn Pro Gln Thr Ile Lys Asp Val Cys Glu Asn
20 25 30
Tyr Pro Arg Lys Gln Trp Ser Ser Cys Phe Ala Gly Val Ile Arg Lys
35 40 45
Glu Asn Gly Leu Lys Pro Trp Ala His Ser Thr Thr Leu Gly Glu Glu
50 55 60
Phe Pro Ala Lys Ile Met Gly Asn Lys Leu Met Ala Pro Tyr Glu
65 70 75

<210> 27769
<211> 132
<212> PRT
<213> A.fumigatus

<400> 27769
Gly Leu Leu Glu Tyr Ala His Lys Leu Asn Arg Pro Ile Pro Asn Gly
1 5 10 15
Val Pro Ser Asp Glu Gln Thr Asn Ile Leu Val Met Gln Ser Gln Thr
20 25 30
Met Arg Asp Leu Glu Glu Leu Thr Leu Ala Phe Asp Gly Leu Glu Arg
35 40 45
Phe Gly Leu Cys Trp Lys Lys Ile Asp Lys Cys Val Ser Ile Tyr Val
50 55 60
Leu Asn Arg Asn Gly Leu Leu Thr Asp Val Ala Phe Arg Ser Lys Arg
65 70 75 80
Arg Arg Asp Ser Gly Ala Val Lys Asp Leu Arg Asp Glu Leu Gln Asp
85 90 95
Thr Leu Asp Glu Ile Ser Met His Val Asp Ala Val Leu Asp Glu Trp
100 105 110
Leu Thr Ala Pro Ala Asp Gly Lys Leu Cys Leu Ala Arg His Gly Arg
115 120 125
Trp Lys Thr Tyr
130

<210> 27770
<211> 120
<212> PRT
<213> A.fumigatus

<400> 27770
Thr Phe Phe Gly Ile Glu Ala Glu Glu Ala Glu Leu Glu Glu Ile Arg
1 5 10 15
Val Thr Tyr Ile Pro Glu Leu Phe Leu Asp Tyr His Asn Ala Leu Tyr
20 25 30
Phe Ser Ala His Val Leu Thr Ser Glu Ile Leu Val Gln Cys Met Asn
35 40 45
Leu Ala Met Gln Val Ser Glu Asn Glu Tyr Leu Thr Arg Ser Phe Val
50 55 60
Ser Ser Arg Arg Met Ala Glu Leu Val Asp Ala Leu Ala Leu Ser Ser

65 70 75 80
Lys Ala Met Val Gln Thr Arg Ala Lys Pro Gly Lys Arg Leu Leu Gly
85 90 95
Gly Glu Ser Leu Gly Ile Trp Thr Val Glu Val Pro Glu Asp Glu Glu
100 105 110
Gln Glu Phe Leu Arg Gln Ala Lys
115 120

<210> 27771
<211> 66
<212> PRT
<213> A.fumigatus

<400> 27771
Ser Ile Gly Lys Thr Arg Thr Glu Ala Phe His Met Pro Ser His Val
1 5 10 15
Asp Leu Arg Thr Val Tyr Met Tyr Gly Val Asp Val Arg Asp Asn Ser
20 25 30
Asn Trp Cys Leu Asp Tyr Lys Phe Ala His Gly Lys Ser Trp Ile Ala
35 40 45
Glu Ser Lys Ser Leu Lys Ser Met Gly Thr Ser Ile Leu Pro Asn Val
50 55 60
Leu Leu
65

<210> 27772
<211> 153
<212> PRT
<213> A.fumigatus

<400> 27772
Tyr His Ser Lys Ile Phe Asn Leu His Ala Ile His Leu Arg Phe Val
1 5 10 15
Leu Leu Tyr Asp Asp Met Met Gln Leu Met Thr Met His Thr Arg Ala
20 25 30
Leu Leu Leu Cys Pro Val Leu Phe Ala Thr Leu Ser Cys Ile Leu Ala
35 40 45
Ser Ala Thr Ala Ile Leu Arg His Met His Thr Ala Ser Phe Thr Asn
50 55 60
Ser Thr Cys Ala Phe Ser Ser Phe His Ser Arg Ser Val Phe Phe Trp
65 70 75 80
His Phe Phe Phe Val Ser Leu Val Ile Trp Thr Ile Asn Arg Asp Leu
85 90 95
Val Val Leu Leu Val Lys Glu Pro Gly Tyr Ser Asp His Ala Gly Lys
100 105 110
Ala Val Ile Gly Phe Asp Leu Arg Leu Val Pro Glu Leu Ala Ser Phe
115 120 125
Ser Gln Gln Gly Asn Lys Ala Gln Ala Pro Ser Cys Met Cys Ser Ala
130 135 140
Ser Ser Gly Phe Leu Leu Ser Tyr Leu
145 150

<210> 27773
<211> 183
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (23),(24),(62),(77)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27773
Ser Arg Ser Ala Leu Arg Thr Ala Glu Phe Gln Met Arg Arg Gln Met
1 5 10 15
Ile Asp Glu Met Leu Ala Xaa Xaa Glu Leu Lys Lys Met Leu Arg Asp
20 25 30
Ser Phe Ala Asn Tyr Val Val Gln Thr Ala Met Asp Phe Ala Asp Pro
35 40 45
Glu Thr Arg Ala Arg Ile Val Asp Ala Ile Arg Pro Ile Xaa Pro Ser
50 55 60
Ile Arg Gln Thr Pro His Gly Arg Arg Ile Ala Gly Xaa Met Met Ala
65 70 75 80
Ser Glu Gly Ser Gly Arg Gly Ser Ala Ala Thr Ser Gly Gln Val Thr
85 90 95
Pro Asn Glu Met Asn Ser Ala Gln Leu Pro Gly Pro Leu Gln Gly Pro
100 105 110
Gln Lys Pro Phe Leu Tyr Gln His Asn Ser Phe Pro Ala Pro Thr Val
115 120 125
Gly Pro Gln Phe Gly Ser Gln Asn Phe Met Pro Ala Ser Gly Ser Gly
130 135 140
Ser Val Ser Asn Thr Thr Ser Gly Gly Ala Ser Asp Asn Ser Ser Gly
145 150 155 160
Ile Tyr Ala Pro Ala Ala Gln Gln Pro Asn Gly Asn Ile Gly Ala Gln
165 170 175
Ser Gln Leu Tyr Ala Tyr Phe
180

<210> 27774
<211> 93
<212> PRT
<213> A.fumigatus

<400> 27774
Leu Ile Ser Cys Thr Ser Gly Lys Val Ala Ala Met Ala Pro Lys Val
1 5 10 15
Glu Ile Ser Ile Pro Thr Thr Thr Thr Ser His Thr Ser Pro Pro Tyr
20 25 30
Thr Ile Tyr Asn Ile Thr Leu Arg Leu Pro Leu Arg Ser Phe Thr Ile
35 40 45
Ser Lys Arg Tyr Ser Asp Phe Val Ala Phe His Thr Ser Leu Leu Asn
50 55 60
Gln Thr Asn Ala Pro Pro Pro Ala Pro Leu Pro Phe Ser Gln Thr Ala
65 70 75 80
Val Glu Gly Pro His Met Val Ile Pro Lys Gln Pro Gly
85 90

<210> 27775
<211> 280
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (236)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27775
Gln Thr Ser Thr Glu Lys Leu Tyr Leu Ser Gly Phe Ser Ser Asp Gly
1 5 10 15
Asp Val Asp Lys Ile Gly Cys Asp Asp Leu Arg Gln Thr Gly Tyr Leu
20 25 30
Asp Ile Glu Arg Ser Ile Leu Leu His Asp Asn Ile Ser Gln Ile Ala
35 40 45
Leu Ser Val Ser Ser His Pro Met Ile Gln Glu Ile Leu Asp Gln Thr
50 55 60
Ala His Gly Val Lys Ile Phe Glu Pro His Asp Leu Ile Glu Ser Arg
65 70 75 80
Leu Ser Gln Phe Ala Gly Ser Gly Val Trp Leu Ser Gln Leu Asn Val
85 90 95
Tyr Ile Val Ala Ser Arg Val Val Tyr Thr Ala Pro Gly Thr Ser Trp
100 105 110
Pro Thr Ile Ser Phe Leu Arg Gly Arg Val Phe Asp Lys Asn Trp Arg
115 120 125
His Leu Glu Asn Tyr Thr Ile Asp Trp Tyr Gly Lys Thr Thr Thr Phe
130 135 140
Pro Leu Leu Phe Glu Ile Pro Thr Val Trp Trp Lys Asp Gly Ser Phe
145 150 155 160
Phe Gly Pro Glu Asp Pro Arg Ile Val Leu Glu Glu Gly Val Gln Gly
165 170 175
Ala Glu Pro Ile Ile Val Phe Asn Met Ile Leu Asn Ala Thr Gly Tyr
180 185 190
Pro Arg Val Met Trp Ile Phe Lys Pro Phe Ser Arg Ile Ile Ser Tyr
195 200 205
Leu Arg Ile Arg Gly Glu Glu Arg Lys Pro Thr Glu Lys Asn Trp Ala
210 215 220
Pro Phe Phe Tyr Ser Tyr Arg Ala Asp Ser Glu Xaa Lys Pro Ser Glu
225 230 235 240
His Leu Tyr Phe Val Tyr Ser Phe Asn Pro Leu Gln Val Leu Lys Cys
245 250 255
Lys Ser Asp Thr Gly Ser Cys Asp Trp Phe Tyr Arg Ala Thr Ser Ser
260 265 270
Pro Asp Phe Ser Ser Leu Pro His
275 280

<210> 27776
<211> 67
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (27),(29),(30),(42)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27776
His Trp Glu Leu Arg Leu Val Leu Gln Gly Asn Ile Lys Pro Gly Leu
1 5 10 15

```
Phe Val Thr Ala Thr Leu Gly Pro Ser Trp Xaa Asn Xaa Xaa Gly Asp
            20                  25                  30
Glu Phe Arg Ala Val Ala Leu Ala Ala Xaa Ser Gly Leu Pro Ile Leu
        35                  40                  45
Ser Gly Asn Ser Pro Asn Thr Arg Pro Val Leu Pro Ile Arg Val Phe
    50                  55                  60
Leu Ser Pro
65
```

<210> 27777
<211> 89
<212> PRT
<213> A.fumigatus

<400> 27777

```
Ser Leu Arg Arg Ser Pro Ala Arg Val Glu Lys Met Cys Asp Glu Ala
1               5                   10                  15
Cys Leu Gln Asp Leu Ser Asn Asn Pro Tyr Phe Leu Val Tyr Pro Ala
            20                  25                  30
Ser Lys Pro Gln Met Lys Arg Leu Gln Phe Arg Ser Ser Ser Asp Ser
        35                  40                  45
Ile Ser Val Leu Ile Ala Ser Leu Arg Leu Glu Phe Ala Ala Leu Ser
    50                  55                  60
Thr Ala His Asp Met Ile Ser Phe Ser Ile Thr Asp His Arg Asp Phe
65                  70                  75                  80
Cys Asn Gly Val Leu Trp Ser Pro Pro
                85
```

<210> 27778
<211> 194
<212> PRT
<213> A.fumigatus

<400> 27778

```
Leu Leu Leu Arg Asn Ser Asp Leu Thr Ile Asn Met Val Thr Pro Thr
1               5                   10                  15
Ser Lys Pro Asn Ser Ser Phe Ser Lys Val Tyr Leu Thr Lys Asn Asn
            20                  25                  30
Tyr Ala Gly Arg Ser Leu His Pro Asn Ala Lys Arg Pro Gly Lys Gly
        35                  40                  45
Val Glu Glu Ser Ala Lys Glu Glu Ser Thr Gln Val Val Glu Ser Phe
    50                  55                  60
Glu Val Asp Gly Asp Lys Gln Ile Val Asp Asn Glu Asp Ile Thr Ala
65                  70                  75                  80
Glu Pro Ala Ser Ser Pro Val Ser Ser Leu Glu Asp His Glu Asn Glu
                85                  90                  95
Ile Leu Pro Gly Phe Glu Tyr Phe Asp Ser Ala Val Gly Glu Arg Arg
            100                 105                 110
Arg Pro Gln Arg Gly Arg Lys Asp Leu Arg Gly Ser Glu Ser Pro Thr
        115                 120                 125
Leu Arg Arg Lys Arg Asn Ala Asp Glu Met Ala His Thr Ala Gln Ala
    130                 135                 140
Asp Ala Glu Lys Glu Asp Tyr Val Phe Gly Trp Ser Gln Ser Gln Lys
145                 150                 155                 160
Lys Arg Lys Gln Gly Tyr Ala Gly Lys Thr Ser Asp Gly Ser Leu Trp
                165                 170                 175
```

Lys Ala Gln Gly Ser Thr Thr Ala Pro Ser Gln Ser Lys Ser Ser Pro
180 185 190
Ser Ser

<210> 27779
<211> 350
<212> PRT
<213> A.fumigatus

<400> 27779
Thr Leu Glu Ile Phe Ser Gln Ile Leu Ser Leu Val Asn His Gly Asn
1 5 10 15
Ser Leu Leu Lys Ala Asp Phe Val Lys Gly Val Asn Gly Val Ile Gly
20 25 30
Asn Ala Asn Thr Leu Leu Thr Ala Asp Phe Val Lys Glu Thr Arg Gly
35 40 45
Leu Ile Glu Ala Val Ala Pro Ile Leu Thr Pro Glu Leu Phe Lys Gln
50 55 60
Ile Gly Thr Leu Leu Ile Asn Ala Asn Thr Leu Leu Thr Ser Asp Phe
65 70 75 80
Val Lys Glu Val Lys Gln Leu Ile Asn Ala Val Gly Pro Leu Leu Ser
85 90 95
Pro Asp Leu Phe Lys Gln Ile Ser Gly Leu Leu Asn Asn Ala Asn Asp
100 105 110
Leu Leu Thr Pro Asp Phe Val Lys Glu Thr Arg Ser Leu Val Gly Gly
115 120 125
Ile Ala Pro Val Leu Thr Pro Gly Val Leu Ala Glu Val Gly Ala Leu
130 135 140
Leu Ser Asn Ala Asn Asp Leu Leu Thr Pro Thr Phe Val Asn Glu Thr
145 150 155 160
Gln Gly Leu Ile Gly Ala Val Ala Pro Asn Ile Thr Pro Gln Leu Phe
165 170 175
Lys Glu Ile Gly Ser Leu Leu Asn Asn Ala Asn Ser Leu Leu Ser Thr
180 185 190
Asp Gly Leu His Glu Ile Gln Ser Leu Leu Asn Asn Ala Asn Asp Leu
195 200 205
Leu Thr Pro Asp Phe Val Lys Glu Thr Lys Asp Leu Ile Gly Asp Val
210 215 220
Ser Pro Val Ile Thr Pro Glu Leu Leu Gly Gln Val Gly Gly Leu Leu
225 230 235 240
Asn Asn Ala Asn Lys Leu Leu Thr Thr Lys Phe Val Glu Glu Thr Gln
245 250 255
His Leu Ile Asp Ser Val Gly Pro Ala Leu Thr Pro Ala Leu Phe Thr
260 265 270
Asn Val Thr Tyr Val Leu Gly Asn Ala Thr Gln Leu Leu Thr Pro Lys
275 280 285
Phe Val Asn Glu Thr Arg Asp Leu Ile Asp Gly Val Ser Pro Val Ile
290 295 300
Thr Pro Asp Leu Leu Val Glu Val Gly Gly Leu Leu Asn Asn Ala Asn
305 310 315 320
Asp Leu Leu Thr Arg Lys Phe Val Asn Glu Thr Gln Val Leu Val Glu
325 330 335
Asp Ala Ser Glu Val Cys Ser Leu Thr Leu Lys Ser Thr Asn
340 345 350

<210> 27780
<211> 73
<212> PRT
<213> A.fumigatus

<400> 27780
Gly Thr Tyr Leu Arg Cys Ile Leu Asp Gln Asp Leu Cys Leu Ile Asn
1 5 10 15
Glu Leu Pro Gly Glu Gln Ile Ile Gly Ile Val Glu Glu Thr Ala Asp
20 25 30
Leu Tyr Lys Gln Val Gly Cys Asp Asp Arg Gly Asp Thr Val Asn Gln
35 40 45
Val Ser Arg Leu Val Asp Glu Leu Gly Arg Gln Gln Leu Gly Gly Val
50 55 60
Ala Gln Asn Val Gly Asp Ile Gly Glu
65 70

<210> 27781
<211> 104
<212> PRT
<213> A.fumigatus

<400> 27781
Arg Glu Ser Val Ser Arg Arg Met Ile His Gly Ala Glu Ser Thr Arg
1 5 10 15
Ser Arg Cys Leu Leu Gln Asp Glu Ala Ala Ile Ser Thr Arg Ile Ser
20 25 30
Ser Glu Leu Ala Tyr Tyr Tyr Phe Asp Ile Ile Met Thr Gln Ser Ile
35 40 45
Ser Ser Leu Gly Met Asn Leu Gly Phe Pro Leu Gly Tyr Gly Leu Ile
50 55 60
Ile Lys Thr Ser Thr His Ser Thr Cys Met Ala Trp Tyr Ile Thr Val
65 70 75 80
Leu Asn Met Lys Ile Ile Lys His Glu Ala Arg Asp Tyr Leu Pro Tyr
85 90 95
Met Ser Lys Lys Arg Lys Leu Gln
100

<210> 27782
<211> 94
<212> PRT
<213> A.fumigatus

<400> 27782
Glu Asp Leu Ser Ser Asn Trp Cys Ser Thr Ala Gln Leu Phe Asp Pro
1 5 10 15
Glu Thr Met Ser Pro Pro Thr Ser Glu Lys Pro Gly Ser Val Gln Asn
20 25 30
Ile Glu Asp Val Gly Gln Arg Ala Leu Asp Asn Ile Asp Tyr Asp Glu
35 40 45
Glu Tyr Ser Tyr Glu Glu Gln Arg Lys Ile Ile His Arg Ile Asp Arg
50 55 60
Arg Leu Val Thr Met Thr Gly Leu Ala Tyr Cys Ile Ser Leu Met Asp
65 70 75 80
Arg Thr Asn Leu Ser Met Ala Ala Val Ala Gly Tyr Gly Pro
85 90

<210> 27783
<211> 217
<212> PRT
<213> A.fumigatus

<400> 27783
Ala Leu Gln Ser Asn Ser Leu Pro His Pro Gly Pro Arg Pro Glu Asp
1 5 10 15
Leu Gly Leu Arg Asn Asp Phe Pro Val Ser Pro Arg Ala Ser Thr Thr
20 25 30
Thr Thr Thr Thr Asp Arg Arg Ser Cys Thr Thr Thr Val Thr Tyr Ala
35 40 45
Ile Ala Tyr Phe Leu Pro Ile Ile Leu Gln Gln Gly Met Gly Tyr Ser
50 55 60
Val Gly Ala Ser Gln Cys Leu Val Ala Pro Pro Phe Val Phe Ala Gly
65 70 75 80
Ile Val Met Phe Ser Ser Ala Trp Val Gly Asp Lys Tyr Arg Val Arg
85 90 95
Gly Val Leu Val Ala Val Asn Ser Ile Leu Cys Leu Ile Gly Leu Pro
100 105 110
Ile Leu Gly Phe His Ser Asn Asn Ala Val Arg Tyr Phe Gly Val Phe
115 120 125
Leu Ala Thr Ala Gly Ala Asn Ala Asn Ile Pro Ala Ile Met Ala Tyr
130 135 140
Gln Ala Asn Asn Val Arg Gly Gln Trp Thr Arg Ala Leu Ser Ser Ala
145 150 155 160
Thr Leu Val Gly Phe Gly Gly Ile Gly Gly Ile Leu Ser Ser Leu Val
165 170 175
Phe Arg Ser Gln Asp Ala Pro Gly Tyr Arg Pro Gly Met Trp Thr Thr
180 185 190
Ile Gly Cys Val Ser Leu Ser Phe Leu Leu Phe Phe Thr Ser Ala Ala
195 200 205
Val Leu Thr Glu Val Asp Ala Ile Phe
210 215

<210> 27784
<211> 73
<212> PRT
<213> A.fumigatus

<400> 27784
Ile Thr Gly Val Ile Gly Val Leu Thr Leu Leu Leu Leu Val Asp Phe
1 5 10 15
Pro Asp Arg Ala His Lys Ser Trp Arg Phe Leu Ser Glu Lys Glu Cys
20 25 30
Ala Phe Val Val Arg Arg Ile Asn Arg Asp Arg Ser Asp Ala Asp Asp
35 40 45
Glu Pro Phe Ser Leu Ile Arg Phe Leu Thr Pro Ala Leu Asp Pro Lys
50 55 60
Ile Trp Gly Phe Ala Met Ile Phe Leu
65 70

<210> 27785
<211> 72
<212> PRT

<213> A.fumigatus

<400> 27785
Ser Tyr Val Ser Leu Phe Arg Ser Arg Asp Ile Ser Leu Thr Ile Arg
1 5 10 15
Gln Gly Met Gly Phe Thr Lys Asp Trp Lys Gln Met Thr Val Cys Arg
20 25 30
Ala Leu Leu Gly Leu Leu Glu Ala Gly Tyr Phe Pro Gly Cys Val Tyr
35 40 45
Leu Leu Ser Ser Trp Tyr Val Arg Cys Gln Cys Pro Phe Leu Ala Pro
50 55 60
Asp Gly Arg Phe Cys Val Leu Thr
65 70

<210> 27786
<211> 141
<212> PRT
<213> A.fumigatus

<400> 27786
Pro Pro Cys Ala Asp Pro Ser Gly Pro Val Val Thr Thr Arg Met Thr
1 5 10 15
Asp Ala Leu Arg Ala Val Thr Arg Leu Ala Ile Gln Glu Ala Arg Ala
20 25 30
Arg Glu Ile Arg Gln Glu Leu Val Lys Ser Glu Lys Leu Lys Arg His
35 40 45
Phe Glu Glu Asn Pro Glu Glu Leu Lys Gln Leu Arg His Asp Gly Glu
50 55 60
Leu Arg Ala Ala Arg Ile Gln Pro His Leu Lys His Ile Pro Asp Tyr
65 70 75 80
Leu Met Pro Ser Lys Gly Arg Lys Gly Ile Ser Ser Glu Asp Val Gly
85 90 95
Phe Val Gly Phe Arg Lys Ser Gly Asp Asn Arg Ile Arg Lys Ala Arg
100 105 110
Glu Lys Asn Arg Gly Lys Gly Lys Gly Arg Lys Pro Ser Gly Val Arg
115 120 125
Lys Val Asp Pro Leu Lys Thr Phe Asn Arg Gly Arg Lys
130 135 140

<210> 27787
<211> 318
<212> PRT
<213> A.fumigatus

<400> 27787
Leu His Pro Arg Ser Val Leu Cys Asp Leu His Ile Thr Met Ala Pro
1 5 10 15
Leu Ser Ser Arg Ile Phe Pro Val Ala Ile Gly Ala Leu Ala Leu Thr
20 25 30
Pro Leu Thr Ser Ala Trp Thr Leu Thr Trp Arg Asn Ser Thr Ala Gly
35 40 45
Ala Thr Ile Ile Asn Glu Asn Lys Ala Glu Asn Cys Thr Arg Ile Trp
50 55 60
His Gln Lys Gly Leu Pro Phe Ala Trp Asp Pro Glu Gly Lys Trp Cys
65 70 75 80
Met His Phe Tyr Lys Asp Ala Ala Cys Thr Gln Ile Ala Gly Tyr Ala

```
                85                  90                  95
Cys Asp Gly Lys Val Trp Arg Gln Asp Ala Ser Arg Asp Leu Pro Ala
            100                 105                 110
Phe Asp Val Phe Pro Met Pro Pro Glu Ser Val Ser Val Ile Phe Pro
        115                 120                 125
Ser Thr Ser Ser Thr Ala Thr Thr Pro Thr Ser Thr Ala Val Thr Thr
    130                 135                 140
Thr Ala Ser Gln Ser Pro Ser Ala Ala Ser Ala Ala Ala Ser Thr Ala
145                 150                 155                 160
Pro Thr Thr Ser Pro Thr Pro Ser Pro Ser Pro Ala Ser Ser Ser Ser
                165                 170                 175
Thr Leu Ser Gly Gly Ala Ile Ala Gly Ile Val Ile Gly Ala Ile Ala
            180                 185                 190
Ala Val Gly Leu Ile Ala Ala Leu Phe Phe Phe Phe Gly Arg Arg Asn
        195                 200                 205
Arg Lys Pro Ala Gln Pro Ala Glu Pro Asp Pro Arg Ser Thr Thr Pro
    210                 215                 220
Pro Thr Pro Gln Phe Pro Pro Gly Ser Pro Leu Gly Leu Val Ser Thr
225                 230                 235                 240
Asn Asp Thr Ala Ala Ala Pro Ala Pro Ala Tyr Ile Val Pro Asn Lys
                245                 250                 255
Arg Glu Leu Ala Glu Ala Glu Met Ser Gln Ala Tyr Ala His Gly Tyr
            260                 265                 270
Gly His Pro Arg Ala Tyr Ala Gly Ala Lys Phe Val Glu Leu Pro Gly
        275                 280                 285
Asn Gly Ala Glu Ala Glu Leu Ser Asn Ser Arg Gln Val His Glu Met
    290                 295                 300
Asp Gly Thr Ser Asp Ile Lys Arg Pro Ile Tyr Glu Ala Ala
305                 310                 315
```

<210> 27788
<211> 152
<212> PRT
<213> A.fumigatus

<400> 27788

```
Pro Pro Gln His Pro Ser Pro Arg Gln Pro Pro Pro Gln Pro His Arg
1               5                   10                  15
Pro Arg Pro Pro His Pro Gln Pro Arg Pro Pro Pro Pro Pro Arg Pro
            20                  25                  30
Pro Pro Pro Ser Pro Gly Ala Pro Ser Leu Glu Ser Ser Ser Ala Pro
        35                  40                  45
Ser Pro Pro Ser Val Ser Ser Pro Pro Ser Ser Ser Ser Ser Glu Asp
    50                  55                  60
Ala Thr Ala Ser Gln Pro Ser Pro Arg Ser Pro Thr Arg Gly Arg Pro
65                  70                  75                  80
Pro Arg Gln Pro Arg Asn Ser Arg Arg Val Arg His Ser Ala Ser Ser
                85                  90                  95
Arg Arg Thr Ile Pro Arg Arg Pro Pro Arg Gln Leu Thr Ser Ser Arg
            100                 105                 110
Thr Ser Gly Asn Ser Pro Arg Arg Arg Cys Pro Arg Arg Met Arg Met
        115                 120                 125
Gly Thr Gly Ile His Gly Arg Thr Pro Ala Pro Ser Ser Ser Ser Tyr
    130                 135                 140
Pro Ala Thr Gly Arg Arg Arg Asn
145                 150
```

<210> 27789
<211> 134
<212> PRT
<213> A.fumigatus

<400> 27789
Leu Asp Glu Leu Gly Ala Gly Val Arg Pro Trp Met Pro Val Pro Met
1 5 10 15
Arg Ile Arg Leu Gly His Leu Arg Leu Gly Glu Phe Pro Leu Val Arg
20 25 30
Asp Asp Val Ser Trp Arg Gly Gly Arg Arg Gly Ile Val Arg Arg Asp
35 40 45
Glu Ala Glu Trp Arg Thr Arg Arg Glu Leu Arg Gly Trp Arg Gly Gly
50 55 60
Arg Pro Arg Val Gly Leu Arg Gly Leu Gly Trp Leu Ala Val Ala Ser
65 70 75 80
Ser Glu Glu Glu Glu Glu Gly Gly Asp Glu Thr Asp Gly Gly Asp Gly
85 90 95
Ala Asp Asp Asp Ser Ser Asp Gly Ala Pro Gly Glu Gly Gly Gly Gly
100 105 110
Arg Gly Gly Gly Gly Gly Arg Gly Trp Gly Cys Gly Gly Arg Gly Arg
115 120 125
Cys Gly Cys Gly Gly Gly
130

<210> 27790
<211> 106
<212> PRT
<213> A.fumigatus

<400> 27790
Arg Leu Pro Ile Ala Met Thr Ile Arg Ala Ser Asn Thr Tyr Glu Glu
1 5 10 15
Arg Ala Leu Gly Leu Tyr Pro Ser Asn Glu Asp Glu Leu Asp Glu Asn
20 25 30
Asn Gly Ile Asn Tyr Val Thr Thr His Met Arg Asn Gln Leu Ser Phe
35 40 45
Asp Leu Trp Tyr Ile Phe Ile Gly Ile Phe Cys Ile Cys Ala Thr Glu
50 55 60
Ala Arg Arg Ile Met Asp Pro Ser Glu Pro Val Gly Phe Gln Pro Cys
65 70 75 80
Phe Gly Phe Arg Ala Arg Thr Thr Asp Phe Leu Gln Gly Phe Ser Val
85 90 95
Phe Ala Ile Phe Phe Glu Val Val Ser Ala
100 105

<210> 27791
<211> 98
<212> PRT
<213> A.fumigatus

<400> 27791
Val Gln Tyr Leu Val Leu Ser Phe Arg Gly Cys Leu Thr Arg Cys Ser
1 5 10 15
Gly Asn Val Gly Leu Ser Leu Gly Tyr Pro Asn Val Thr Thr Ser Phe

```
            20                  25                  30
Cys Gly Gln Phe Ser Val Phe Ser Lys Ile Val Ile Cys Ala Met Met
        35                  40                  45
Ile Arg Gly Arg His Arg Gly Leu Pro Val Gln Leu Asp Arg Ala Ile
    50                  55                  60
Leu Leu Pro Gly Glu Arg Ile Ala Gly Asp Asp Gly Leu Asp Glu Ser
65                  70                  75                  80
Phe Ala Ala Arg Gln Ser Gln Thr Leu Asn Ser Phe Arg Arg Tyr His
                85                  90                  95
Thr Lys
```

<210> 27792
<211> 69
<212> PRT
<213> A.fumigatus

<400> 27792

```
Glu Gly Asn Ala Ser Lys Ser Val Gly Phe Glu His Glu Arg Leu Tyr
1               5                   10                  15
Ile Thr Leu Pro Val Ser Thr Ala Gly Ala Tyr Asp Arg Ser Lys Ala
            20                  25                  30
Tyr Thr Arg Asp Ile Thr Asn Ile Asn Pro Ile Leu Ile Gln Thr Thr
        35                  40                  45
Arg Leu Glu Met Pro Phe Leu Asp Tyr Thr Ser Ile Thr Leu Thr Ile
    50                  55                  60
Leu Tyr Gly Ser Val
65
```

<210> 27793
<211> 73
<212> PRT
<213> A.fumigatus

<400> 27793

```
Lys Lys Gly Leu Asp Arg Pro Pro Ala Gln Gly Asn Gln Gly Asp Pro
1               5                   10                  15
Ile Leu Ala Asn Gln Trp Arg Val Lys Asp Ile Leu Leu Gly His Arg
            20                  25                  30
Arg His Arg Leu Ala Gly Tyr Cys Cys His Pro Arg Ala Ser Ala Ser
        35                  40                  45
Leu Gly Thr Gly Ala Ala Thr Leu Gly Thr Asp Thr Thr Asn Trp Gln
    50                  55                  60
Trp Pro Ser Trp Ala Arg Ala Arg Ser
65                  70
```

<210> 27794
<211> 727
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (678),(690),(705)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27794

```
Pro Trp Ala Thr Pro Arg Ala Ala Glu Leu Pro Phe Tyr Thr Lys Glu
1               5                  10                  15
Lys Lys Ser Trp Gln Val Glu Asn Leu Pro Lys Met Val Asp Ala Gly
            20                  25                  30
Ile Ile Ile Glu Cys Met Ser Pro Trp Ser Ala Arg Thr Lys Phe Pro
        35                  40                  45
Arg Lys Thr Ser Gly Lys Leu Arg Met Val His Asn Phe Met Pro Ile
    50                  55                  60
Asn Ala Ala Thr Ile Lys Met Asn Tyr Pro Leu Arg Arg Ile Glu Pro
65                  70                  75                  80
Val Ile Ala Asn Leu Ser Lys Lys Arg Trp Lys Val Phe Phe Lys Val
                85                  90                  95
Asp Ala Ala Asn Gly Tyr Trp Ala Val Pro Leu Ala Ile Glu His Ser
            100                 105                 110
Phe Lys Thr Gly Phe Asn Ser Ile Leu Gly Gln Phe Cys Tyr Leu Arg
        115                 120                 125
Met Gly Gln Gly Leu Thr Gly Ala Pro Gly Thr Tyr Ser Lys Leu Lys
    130                 135                 140
Asp Leu Ala Met Gly Ala Ile Pro Glu Pro Ser Ser Glu Ala Ala Leu
145                 150                 155                 160
Thr Ser Leu Pro Gly Val Gly Phe Glu Tyr Phe Met Asp Asp Asp Ala
                165                 170                 175
Ala Ala Thr Glu Asn Met Asn Asn Met Val Ser Phe Leu His Gln His
            180                 185                 190
Tyr Phe Pro Arg Leu Ala Trp Ala Gly Leu Thr Leu Asn Pro Ala Lys
        195                 200                 205
Ser Val Phe Phe Thr Asp Glu Ile Glu Ile Leu Gly His Gln Cys Thr
    210                 215                 220
His Asn Gly Leu Arg Pro Ser Ile Thr Lys Leu Glu Ala Leu Arg Ala
225                 230                 235                 240
Trp Pro Glu Pro Thr Asn Glu Glu Glu Leu Met Arg Phe Ile Tyr Leu
                245                 250                 255
Leu Pro Phe Leu Lys Val Tyr Ile Pro Gly Arg Ala Asp Tyr Thr Ala
            260                 265                 270
Ile Leu Lys Lys Ala Leu Lys Tyr Thr Gly Lys Gly Lys Thr Lys Arg
        275                 280                 285
Leu Glu Ser Phe Lys Trp Gly Glu Glu Gln Arg Lys Val Phe Gln Ile
    290                 295                 300
Leu Lys Arg Tyr Leu Leu Glu Val Lys Leu Ser Gly Gly Asp Pro Lys
305                 310                 315                 320
Leu Gln Tyr His Leu Ser Thr Asp Ala Ser Asn Gly Gly Leu Gly Gly
                325                 330                 335
Val Leu Phe Gln Met Thr Glu His Pro Val Gly Thr Lys Ser Ser Arg
            340                 345                 350
Lys Thr His Pro Tyr Glu Val Pro Val Met Tyr Leu Ser Phe Ala Leu
        355                 360                 365
Ser Asp Pro Glu Thr His Tyr Thr Thr Thr Glu Lys Glu Val Leu Ala
    370                 375                 380
Val Leu Arg Gly Leu Glu Glu Thr Arg Trp Leu Ile Leu Gly Ser Pro
385                 390                 395                 400
Tyr Pro Val Ile Val Tyr Thr Asp His Thr Ala Val Lys Ser Val Thr
                405                 410                 415
Gly Glu His Ser Glu Ala Thr Gly Arg Leu Ala Arg Trp His Tyr Arg
            420                 425                 430
Leu Gln Glu Tyr Gln Val Asp Tyr Val His Val Pro Gly Lys Leu Gln
```

```
        435                 440                 445
Val Val Ala Asp Gly Leu Ser Arg Ile Pro Tyr Trp Lys Ser Thr Thr
    450                 455                 460
Pro Gly Thr Glu Glu Asp Gly Phe Pro Leu Leu Ser Phe Ala Asn Met
465                 470                 475                 480
Glu Asp Cys Gln Pro Gln Pro Ser Ile Thr Pro Lys Glu Thr His Glu
                485                 490                 495
Glu Leu Tyr Leu Pro Tyr Leu Gln Asp Thr Trp Tyr Lys Gln Thr Val
            500                 505                 510
Glu Glu Leu Leu Lys Gly Arg Ile Asp Lys Arg Phe Ser Leu Ile Asn
        515                 520                 525
Val Glu Gly Glu Tyr Leu Leu Ala Tyr His Glu Ala Asn Gly Lys Trp
    530                 535                 540
Ser Gln Cys Val Leu Gln Ser Gln Leu Gln Gly Val Leu Cys Leu Leu
545                 550                 555                 560
His Asp Val His Gly His Phe Ala Ala Arg Ile Ser Leu Gly Arg Ala
                565                 570                 575
Ile Gly Arg Tyr Tyr Trp Pro Cys Arg Tyr Gln Thr Leu Val Glu Tyr
            580                 585                 590
Cys Arg Ser Cys Pro Gln Cys Gln Val Val Gly Leu Lys Pro Pro Lys
        595                 600                 605
Gly Asp Pro Arg Ala Val Ile Ser Leu Glu Pro Leu Gln Leu Phe Ala
    610                 615                 620
Met Asp Tyr Ile Gly Pro Ile Thr Pro Thr Ser Arg Met Gly Ala Arg
625                 630                 635                 640
Tyr Ile Leu Val Gly Ala Asp Tyr Phe Ser Lys Tyr Val Phe Ala His
                645                 650                 655
Thr Ala Thr Ala Ala Thr Thr Gln Val Ser Val His Phe Leu Lys His
            660                 665                 670
Asp Val Gly Lys His Xaa Ser Ile Thr Ala Ile Pro Cys Thr Pro Asn
        675                 680                 685
Asn Xaa Lys Ala Leu Tyr Arg Arg Arg Asp His Pro Leu Leu Glu Lys
    690                 695                 700
Xaa Trp Gly Val Arg His Val Thr Gly Pro Cys Thr Ser Pro Val Val
705                 710                 715                 720
Trp Arg Phe Tyr Arg Thr Glu
                725
```

<210> 27795
<211> 483
<212> PRT
<213> A.fumigatus

<400> 27795

```
Ser Gly Asn Pro Tyr Ala Ala Asn Tyr Ile Thr Leu Pro Tyr Ser Arg
1               5                   10                  15
Gly Leu Gly Lys Ser Thr Pro Lys Lys Arg Pro Arg Phe Pro Ser Leu
            20                  25                  30
Thr Trp Gly Ser Ile Ala Val His Pro Tyr Phe Leu Cys Tyr Phe Thr
        35                  40                  45
Leu Ser Leu Lys Ser Leu Phe Ser Phe Pro Leu Val Glu Arg Asn Met
    50                  55                  60
Ser Asp Ile Lys Pro Lys Ser Pro Ser Ile Pro Gln Trp Gln Gln Pro
65                  70                  75                  80
Ala Ala Ala Thr Thr Asn Thr Gly Asn Ser Thr Ser Thr Pro Ser Pro
                85                  90                  95
```

```
Ser Ser Asp Glu Thr Pro Arg Ser Glu Leu Ile Glu Gln Ala Lys Lys
            100                 105                 110
Phe Leu Gln Asp Asp Ser Ile Arg Asp Ala Pro Ile Asp Arg Lys Ile
        115                 120                 125
Ala Phe Leu Glu Ser Lys Gly Leu Arg Ser Glu Glu Ile Asp Ser Leu
    130                 135                 140
Leu Ala Ile Ser Arg Glu Thr Asp Ser Ser Thr Asn Leu Ala Glu Gly
145                 150                 155                 160
Ser Lys Ser Thr Pro Asp Ser Thr Thr Ser Ser Thr Ser Asn Glu Ser
                165                 170                 175
Gln Ser Pro Lys Glu Pro Ser Ala Leu Ser Pro Ile Ser Ser Ala Ser
            180                 185                 190
Ser Pro Thr Thr Pro Ala Ala Pro Thr Ala Thr Lys Asn Ser Thr Pro
        195                 200                 205
Arg Asp Val Pro Pro Ile Ile Thr Tyr Pro Glu Phe Leu Met Gln Gln
    210                 215                 220
Ser Lys Pro Pro Pro Leu Val Thr Leu Arg Ser Ile Leu Tyr Thr Leu
225                 230                 235                 240
Tyr Gly Ala Ala Gly Leu Gly Ala Ser Leu Tyr Gly Ala Ser Glu Tyr
                245                 250                 255
Phe Val Lys Pro Met Leu Ala Thr Leu Thr Ser Ala Arg Val Glu Leu
            260                 265                 270
Ala Gln Thr Ala Asn Ala Asn Leu Gln Lys Leu Asn Glu Lys Leu Glu
        275                 280                 285
Gln Asn Val Ser Arg Ile Pro Pro His Leu Ser Ala Lys Asp Thr Lys
    290                 295                 300
Gln Thr Glu Pro Ala Asp Ser Glu Asp Asp Glu Gln Asp Ser Val Thr
305                 310                 315                 320
Ser Asp Pro Thr Glu Leu Phe His Arg Asp Val Ala Thr Gln Thr Ser
                325                 330                 335
Gln Asp Leu Asp Val Ser Thr Leu Pro His Lys Ala Gly Tyr His Pro
            340                 345                 350
Ala Asp Glu Ala Thr Pro Asp Pro Thr Ala Thr Val Asn Thr His Ile
        355                 360                 365
Lys Arg Leu Glu Asn Ile Thr Ser His Leu Arg Glu Val Ala Ser Ser
    370                 375                 380
Glu Lys Glu Ser Gly Ala Leu Asp Asp Ser Met Arg Thr Arg Leu Asn
385                 390                 395                 400
Glu Leu His His Tyr Leu Asp Gly Leu Leu Tyr Gly Arg Ser Ser Tyr
                405                 410                 415
Ser Ser Val Thr Ala Tyr Gly Val Tyr Ser Thr Pro Gly Leu Glu Thr
            420                 425                 430
Thr Ser Gly Pro Ser Val Gly Ile Ser Lys Gly Arg Glu Asp Ala Met
        435                 440                 445
Ala Ser Phe Arg Ala Asp Ile Arg Gly Val Lys Gly Ala Leu Leu Ser
    450                 455                 460
Ala Arg Asn Phe Pro Ala Ser Arg Gly Arg Ile Gly Ser Gly Ile Leu
465                 470                 475                 480
Ser Gly Arg
```

<210> 27796
<211> 94
<212> PRT
<213> A.fumigatus

<400> 27796
Glu Gln Ala Ser Thr Ala Gln Ala Asn Thr Leu Ser Asn Gln Cys Ser
1 5 10 15
Pro Pro Ser Pro Ala Pro Val Ser Asn Ser Pro Lys Pro Pro Thr Pro
20 25 30
Thr Cys Arg Ser Ser Thr Arg Asn Ser Asn Arg Thr Ser Leu Gly Ser
35 40 45
Arg Pro Ile Ser Pro Gln Arg Thr Gln Asn Lys Pro Ser Pro Pro Thr
50 55 60
Pro Lys Met Met Ser Arg Thr Pro Ser Pro Arg Thr Gln Leu Ser Ser
65 70 75 80
Ser Thr Gly Met Ser Gln Pro Arg Pro Pro Arg Ile Trp Met
85 90

<210> 27797
<211> 117
<212> PRT
<213> A.fumigatus

<400> 27797
Tyr Cys Leu Phe Ser Phe Asn Arg Ser Gly Leu Gln Met Leu Pro Ser
1 5 10 15
Thr Val Leu His Asp Tyr Tyr Ala Ile Leu Gly Ile Pro Gln Ser Ala
20 25 30
Asp Pro Ala Ser Ile Lys Ser Ala Tyr Lys Arg Leu Ala Leu Val Lys
35 40 45
His Pro Asp Arg Arg Arg Asn Glu Pro Lys Ala Thr Ala Glu Phe Gln
50 55 60
Leu Val Ser Leu Thr Pro Ser Phe Ser Ser Leu Leu Glu Ala Cys Val
65 70 75 80
Val Thr Asp Ala Val Ile Leu Ser Ser Thr Leu Arg Met Ser Ser Ser
85 90 95
Glu Met Ser Ile Asp Val Glu Asn Met Thr Glu Tyr Met Asn Gln Gln
100 105 110
Tyr Val Thr Lys Lys
115

<210> 27798
<211> 67
<212> PRT
<213> A.fumigatus

<400> 27798
Leu Lys Phe Gly Ser Phe Gln Pro Leu Val Val Lys Thr Gln Cys Arg
1 5 10 15
Ser Val Gln Gly Ile Lys Gly Gly Lys Arg Arg Val Glu Leu His Tyr
20 25 30
Gln Val Ala Pro Arg Phe Lys Glu Gln Glu Gly Leu Ile Val Thr Tyr
35 40 45
His Phe Thr Ala Pro Leu Pro Leu Phe Tyr Leu Lys Phe Tyr Thr Lys
50 55 60
Ala Asp Asn
65

<210> 27799
<211> 87

<212> PRT
<213> A.fumigatus

<400> 27799
Gly Ala Ala Leu Gly Arg Val Ala Pro Phe Ser Ala Phe Gln Pro Gly
1 5 10 15
Asn Phe Cys Leu Leu Val Leu Ser Lys Asn Pro Ser Leu Leu Asn Val
20 25 30
Ala Lys Gly Arg Val Phe Asn Ser Thr Ile Ser Pro Ser Gly Lys Leu
35 40 45
Lys Pro Leu Pro Lys Ser Phe Gln Pro Gly Ser Pro Leu Pro Leu Thr
50 55 60
Lys Lys Val Gln Ile Pro Phe Leu Leu Asn Pro Phe Lys Asn Phe Pro
65 70 75 80
Phe Pro Pro Ser Asn Phe Ser
85

<210> 27800
<211> 350
<212> PRT
<213> A.fumigatus

<400> 27800
Lys Glu Gln Arg Ala Pro Thr Leu His Leu Ile Glu Arg His Lys Asn
1 5 10 15
Leu Leu Ser Glu Arg Glu Ala Leu Ala Ala Ser Ser Gln Asp Ala Ser
20 25 30
Arg Leu Met Ala Arg Gly Asn Lys Gly Glu Arg Arg Asp Pro Gly Lys
35 40 45
Leu Leu Arg Glu Glu Lys Met Arg Lys Arg Ile Ala Lys Glu Leu Pro
50 55 60
Lys Val Glu Ala Asp Leu Arg Lys Glu Leu Glu Arg Trp Glu Glu Glu
65 70 75 80
Tyr Gly Arg Pro Phe Leu Val His Gly Glu Arg Tyr Leu Asp Glu Leu
85 90 95
Thr Pro Val Ile Ala Lys Pro Pro Pro Arg Ser Lys Thr Pro Ser Ala
100 105 110
Pro Pro Ser Ala Asn Ser Lys Ala Gly Phe Gly Arg Pro Gln Pro Pro
115 120 125
Ser Arg Pro Ala Ser Val Met Arg Gly Pro Pro Pro Pro Arg Ser Ala
130 135 140
Thr Arg Thr Pro Thr Gly Asn Gly Gln Thr Lys Tyr Asn Thr Ile Gly
145 150 155 160
Pro Ser Arg Ala Gly Ala Lys Ser Pro Ser Lys Ile Pro Ala Arg Val
165 170 175
Pro Leu Ser Asn Met Pro Tyr Gly Asn Asn Ser Ala Gly His Arg Ala
180 185 190
Ala Pro Gly Ser Tyr Ser Ser Ser Thr Met Gly Lys Val Pro Ala Pro
195 200 205
Arg Ala Pro Pro Pro Arg Met Arg Ala Leu Thr Ile Asp Ser Lys Glu
210 215 220
Asp Arg Gly Pro Tyr Ser Met Asp Pro Pro Arg Cys Ala Ser Ala Met
225 230 235 240
Ser Asn Ala Phe Val Arg Pro Val Ser Pro Glu Asp Val Tyr Asp Asp
245 250 255
Arg Asn Gln Arg Ser Phe Met Ser Ser Ser Val Phe Ser Gln Arg Ser

```
            260                 265                 270
Thr Gly Phe Ser Gln Cys Ser Gln Ser Ser Ala Ser Ser Ile Ser Ser
        275                 280                 285
Val Pro Asn Phe Pro Arg Pro Asn Pro Tyr Leu Gln His Ala Pro Pro
    290                 295                 300
Pro Pro Ala Pro Arg Gln Val Ser Asn Ser Ser Thr Val Asp Thr Ala
305                 310                 315                 320
Asn Thr Gly Ser Glu Asn Trp Glu Thr Phe Asp Asp Gly Ser Glu Ser
                325                 330                 335
Glu Ala Asp Val Phe Thr Pro Gly Leu Glu Gly Asn Ala Cys
            340                 345                 350

<210> 27801
<211> 176
<212> PRT
<213> A.fumigatus

<400> 27801
Leu Lys Glu Val Gln Thr Arg Leu Arg Ala Glu Ile Leu Ser Thr Asn
1               5                   10                  15
Thr Thr Thr Pro Thr Ser Glu Val Val Asn Ala Leu Pro Tyr Leu Thr
            20                  25                  30
Ala Val Val Tyr Glu Leu Leu Arg Leu Tyr Pro Pro Val Ser Gln Leu
        35                  40                  45
Ile Asn Arg Val Thr Val Arg Pro Ala Met Leu Gly Asn Glu Ile Pro
    50                  55                  60
Ile Pro Ala Gly Thr Phe Val Gly Trp Asn Ala Tyr Gly Val His Val
65                  70                  75                  80
Asn Pro Ala Ile Trp Gly Pro Asp Ala Asn Glu Phe Lys Pro Glu Arg
                85                  90                  95
Trp Gly Arg Thr Val Gly Glu Met His Ala Arg Phe Arg Arg Glu Thr
            100                 105                 110
Val Arg Gly Thr Tyr Ile Pro Phe Asn Ala His Ser Arg Lys Cys Leu
        115                 120                 125
Gly Gln Gly Phe Val Leu Leu Gln Met Lys Ile Leu Leu Phe Glu Val
    130                 135                 140
Leu Arg Arg Ile Glu Trp Thr Val Asp Pro Gly Tyr Arg Leu Lys Met
145                 150                 155                 160
Thr Pro Val Ser Tyr Phe Leu Glu Ser Gly Arg Lys Ser Thr Asp Ala
                165                 170                 175

<210> 27802
<211> 274
<212> PRT
<213> A.fumigatus

<400> 27802
Gly Val Lys Met Leu His Leu Pro Ser Phe Val Ser Asn Arg Tyr Ile
1               5                   10                  15
Lys Thr Met Arg Asp Tyr Ala Ala Glu Ile Val Ala Lys Arg Arg Ala
            20                  25                  30
Ala Pro Thr Glu Lys Lys Asp Met Leu His Ala Ile Met His Gly Thr
        35                  40                  45
Asp Pro Gln Thr Gly Lys Ala Leu Thr Glu Ser Gln Tyr Leu Asp Glu
    50                  55                  60
Ile Ile Asn Leu Phe Ile Gly Ser Ala Thr Ala Ala Asn Leu Val Ser
```

65 70 75 80
Phe Ala Leu Tyr Tyr Leu Met Lys Asn Pro His Glu Ile Ala Arg Ala
85 90 95
Arg Glu Glu Ile Asp Ala Val Val Gly Gly Pro Thr Ala Gln Leu Glu
100 105 110
His Glu His Leu Ala Arg Leu Pro Tyr Cys Glu Ala Ile Leu Arg Glu
115 120 125
Ser Leu Arg Leu Ser Ala Thr Ala Pro Gly Phe Asn Ile Glu Pro Ile
130 135 140
Pro Asp Leu Glu Gln Pro Val Leu Leu Ala Gly Gly Glu Tyr Gln Val
145 150 155 160
Pro Asn Lys Gln Pro Leu Ile Ala Leu Leu Ala Ala Val Asn Arg Asp
165 170 175
Pro Glu Val Phe Glu Asp Pro Asp Ala Phe Lys Pro Glu Arg Met Val
180 185 190
Gly Glu Lys Tyr Asp Arg Leu Pro Ser Gly Val Lys Lys Gly Phe Gly
195 200 205
Asn Gly Lys Arg Glu Cys Phe Gly Lys Arg Tyr Ala Trp Glu Trp Ser
210 215 220
Phe Met Ile Phe Val Thr Ile Met Lys Asp Val Asp Phe Val Leu Ala
225 230 235 240
Asp Lys Asn Tyr Lys Thr Glu Val Gly Gly Val Asn Tyr Asn Gly Ala
245 250 255
Phe Ser Thr Lys Pro Leu Gly Leu Phe Ala Leu Thr Gly Pro Arg Gln
260 265 270
Ser Val

<210> 27803
<211> 424
<212> PRT
<213> A.fumigatus

<400> 27803
Gly Leu His Ser Arg Val Pro Val Val Val Asp Leu Gly Phe Ser Pro
1 5 10 15
Arg Lys Ile Asp Thr Tyr Arg Ser Val Leu Glu Met Phe Leu Arg Leu
20 25 30
Val Pro Asp Ala Val Thr Cys Ser Leu Ser Cys Pro Asp Glu Ile Ile
35 40 45
Gln Trp Leu Asn Thr Thr Lys Gly Ser Ile Lys Thr Ile Ala Thr Trp
50 55 60
His Gln Ser Thr Pro Leu Gly Ile Asp Val Ser Gln Thr Ala His Ile
65 70 75 80
Pro Val Glu Lys Ala Ile Gln Ser Gly Phe Asp Cys Ile Arg Ile Thr
85 90 95
Gly Glu Ser Phe Ser Ile Glu Asp Asn Leu Ala Cys Val Ala Leu Arg
100 105 110
Gln Arg Leu Ile Gln Asn Ser Thr Ile Pro Val Ile Ala Tyr Asn Thr
115 120 125
Gly Leu Ser Gly Arg Ala Ser Ile Cys Leu Asn Pro Thr Leu Ser Pro
130 135 140
Val Val Pro Ser Ser Met Asn Ala Thr Gly Val Thr Leu Ser Asp Ala
145 150 155 160
Gln Lys Ala Leu Thr Ser Cys Phe Leu Thr Thr Lys Met Arg Phe Thr
165 170 175

```
Leu Val Gly Gln Ala Leu Glu His Thr Leu Ser Pro Ala Met His Val
            180                 185                 190
Ala Ala Tyr Ala Ala Cys Gly Leu Pro His Ser Tyr Glu Ala Val Gln
        195                 200                 205
Ala Ala Thr Leu Ser Glu Ile Arg Thr Leu Leu Glu Asp Gly Ser Arg
    210                 215                 220
Ser Gly Val Ala Ile Ser Ile Pro Tyr Lys Thr Ala Val Leu Pro Leu
225                 230                 235                 240
Leu Asp Glu Ile Ser Pro Asp Ala Arg Asn Ile Asn Ala Val Asn Thr
                245                 250                 255
Val Val Leu Lys Arg His Arg His Asp Gly Gln Val Val Thr Thr Arg
            260                 265                 270
Lys Gly Tyr Asn Thr Asp Tyr Ile Gly Val Arg Asn Cys Ile His Gln
        275                 280                 285
His Leu Ser Pro Ala Asn Ala Ile Arg Asp Gly Thr Thr Val Leu Ile
    290                 295                 300
Ile Gly Ala Gly Gly Met Ala Arg Ala Ala Ile Tyr Ala Cys Tyr Lys
305                 310                 315                 320
Met Gly Val Arg Gln Phe Cys Ile Tyr Asn Arg Thr Leu Glu Asn Ala
                325                 330                 335
Arg Lys Leu Ala Glu Tyr Phe His Arg Trp Ile His Gln Ser Gly Thr
            340                 345                 350
Asn Leu Glu Phe Glu Val Ile Glu Ser Ile Glu Thr Gln Trp His Thr
        355                 360                 365
Arg Phe Arg Leu Pro Thr Ile Val Ile Ser Cys Leu Pro Gly Gln Gln
    370                 375                 380
Val Gly Cys Gly Glu Met Val Asp Val Arg Ile Ser Glu Arg Trp Leu
385                 390                 395                 400
Gln Ser Thr Thr Gly Gly Val Phe Leu Glu Val Trp Leu Phe Leu Val
                405                 410                 415
Phe Trp Ala Phe Val Gly Phe Gly
            420
```

<210> 27804
<211> 64
<212> PRT
<213> A.fumigatus

<400> 27804

```
Arg Val Tyr Thr Arg Leu Lys Ser Ser Lys Thr Phe Pro Ser Thr Leu
1               5                   10                  15
Thr Thr Thr Tyr Leu Phe Val Gly Thr His Ser Leu Gln Thr Trp Val
            20                  25                  30
Phe Val Leu Thr Val Cys Ser Gly Gly Pro Lys His Glu Arg Asn Gly
        35                  40                  45
His Thr Arg Gly His Cys Ser Phe Asp Thr Ile Asp Pro Val Thr Arg
    50                  55                  60
```

<210> 27805
<211> 99
<212> PRT
<213> A.fumigatus

<400> 27805

```
Pro Pro Ser Ile Asp Met Ser Leu His Thr Ser Tyr His Ala Asp Ser
1               5                   10                  15
```

```
Asp Ala Asp Asp Glu Tyr Glu Arg Ser Val Ile Thr Ser Pro His Leu
            20                  25                  30
Ala Thr Asp Ser Glu Ala Ser Pro Ser Asp Ser Glu Phe Pro Ser Ala
        35                  40                  45
Glu His Thr Pro Arg Thr Phe Ala Asn Pro Glu Glu Asp Pro Arg Ser
    50                  55                  60
Pro Lys Thr Ile Ile Thr Glu Trp Thr Ala Glu Glu Cys Ala Asn Trp
65                  70                  75                  80
Leu Ala Ala Leu Gly Leu Arg Gln Tyr Cys Ala Thr Phe Leu Gly Thr
                85                  90                  95
Leu Ala Ala
```

<210> 27806
<211> 113
<212> PRT
<213> A.fumigatus

<400> 27806

```
Ser Ser Leu Leu Leu Thr Val Lys Glu Pro Lys Ser Arg Cys Arg Ile
1               5                   10                  15
Gly Val Asn Arg Ser Leu Ala Leu Thr Tyr Ile Gln Arg Lys Glu Leu
            20                  25                  30
Arg Arg Ala Leu Thr Pro Phe Pro Phe His Arg Ser Leu Gly Cys Ile
        35                  40                  45
Thr Cys Lys Ala Lys Arg Leu Lys Cys Asp Glu Ser Lys Pro Thr Cys
    50                  55                  60
Leu Gln Cys Arg Lys Arg Asn Val Glu Cys Gly Gly Tyr Lys Lys Asp
65                  70                  75                  80
Phe Lys Trp Arg Pro Phe Glu Glu Thr Asn Val Ile Ser Arg Ile Ser
                85                  90                  95
Ser Ile Gln Ala Arg Lys Ser Lys Cys Thr Gly Leu Gln Gly Leu His
            100                 105                 110
Leu
```

<210> 27807
<211> 393
<212> PRT
<213> A.fumigatus

<400> 27807

```
Asn Leu Ser Gly Asp Pro Ala Arg Ser Gly Lys Glu Arg Arg Ala Ser
1               5                   10                  15
His Ser Val Gln Ala Gly Lys Asp Arg Gln Pro Trp Pro Val Ser Pro
            20                  25                  30
Arg Ser Pro Thr Pro Thr Ala Ser Ser Leu Asp Ser Asn Asp Ala Ala
        35                  40                  45
Leu Ile His Thr Leu Gln Ser Gly Ile Ser Pro Ser Thr Asp Ser Pro
    50                  55                  60
Leu Ala Leu Thr Gln Glu Asn Leu Thr Ser Trp Asn Ser Gly Ile Ala
65                  70                  75                  80
Arg Phe Leu Asp Phe Ser Asn Ala Glu Asp Glu Leu Leu Thr Pro Leu
                85                  90                  95
Phe Thr Asn Ser Ser Pro Pro Glu Gln Ser Pro Gln Leu Ser Asp Ile
            100                 105                 110
```

```
Val Pro Ser Ala Leu Asp Ile His Thr Ser Pro Met Arg Arg Pro Leu
        115                 120                 125
Gly Met Ala Ser Gln Asn Thr Leu Arg Pro Gly Asn Leu Ser Phe Ala
    130                 135                 140
Ala Leu Leu Glu Glu Asp Asn Asp Lys Ile Glu Glu Ile Ala Arg Gln
145                 150                 155                 160
Ser Asp Lys Pro Ile Asp Pro Trp Leu Val Gly Val Ser Asp Gly Gly
                165                 170                 175
Ala Pro Ser Glu Thr Ser Asn Thr Pro Ala Met Leu Thr Lys Glu Pro
            180                 185                 190
Asn Phe Asp Ile Ala Ser Pro Glu Met Leu Ala Leu Gln Phe Asp Arg
        195                 200                 205
Phe Thr Cys Gly Ile Leu Ser Val Lys Asp Gly Leu Asn Glu Asn Pro
    210                 215                 220
Trp Arg Thr Leu Ile Trp Pro Leu Ala Gly Glu Thr Pro Ala Leu Tyr
225                 230                 235                 240
His Ala Ile Phe Ser Met Thr Ala Phe His Ser Ser Lys Asp Asn Pro
                245                 250                 255
Gly Leu Arg Met His Gly Val Asp His Met Arg Arg Ser Ile Thr Tyr
            260                 265                 270
Met Val Gln Asp Ile Gln Asn Met Arg Thr Asp Ala Ala Leu Ala Thr
        275                 280                 285
Ser Leu Ala Leu Ala Phe Ala Asp Thr Trp Asp Gln Asn Thr Arg Asn
    290                 295                 300
Cys Ile Gln His Val Arg Gly Ala Lys Ala Leu Val Leu Gln Val Leu
305                 310                 315                 320
Lys Ser Lys Ala Arg Asp Ala Asn Asp Ile Glu Arg Ile Arg Phe Leu
                325                 330                 335
Tyr Asn Thr Trp Leu Tyr Met Asp Ala Ile Ala Arg Leu Thr Ser Arg
            340                 345                 350
Asp Asp Asp Gly Asp Gln Asp Met Asn Phe Ser Ile Phe Gln Leu Pro
        355                 360                 365
Arg Asp Ala Val His Glu Ile Asp Pro Leu Met Gly Cys Ala Thr Thr
    370                 375                 380
Leu Phe Pro Leu Ile Asn Gln Val Ala
385                 390
```

<210> 27808
<211> 82
<212> PRT
<213> A.fumigatus

<400> 27808

```
Ile Ile Lys Met Lys Tyr Ser Gly Thr Trp His Gly Leu Pro Ala Ser
1               5                   10                  15
Lys Leu Tyr Gly Glu Val Lys Asp Val Gly Leu Leu Thr Leu Pro Ile
            20                  25                  30
Gly Ile Val Val Thr Glu Ala Leu Ala Pro Gly Ser His Thr Ile Met
        35                  40                  45
Pro Gly Ile Val Cys Ala Ile Pro Cys Asp His Lys Val Cys Val Lys
    50                  55                  60
Leu Tyr Gly Ser Leu Cys Thr Pro Tyr Ser Lys Val Ala Arg His Leu
65                  70                  75                  80
Pro Thr
```

<210> 27809
<211> 116
<212> PRT
<213> A.fumigatus

<400> 27809
His Ser Ser His Asp Lys Ala His Arg Thr Leu Ile Thr Arg Lys Leu
1 5 10 15
Lys Gly Leu Glu Asp Ile Ile Ser Phe Thr Ser Val His Trp His Leu
20 25 30
Gly Glu Asn Gly Met Val Ser Glu Leu Arg Ala Leu Glu Asn Glu Ala
35 40 45
Asn Val Phe Cys Trp Lys Gly Trp Arg Phe Ala Thr Ala Asp Glu Glu
50 55 60
Val Ala Gly Glu Asn Val Thr Pro Asp Pro Leu His Pro Asp Phe Thr
65 70 75 80
His Leu Arg Ala Ile Tyr Phe Ser Asn Asp Pro Asp Tyr Thr Gly Arg
85 90 95
Phe Thr Val Pro Val Leu Phe Asp Lys Lys Thr Gln Arg Ile Val Ser
100 105 110
Asn Glu Val Cys
115

<210> 27810
<211> 195
<212> PRT
<213> A.fumigatus

<400> 27810
Thr Phe Lys Gln Ser Ser Glu Ile Ile Arg Met Phe Tyr Tyr Glu Phe
1 5 10 15
Asp Asp Leu Leu Pro Glu Lys Tyr Arg Asn Val Asp Leu Tyr Pro Pro
20 25 30
Ala Leu Arg Ser Glu Ile Asp Ala Thr Asn Asp Trp Thr Tyr Asn Asp
35 40 45
Val Asn Asn Gly Val Tyr Lys Ser Gly Phe Ala Thr Thr Gln Glu Ala
50 55 60
Tyr Glu Lys Ala Val Thr Thr Leu Phe Ala Ser Leu Asp Arg Ile Glu
65 70 75 80
Ala His Leu Ser Lys Asp Ala Asn Ser Pro Tyr Phe Phe Gly Ser Ser
85 90 95
Ile Thr Glu Val Asp Ile Arg Leu Phe Thr Thr Ile Ile Arg Phe Asp
100 105 110
Pro Val Tyr Val Gln His Phe Lys Cys Asn Ile Arg Asp Ile Arg Ser
115 120 125
Gly Tyr Pro Ala Ile His Arg Trp Val Arg Arg Leu Tyr Trp Asp Val
130 135 140
Pro Ala Phe Arg Glu Thr Thr Asn Phe Glu His Ile Lys Lys His Tyr
145 150 155 160
Thr Lys Ser His Lys Gln Ile Asn Gln Phe Ala Ile Thr Pro Val Gly
165 170 175
Pro Val Pro Asp Ile Leu Pro Lys Asp Glu Gln Val Arg Ala Val Ala
180 185 190
Ala Gln Gln
195

<210> 27811
<211> 88
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (2),(3),(4),(5),(7),(12)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27811
Leu Xaa Xaa Xaa Xaa Leu Xaa Ser Tyr Thr Thr Xaa Ala Gly Lys Ile
1 5 10 15
Thr Asp Trp Val Asp Pro Lys Asp Lys Ser Gly Glu Phe Lys Arg Gln
20 25 30
Gln Ser Val Phe Arg Asn Phe Ile Ser Arg Glu Pro Gly Ala Gln Phe
35 40 45
Pro Pro Glu Lys Asp Arg Tyr His Leu Tyr Val Ser Tyr Ala Cys Pro
50 55 60
Trp Gly Ala Arg Ser Leu Glu Asp Ser Phe Asp Cys Ser Asn Ser Arg
65 70 75 80
His Ile Arg Leu Thr Leu Phe Ser
85

<210> 27812
<211> 249
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (9)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27812
Thr Ile Leu Tyr Asn Gln Phe Phe Xaa Ser Ser Asp Arg His Thr Lys
1 5 10 15
Asp Pro Ser Val Gly Cys Arg Leu Leu Thr Pro Gln Thr Thr Ser Arg
20 25 30
Arg Gln Ala Arg Arg Lys Met Pro Leu Arg Asn Ile Leu His Lys Lys
35 40 45
Asp Lys Ile Asn Asp Ser Gly Ser Gln Tyr Pro Pro Asp Gly Pro Ser
50 55 60
Asn Ala Val Pro Glu Ile Lys Phe Ile Arg Ser Asp Thr Ile Ser His
65 70 75 80
Glu Val Ile Asp Pro Ser Ser Phe Gly Gly Asp Val Ser Glu His Lys
85 90 95
Gly Asp His Gly Gln Ser Asp Leu Leu Glu Pro Ser Arg Pro Ser Ser
100 105 110
Ser Thr His Arg Arg Ser Leu Asn Ile Phe Ser Arg Ser Arg Ser Pro
115 120 125
Ser Glu Ser Ser Glu Pro Ala Ser Pro Ser Arg Pro Arg Gly Glu His
130 135 140
Arg Leu Ser Gln Leu Leu His Arg Asp Arg Gly Ser Arg Ser Ala Ser
145 150 155 160
Ser Ser Ser Val Asn Ile Pro Ser Asp Leu Pro Gln Ile Ser Asp Asp

```
                165                 170                 175
Lys Val Asp Glu Gln Glu Arg Glu Ala Gln Trp Glu Lys Arg Ala Thr
            180                 185                 190
Ile Leu Ala Gln Gln Ser Pro Leu Phe Gly Ser Pro Ala Ala Ser Leu
        195                 200                 205
Arg Ser Ser Pro Asn Arg Leu Glu Thr Asn Ser Ala Gly Gly Ala Arg
    210                 215                 220
Ser Arg Ser Ser Ser His Ser Gln Ile Asn Asp Pro Glu Gly Asp Val
225                 230                 235                 240
Ser Leu Cys Ala Trp Leu Lys Ala Ile
                245
```

<210> 27813
<211> 141
<212> PRT
<213> A.fumigatus

<400> 27813

```
Tyr Gly Gly Phe Thr Lys Val Tyr Leu Phe Ser Leu Phe Leu Lys Cys
1               5                   10                  15
Leu Thr Leu Asn Arg Ser Pro Arg His Gly Trp Gly Cys Pro Gln Asp
            20                  25                  30
Pro Asp Lys Ala Val Thr Tyr Leu Ser Tyr Ala Ala Ala Asn Ser Ala
        35                  40                  45
Ser Ile Glu Ser Gln Ala Leu Gln Ala Gly Met Lys Lys Gly Gly Ala
    50                  55                  60
Ala Lys Gly Glu Leu Val Leu Ala Ile Phe Glu Leu Gly Asn Cys Tyr
65                  70                  75                  80
Arg Asn Gly Trp Gly Val Lys Lys Asp Pro Val Ala Ala Arg Gln Tyr
                85                  90                  95
Phe Glu Thr Ala Ala Asn Leu Gly Asp Thr Asp Ala Met Asn Glu Val
            100                 105                 110
Ala Trp Cys Tyr Leu Glu Gly Phe Gly Gly Lys Lys Asp Lys Val Arg
        115                 120                 125
Tyr Tyr Leu Thr Pro Asn Cys Pro Ser Gly Arg Ala Arg
    130                 135                 140
```

<210> 27814
<211> 195
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (167),(188)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27814

```
Thr Leu Val Trp Glu Glu His Gly Thr Ser Ser Ser Thr Ser Ser Leu
1               5                   10                  15
Arg Val Arg Arg Lys Pro Tyr Leu Leu Met Arg Cys Ser Ser Ala Ser
            20                  25                  30
Ser Ser Ser Ser Ser Ser Ser Ser Glu Glu Ser Ser Ser Met Ser Lys Pro
        35                  40                  45
Pro Ser Ser Ser Ser Ser Ser Ser Ser Phe Ser Ser Ser Ser Ser Ser Ser
    50                  55                  60
```

```
Pro Ser Ser Ser Val Ala Thr Ser Glu Pro Ser Ser Leu Thr Thr Ala
65                  70                  75                  80
Ala Ser Pro Cys Ser Met Glu Ser Pro Ser Ser Thr Pro Asp Leu Pro
                85                  90                  95
Leu Val Gly Leu Val Arg Arg Ser Leu Ala Leu Glu Val Arg Glu Ser
            100                 105                 110
Pro Phe Lys Glu Val Pro Lys Val Thr Arg Cys Thr Ser Trp Ile Gly
        115                 120                 125
Ser Ser Ser Thr Leu Pro Ser Ile Ser Ser Cys Asn Leu Ser Cys Gly
    130                 135                 140
Asn Ala Leu Ser Glu Leu Ser Ser Ile Ser Val Arg Ser Pro Pro Lys
145                 150                 155                 160
Ala Arg Phe Thr Lys Ala Xaa Leu Thr Pro Val Thr Val Ser Ile Lys
                165                 170                 175
Met Pro Arg Pro Thr Leu Lys Asn Gln Asn Leu Xaa Ala Glu Ser Pro
            180                 185                 190
Val Lys Arg
        195
```

<210> 27815
<211> 309
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (8),(28)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27815

```
Leu Leu Thr Gly Leu Ser Ala Xaa Arg Phe Trp Phe Phe Arg Val Gly
1               5                   10                  15
Arg Gly Ile Leu Met Glu Thr Val Thr Gly Val Xaa Tyr Ala Phe Val
            20                  25                  30
Asn Arg Ala Phe Gly Gly Leu Arg Thr Glu Ile Glu Asp Asn Ser Asp
        35                  40                  45
Ser Ala Phe Pro Gln Glu Arg Leu Gln Glu Asp Ile Asp Gly Ser Val
    50                  55                  60
Glu Glu Glu Pro Ile Gln Asp Val His Leu Val Thr Leu Gly Thr Ser
65                  70                  75                  80
Leu Asn Gly Asp Ser Arg Thr Ser Asn Ala Arg Glu Arg Arg Thr Ser
                85                  90                  95
Pro Thr Asn Gly Arg Ser Gly Val Glu Asp Gly Asp Ser Ile Glu His
            100                 105                 110
Gly Asp Ala Ala Val Val Ser Glu Asp Gly Ser Asp Val Ala Thr Glu
        115                 120                 125
Asp Glu Gly Glu Asp Glu Glu Glu Asp Glu Asn Glu Glu Glu Asp Glu
    130                 135                 140
Asp Glu Gly Gly Phe Asp Met Glu Leu Asp Ser Ser Asp Glu Glu Glu
145                 150                 155                 160
Asp Glu Asp Glu Ala Glu Glu His Leu Ile Asn Arg Tyr Gly Phe Arg
                165                 170                 175
Arg Thr Arg Arg Glu Asp Val Glu Leu Asp Val Pro Cys Ser Ser His
            180                 185                 190
Thr Lys Val Tyr Arg Gly His Cys Asn Ile Lys Thr Val Lys Asp Val
        195                 200                 205
```

```
Asn Tyr Phe Gly Leu Asn Asp Glu Tyr Val Val Ser Gly Ser Asp Ser
    210                 215                 220
Gly His Ile Phe Ile Trp Asp Arg Lys Thr Thr Asn Leu Val Asn Ile
225                 230                 235                 240
Leu Glu Ala Asp Ser Glu Val Val Asn Val Val Gln Gly Met Ser Ile
                245                 250                 255
Leu Thr Thr Tyr Thr Thr Leu Ala His Thr Cys Phe Leu Arg Thr Pro
            260                 265                 270
Val Arg Thr Asp His Arg Arg Phe Trp Asp Arg Gln His His Gln Asp
        275                 280                 285
Leu Leu Thr Arg Ser Pro Cys Thr Gly Gln Cys Thr Pro Trp Tyr Gln
    290                 295                 300
His Pro Arg Pro Arg
305
```

<210> 27816
<211> 115
<212> PRT
<213> A.fumigatus

```
<400> 27816
Gly His Pro Tyr Glu Pro Thr Ile Ala Ala Ser Gly Ile Asp Asn Thr
1               5                   10                  15
Ile Lys Ile Phe Ser Pro Asp Arg His Ala Gln Asp Asn Ala Arg Arg
            20                  25                  30
Gly Ile Asn Ile Leu Asp Pro Asp Asn Pro Ala Asn Thr Leu Gly Ser
        35                  40                  45
Asn Val Ala Ser Ile Gly Gly Leu Lys Ser Cys Lys Arg Ile His Asp
    50                  55                  60
Ser Tyr Arg Ile Met Ser Gln Asn Asp Val Asp Arg Gln Gly Gly Met
65                  70                  75                  80
Ser Glu Ala Tyr Ile Thr Val Ser His Gly Leu Leu Arg Ser Trp Asp
                85                  90                  95
Phe Ile Leu Pro Ser Tyr Ser Asp Ser Gly Ile Phe Arg Gly Val Cys
            100                 105                 110
Trp Leu Gly
        115
```

<210> 27817
<211> 73
<212> PRT
<213> A.fumigatus

```
<400> 27817
Pro Thr Ser Leu Ser Ser Phe Asn Ser Thr Tyr Tyr Gly Lys Asp Tyr
1               5                   10                  15
Arg Ala Gly Ala Ala Leu Leu Arg Ala Arg Arg Pro Tyr Leu Phe Lys
            20                  25                  30
Asn Ala Leu Thr Gly Leu Gly Leu Val Ala Phe Thr Ile Ser Val Cys
        35                  40                  45
Met Cys Ser Thr Gly Thr Pro Pro Ser Ser Cys Phe Arg Asp Glu Ser
    50                  55                  60
Thr Ala Arg Ser Met Val Arg Ser Tyr
65                  70
```

<210> 27818

<211> 92
<212> PRT
<213> A.fumigatus

<400> 27818
Arg Pro Arg Tyr Lys Met Ser Tyr Tyr Asn Phe Asn Ser Leu Phe Pro
1 5 10 15
Ser Gly Gln Ala Val Asp Arg Val Arg Gly Ser Lys Leu Pro Thr Glu
20 25 30
Gly Pro Gln Leu Ser Thr Leu Glu Glu Ala Phe Thr Ser Glu Asn Trp
35 40 45
Ile Ile Arg Ile Tyr Lys Val Lys Asp Leu Asp Asn Leu Gly Arg Asp
50 55 60
His Asn Gln Ala Val Ala Phe Asp Lys Gly Leu Lys Lys Lys Arg Ser
65 70 75 80
Thr Lys Arg Lys Gly Pro Arg Val Leu Arg Thr Glu
85 90

<210> 27819
<211> 67
<212> PRT
<213> A.fumigatus

<400> 27819
Thr Ser Ser Gly Arg Gly Ser Ser Gln His Pro Tyr Lys Glu Leu Ser
1 5 10 15
Gly Arg Pro Asn Ser Ala Ser Ala Asp Gly His Pro Arg Lys Ala Pro
20 25 30
Ile Leu Val Ile Ser Val Ile Tyr Tyr Tyr Phe Tyr Ser Ile Ser Val
35 40 45
Ile Thr Ile Val Phe Val Phe Phe Lys Thr Ser Tyr Pro Ile Gln Leu
50 55 60
Asn Ala Lys
65

<210> 27820
<211> 391
<212> PRT
<213> A.fumigatus

<400> 27820
His Tyr Leu Pro Val Val Tyr Pro Cys Glu Tyr Asp Thr Gly Arg Pro
1 5 10 15
Lys Pro Ala Pro Ser Gly Arg Tyr Val Leu Arg Phe Tyr Phe Asn Gly
20 25 30
Cys Phe Arg Lys Val Val Ile Asp Asp Arg Leu Pro Ser Ser Lys Thr
35 40 45
Ser Arg Ser Leu Tyr Val Val Asp Arg Asn Asn Pro Asn Phe Leu Trp
50 55 60
Pro Ala Leu Val Glu Lys Ala Tyr Leu Lys Leu Arg Gly Gly Tyr Asp
65 70 75 80
Phe Pro Gly Ser Asn Ser Gly Thr Asp Leu Trp Val Leu Thr Gly Trp
85 90 95
Ile Pro Glu Gln Val Phe Leu His His Glu Asp Val Thr Ser Asp Gln
100 105 110
Ile Trp Arg Arg Leu Phe Arg Ser Phe Gln Tyr Gly Asp Val Leu Leu

```
        115                 120                 125
Thr Ile Gly Thr Gly Lys Leu Thr Glu Lys Glu Glu Glu Glu Leu Gly
    130                 135                 140
Leu Val Ser Glu His Asp Tyr Ala Val Leu Asp Met Lys Glu Phe Asn
145                 150                 155                 160
Gly Arg Arg Gln Met Leu Val Lys Asn Pro Trp Ala Gly Val His Thr
                165                 170                 175
Ala Ser Gly Arg Thr Glu Asn Ser Leu Glu Ser His Ala Pro His Asp
            180                 185                 190
Arg Ser Ser Leu Ser Pro Gly Thr Phe Trp Met Asp Cys Glu Met Val
        195                 200                 205
Phe Gln Asn Phe Glu Asn Leu Tyr Leu Asn Trp Asn Pro Ser Leu Phe
    210                 215                 220
Lys Tyr Arg Gln Asp Ile His Phe Thr Trp Asp Leu Thr Ala Gly Lys
225                 230                 235                 240
Gly Val Pro Gly Cys Phe Val Lys Asn Pro Gln Phe Ala Val Thr Ser
                245                 250                 255
Glu Thr Gly Gly Thr Val Trp Leu Leu Leu Gly Lys His Phe Lys Thr
            260                 265                 270
Arg Asp Arg Leu Asp Tyr Ser Ser Ser Glu Asp Ser Gln Ala Gly Phe
        275                 280                 285
Ile Ser Ile Tyr Val Phe Asn Ala Asp Gly Lys Arg Val Cys Leu Ser
    290                 295                 300
Asp Gly Ala Leu His Arg Gly Pro Tyr Val Asp Ser Pro Asn Thr Leu
305                 310                 315                 320
Met Arg Leu Glu Met Leu Pro Arg Thr Thr Tyr Thr Ala Val Val Ser
                325                 330                 335
Glu Glu Ser Leu Pro Ala Leu Ser Gln Asn Phe Thr Leu Ser Ala Leu
            340                 345                 350
Ser Ile Ser Pro Val His Ile Ala Pro Ser Gln Asn Gln Tyr Thr Cys
        355                 360                 365
Gly Asn Lys Val Gln Gly Phe Trp Met Pro Ser Thr Ala Gly Gly Asn
    370                 375                 380
Ala Glu Ser Ala Arg Tyr Pro
385                 390
```

<210> 27821
<211> 102
<212> PRT
<213> A.fumigatus

<400> 27821

```
Asn Lys Ile Glu Glu Arg Ile Ala Pro Lys Ala Gln Ala Trp Asp Asp
1               5                   10                  15
Leu Cys His Thr Arg Arg Asp Lys Leu Gln Gly Asp Ser Ala Thr Phe
            20                  25                  30
Met Ser Glu Phe Asp Thr Ile His Gln Gln Ser Glu Trp Phe Thr Leu
        35                  40                  45
Ser Arg Pro Arg Ser Asp Arg Glu Val Val Ala Gln Arg Leu Ala Thr
    50                  55                  60
Thr Glu Gln Ser Val Lys Thr Ser Cys Thr Arg Ser Val Phe Ser Gly
65                  70                  75                  80
Thr Asp Ile Ile Asn Val Ser Pro Pro Ala Cys Ala Asn Ser Ser Glu
                85                  90                  95
Gly Arg Phe Gln Pro Ser
            100
```

<210> 27822
<211> 88
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (1),(40)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27822
Xaa Asp Ile Met Val Leu Phe Val Asp Tyr Asp His Asp Ala Phe Pro
1 5 10 15
Arg Ala His Glu Gly Thr Tyr Gln Ala Tyr Leu Gln Pro Asp Lys Pro
20 25 30
Ala Leu Ser Lys Leu Lys Ala Xaa Asp Ser Asp Leu Pro Thr His His
35 40 45
Glu Asn Asp His Ser Met His Asp His Ala Lys Asn Asp Gly Ser His
50 55 60
Lys Ile Val Asn Arg Asn Gly Phe Ser Ala Ala Leu Asn Cys Tyr Pro
65 70 75 80
Tyr Ala Leu Leu Ile Asp Ser Phe
85

<210> 27823
<211> 314
<212> PRT
<213> A.fumigatus

<400> 27823
Pro Arg Gly Met Val Asp Ala Gln Arg Lys Gln Ser His Ile Gln Arg
1 5 10 15
Val Glu Gly Ile Pro Phe Ala Arg Leu Ala Lys Ala Asp Phe Gly Gln
20 25 30
Phe Ile Gln Thr Ser Leu Ser Ser Thr Gln Ser Asp Gln Glu Arg Leu
35 40 45
Ile Trp Gln Leu Ala Asn Ile Leu Phe Asn Asp Glu Ile Glu Asp Asp
50 55 60
Ile Ser Ala Gly Val Pro Pro Gln Leu Arg Ser Lys Cys Leu Gln Arg
65 70 75 80
Ile Lys Lys Asp Arg Leu Ser Arg Leu Trp Glu Ser Ile Val Arg Glu
85 90 95
Arg His Ala His Asp Leu Asp Lys Ile Glu Ser Ser Glu Glu Arg Ala
100 105 110
Val His Leu Leu Cys Ser His Arg Val Glu Glu Ala Cys Lys Val Leu
115 120 125
Ile Ala Gly Gln Asn Leu His Leu Ala Thr Leu Val Ser Gln Ile Gly
130 135 140
Arg Asp Ala Thr Thr Arg Ser Asp Met Ala Arg Gln Ile Glu Met Trp
145 150 155 160
Arg Gln His Asn Val Tyr Ser Glu Met Thr Glu Pro Ile Arg Ala Leu
165 170 175
Tyr Glu Leu Leu Ala Gly Asn Ser Leu Arg Ser Glu Gly Lys Ser Gly
180 185 190
Gly Ala Leu Glu Asp Arg Ala Ser Thr Phe Ser Phe Thr Glu Arg Phe

```
        195                 200                 205
Glu Leu Asp Trp Phe Gln Ala Phe Gly Leu Arg Leu Trp Tyr Gly Ile
    210                 215                 220
Ala Asp Asp Glu Pro Ile Glu Lys Ala Val Leu Lys Phe Ala Lys Glu
225                 230                 235                 240
Leu Ser Ser Gly Asp Glu Ser Ala Phe Pro Tyr Pro Ala Ser His Leu
                245                 250                 255
Glu Gly Asp Val Met Ser Arg Ala Ala Ser Asp Thr Leu Gly Arg Glu
            260                 265                 270
Ser Pro Leu Trp Val Leu Leu Lys Val Tyr Ser Gly Thr Thr Ala Ala
        275                 280                 285
Ala Lys Ser Ser Asp Leu Pro Ala Ile Glu Leu Pro Ala Ala Leu Leu
    290                 295                 300
Pro Glu Ser Val Thr Gly Asp Lys Leu Ser
305                 310

<210> 27824
<211> 224
<212> PRT
<213> A.fumigatus

<400> 27824
Arg Asn Thr Val Gly Ser Glu Pro Thr Ser Thr Tyr Thr Thr Asp Asp
1               5                   10                  15
Ser Phe Val Gly Ser Val Ala Gly Val Glu Asp Asp Thr Phe Asp Phe
            20                  25                  30
Lys Lys Arg Lys Met Val Pro Gly Ala Phe Gly Asn Gln Val Met Glu
        35                  40                  45
Thr Ile Gly Asp Lys Asp Glu Asp Glu Ser Phe Leu Gly Asp Gly Ser
    50                  55                  60
Thr Gly Ser Thr Thr Glu Gln Asp Gly Asp Asp Val Thr Glu Ser Gln
65                  70                  75                  80
Gln Ser Gly Asp Ser Asp Val Glu Phe Asp Glu Gly Glu Glu Met Asp
                85                  90                  95
Met Ala Gly Thr Phe Pro Asn Leu Asp His Thr Val Glu His Asp Asp
            100                 105                 110
Ala Asn Ser Leu Asp Ser Tyr Leu Asp Asn Thr His Pro Ser Leu Arg
        115                 120                 125
Pro Trp Glu Thr Pro Ser Lys Ala Arg Leu Asn Leu Ser Gly Asp Trp
    130                 135                 140
Ala Glu Gln Leu Gln Arg Thr Ile Ser Pro Arg Lys Gln Asn Arg Asp
145                 150                 155                 160
Ala Leu Arg Glu Ile Gln Ala Asn Ala Phe Thr Asp Arg Pro Leu His
                165                 170                 175
Asp Asp Thr Pro Lys Lys Ser Val Thr Asp Tyr Arg Gln Lys Gly Phe
            180                 185                 190
Ala Thr Ser Ile Asp Leu Met Asn Ser Leu Phe His Gln Pro Arg Lys
        195                 200                 205
Pro Gln Gly Gln Ser Pro Leu Lys Ala Gln Pro Lys Cys Phe Glu Val
    210                 215                 220

<210> 27825
<211> 61
<212> PRT
<213> A.fumigatus
```

<400> 27825
Ile Tyr Ala Leu Asp Asn Arg Leu Leu Phe Ser Pro Ala Gly Ile Thr
1 5 10 15
Tyr Arg His Asn Phe Tyr Lys Asp Tyr Lys Pro Leu Val Tyr Cys Ile
20 25 30
Val Glu Leu Pro Ser Ile Pro Gly Arg Asp Ile Tyr Ile Ser Thr Ile
35 40 45
Val Leu Val Asp Ile Ile Thr Leu Tyr Leu Phe Asn Met
50 55 60

<210> 27826
<211> 109
<212> PRT
<213> A.fumigatus

<400> 27826
Tyr Gln Thr Thr Asp Ala Asn Ser Ser Ala Lys Val Phe Lys Glu Lys
1 5 10 15
Val Gln Glu Gly Ser Gly Pro Val Ile Val Asp Cys Ser Ala Thr Trp
20 25 30
Cys Gly Pro Cys Lys Gly Ile Ser Pro Val Phe Gln Arg Leu Ser Thr
35 40 45
Ser Glu Glu Phe Lys Asn Ala Lys Phe Tyr Glu Ile Asp Val Asp Glu
50 55 60
Leu Ser Glu Val Ala Ala Glu Leu Gly Val Arg Ala Met Pro Thr Phe
65 70 75 80
Met Phe Phe Lys Asp Gly Gln Lys Val Asn Glu Val Val Gly Ala Asn
85 90 95
Pro Pro Ala Leu Glu Ala Ala Ile Lys Ala His Val Ala
100 105

<210> 27827
<211> 139
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (133)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27827
Asp Tyr Glu Leu Ala Ala Ala Gly Ala Ala Asp Thr Leu Ser Trp Ala
1 5 10 15
Ala Gly Ala Gly Ala Ala Ala Glu Gly Ala Ser Thr Ala Gly Cys Val
20 25 30
Glu Pro Ser Phe Ser Lys Leu Arg Met Gly Tyr Asn Pro Gln Arg Ser
35 40 45
Phe Ile Ser Arg Ser Ser Ser Leu Pro Leu Leu Ser Val Val Tyr Phe
50 55 60
Phe Ser Pro Val Lys Thr Ala Leu Ala Pro Ala Met Asn His Ala Thr
65 70 75 80
Cys Cys Ser Ser Asp Ser Glu Met Arg Pro Ala Ala Met Arg Thr Met
85 90 95
Val Ala Gly Met Lys Ile Pro Ala Val Ala Met Val Arg Thr His Met
100 105 110

```
Phe Lys Gly Asn Ile Leu Arg Val Ala Asn Gly Val Ala Leu Met Gly
        115                 120                 125
Thr Lys Ala Leu Xaa Gly Asn Ser Ile Arg Val
    130                 135

<210> 27828
<211> 62
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (7)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27828
Phe Thr Arg Ile Glu Phe Xaa Val Lys Ala Phe Val Pro Ile Arg Ala
1               5                   10                  15
Thr Pro Phe Ala Thr Arg Lys Ile Phe Pro Leu Asn Ile Cys Val Arg
            20                  25                  30
Thr Ile Ala Thr Ala Gly Ile Phe Met Pro Ala Thr Ile Val Arg Ile
        35                  40                  45
Ala Ala Gly Arg Ile Ser Leu Ser Asp Glu Gln Gln Val Ala
    50                  55                  60

<210> 27829
<211> 60
<212> PRT
<213> A.fumigatus

<400> 27829
Thr Thr Asp Ser Asn Gly Arg Asp Glu Asp Arg Glu Met Lys Glu Arg
1               5                   10                  15
Trp Gly Leu Tyr Pro Met Arg Ser Phe Glu Lys Glu Gly Ser Thr Gln
            20                  25                  30
Pro Ala Val Glu Ala Pro Ser Ala Ala Ala Pro Ala Pro Ala Ala His
        35                  40                  45
Asp Ser Val Ser Ala Ala Pro Ala Ala Ala Ser Ser
    50                  55                  60

<210> 27830
<211> 132
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (97)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27830
Val Pro Met Phe Leu Gly Thr Glu Thr Gly Ile Leu Lys Met Val Tyr
1               5                   10                  15
Ser Gln Leu Cys His Leu His Leu Gly Asp Phe Gly Leu Gly Ser Ser
            20                  25                  30
Asn Leu Trp Ser Ser Ser Gly Cys Arg Arg Thr Ser Tyr Cys Gly Leu
```

```
        35                  40                  45
Val Leu Val Ser Gly Leu Met His Gly His Val His Arg Gln Phe Gly
    50                  55                  60
Ser Gly Ala Gly Leu Cys Val Ser Tyr Arg Arg Arg Asn Val Leu Arg
65                  70                  75                  80
Tyr Lys Ala Arg Cys Ser Asn Asp Gln Val Pro Ile Phe Ser Trp Val
                85                  90                  95
Xaa Gly Trp Cys Asn Leu Leu Gly Gln Thr Ala Gly Val Ser Ser Val
            100                 105                 110
Ala Tyr Thr Val Ser Gln Met Leu Leu Ala Cys Ala Ser Met Asn Ser
        115                 120                 125
Glu Tyr Phe Tyr
    130
```

<210> 27831
<211> 120
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (92)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 27831
Glu Leu Lys Arg Glu Phe Ser Lys Trp Ser Thr Val Ser Tyr Ala Ile
1               5                   10                  15
Ser Ile Leu Gly Ile Leu Gly Ser Val Pro Ala Thr Phe Gly Ala Pro
            20                  25                  30
Leu Ala Ala Gly Gly Pro Ala Thr Ala Val Trp Cys Trp Phe Leu Gly
        35                  40                  45
Ser Cys Met Ala Met Cys Ile Gly Ser Ser Val Ala Glu Leu Val Ser
    50                  55                  60
Ala Tyr Pro Thr Ala Gly Gly Met Tyr Phe Val Thr Lys His Val Val
65                  70                  75                  80
Pro Met Thr Arg Cys Pro Ser Phe Pro Gly Cys Xaa Ala Gly Ala Ile
                85                  90                  95
Ser Trp Gly Arg Leu Arg Ala Phe Pro Ala Trp Leu Thr Gln Ser Ala
            100                 105                 110
Arg Cys Cys Leu Arg Ala Pro Val
        115                 120
```

<210> 27832
<211> 387
<212> PRT
<213> A.fumigatus

```
<400> 27832
Ser Ser Met Ala Asp Pro Ser Thr Tyr Tyr Ser Val Ala Gln Gly Pro
1               5                   10                  15
Ala Pro Pro Glu Asp Pro Ser Asp Pro Asn Arg Met Ala His Gln Val
            20                  25                  30
Thr Pro Pro Ser His Pro Pro Ala Gly Tyr Gly Pro Gly Ala Val Pro
        35                  40                  45
Pro Gln Pro Gly Ala Pro Tyr Gly Ala Ala Ala Pro Asn Gln Trp Pro
    50                  55                  60
```

```
Pro Tyr Gly Ser Pro Phe Pro Leu Gln Gln Gln Pro Gln Gln Pro Pro
65                  70                  75                  80
Gln Leu Ala Ser Pro Pro Pro Phe Gly Tyr Asn Ala Gly Pro Gln Ala
                85                  90                  95
Gly Met Val Ala Pro Thr Glu Pro Gly Leu Gly Gly Leu Thr His Gln
            100                 105                 110
Met Gly Gly Leu Gly Ile Ser Gly Glu Gly Gly Ala Arg Thr His Lys
        115                 120                 125
Lys Lys His Arg His Ala His His Asp Ile Gly Gly Ala Ser Ala Thr
    130                 135                 140
Ala Pro Ala Gln Gln Pro Phe Ala Gly Met Ala Gln Gly Gly Val Gln
145                 150                 155                 160
Pro Thr Ser Gln Phe Leu Asn Thr Gly Leu Thr Asp Ser Ser Arg Pro
                165                 170                 175
Ile Ser Pro Gly Ala Gly Val Ala Gln Pro Ala Gly Val Gly Phe Gly
            180                 185                 190
Ala Gly Ala Ser Ser Gly Ala Gly Ser Val Ala Thr Gln Gly Lys Ile
        195                 200                 205
Asp Pro Glu Gln Ile Pro Ser Ile Pro Arg Ser Arg Asp Leu Pro Ala
    210                 215                 220
Gln Tyr Tyr Phe Asn His Val Tyr Pro Thr Met Glu Arg His Leu Pro
225                 230                 235                 240
Pro Pro Ala Ala Ile Pro Phe Val Ala His Asp Gln Gly Asn Ser Ser
                245                 250                 255
Pro Lys Tyr Ala Arg Leu Thr Leu Asn Asn Ile Pro Ser Thr Ala Asp
            260                 265                 270
Phe Leu Ser Ser Thr Gly Leu Pro Leu Gly Met Ile Leu Gln Pro Leu
        275                 280                 285
Ala Arg Leu Asp Pro Gly Glu Gln Pro Ile Pro Val Leu Asp Phe Gly
    290                 295                 300
Asp Ala Gly Pro Pro Arg Cys Arg Arg Cys Arg Ala Tyr Ile Asn Pro
305                 310                 315                 320
Phe Met Thr Phe Arg Ser Gly Gly Asn Lys Phe Val Cys Asn Met Cys
                325                 330                 335
Thr Phe Pro Asn Asp Val Pro Pro Glu Tyr Phe Ala Pro Leu Asp Pro
            340                 345                 350
Ser Gly Ala Arg Val Asp Arg Met Gln Arg Pro Glu Leu Met Met Gly
        355                 360                 365
Thr Val Glu Phe Leu Val Pro Ser Ser Pro Arg Gly Trp Lys Glu Pro
    370                 375                 380
Arg His Val
385

<210> 27833
<211> 115
<212> PRT
<213> A.fumigatus

<400> 27833
Ser Val Ile Val Pro Ser Leu Leu Ser Val Pro Arg Tyr Pro Arg Tyr
1               5                   10                  15
Glu Ala Ala Trp Gln Ile His Gln Arg Ile Thr Leu Ser Pro Arg Asp
            20                  25                  30
Leu Arg Leu Leu Lys Thr Pro Pro Ile Pro Ile Gly Trp Pro Thr Lys
        35                  40                  45
Leu Pro Leu Arg Leu Ile Leu Leu Pro Ala Met Ala Leu Glu Arg Phe
```

```
    50                  55                  60
Leu Leu Asn Gln Glu Leu Pro Thr Gly Gln Gln Leu Arg Ile Asn Gly
65                  70                  75                  80
Pro Leu Thr Ala Arg His Phe Leu Tyr Ser Asn Asn Arg Ser Asn Pro
                85                  90                  95
Arg Asn Trp Pro Pro Leu Leu Arg Ser Ala Thr Met Gln Ala Arg Arg
            100                 105                 110
Pro Gly Trp
        115
```

<210> 27834
<211> 131
<212> PRT
<213> A.fumigatus

<400> 27834

```
Trp Val His Leu Pro Ala Ala Leu Val Ala Val Val Pro Lys Asp Lys
1               5                  10                  15
Leu Lys Ile Asn Gly Pro Ile Lys Ser Phe Ala Lys Asn Gly Ser Ser
            20                  25                  30
Gly Lys Ala Val His Arg Met Phe Cys Ser Glu Cys Gly Ser Pro Ile
        35                  40                  45
Ala His Asp Pro Asp Ala Ala Pro Glu Ile Ile Ala Ile Lys Ala Gly
    50                  55                  60
Thr Leu Asp Ile Glu Ile Lys Lys Asn Leu Lys Pro Val Arg Ala Leu
65                  70                  75                  80
Arg Arg Arg Ala Ile Gly Leu Asn Met Leu Thr Thr Tyr Val Pro Gly
                85                  90                  95
Arg Ile Arg Lys Ser Gly Pro Leu Ala Ser Phe Leu Ser Ala Arg Ser
            100                 105                 110
Ile Trp Pro Ser Leu Ser Ser Thr Cys Pro Ser Arg Trp Asp Glu Lys
        115                 120                 125
Thr Asn Leu
    130
```

<210> 27835
<211> 173
<212> PRT
<213> A.fumigatus

<400> 27835

```
Gln Ser Glu Pro Tyr Arg Arg Thr Thr Ser Pro Leu Pro Leu Met Leu
1               5                  10                  15
Val Gly Leu Ser Ala Cys Leu Ala Tyr Val Pro Glu Ser Ile Pro Ala
            20                  25                  30
Ser Thr Lys Pro Asp Leu Tyr Gln Ser Asn Ser Asn Val Leu Asp Arg
        35                  40                  45
Ala Ile Ile Arg Thr Val Ala Ala Tyr Ala Val Val Phe Gly Leu Val
    50                  55                  60
Asn Cys His Arg Arg Gly Ile Pro Phe Ala Gln Pro Ser Arg His Thr
65                  70                  75                  80
Ser Tyr Leu Glu Asn Leu Phe His Leu Ala Gly Leu Val Asp Gln Thr
                85                  90                  95
Thr Gly Arg Pro Asp Pro Thr Lys Leu Ser Cys Phe Gln Arg Phe Ala
            100                 105                 110
Met Leu Asn Ala Asp His Gly Met Ala Leu Ser Val Phe Ser Ala Leu
```

```
        115                 120                 125
Val Thr Ala Ser Ser Leu Thr Asp Pro Ile Ser Cys Leu Ile Thr Ala
    130                 135                 140
Thr Gly Ala Ala Phe Gly Pro Leu His Phe Gly Ala Thr Glu Ser Ala
145                 150                 155                 160
Asn Leu Val Phe Thr Thr Gly Leu Gln Gly Val His Leu
                165                 170
```

<210> 27836
<211> 191
<212> PRT
<213> A.fumigatus

<400> 27836

```
Ala Gly Met Ala Ala Gly Ala Pro Val Gln Gly His Ala Gly Gly Lys
1               5                   10                  15
Lys Lys Arg Ala Tyr Ala Gly Glu Ala Phe Glu Ile Gly Ser Gly Ala
            20                  25                  30
Asn Ala Ala Leu Gly Gly Gln Leu Pro Ala Gly Gly Ser Tyr Gly Ala
        35                  40                  45
Tyr Pro Pro Gln Pro Gln Ala Ala Gly Tyr Gln Gln Pro Val Tyr Gly
    50                  55                  60
Ala Asp Pro Ser Gln Met Asn Ala Ala Ala Pro Gly Tyr Thr Ala Pro
65                  70                  75                  80
Val Thr Pro Gly Ile Ala Gln Met Thr Gln Gln Phe Gly Ala Met Gly
                85                  90                  95
Val Thr Asp Pro His Leu Met Pro Pro Gln Pro Pro Gln Ala Ala Val
            100                 105                 110
Ala Pro Gln Ala Pro Arg Pro Val Pro Leu Asn Gln Leu Tyr Pro Thr
        115                 120                 125
Asp Leu Leu Thr Gln Pro Phe Asn Val Ala Glu Leu Asp Tyr Pro Pro
    130                 135                 140
Pro Pro Ile Val Leu Pro Pro Gly Val Cys His Ser His Gly Pro Val
145                 150                 155                 160
Gln Glu Val Lys Leu Leu Thr Ala Ser Phe Ser Arg Gln Ala Phe Thr
                165                 170                 175
His Pro Leu Gln Arg Ile Ala Leu Arg Asn Met Phe Gly Arg Pro
            180                 185                 190
```

<210> 27837
<211> 341
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (338),(340)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27837

```
Thr Ser Val Tyr Pro Ser Pro Thr Ala Asn Cys Pro Pro Lys Tyr Val
1               5                   10                  15
Arg Ser Thr Leu Asn Ala Val Pro Thr Thr His Ser Leu Leu Lys Lys
            20                  25                  30
Ser Lys Leu Pro Phe Ala Leu Val Ile Gln Pro Tyr Ala Ser Leu Arg
        35                  40                  45
```

```
Asp Ala Glu Glu Pro Ile Pro Val Ile Pro Asp Gln Val Ile Ser Arg
    50                  55                  60
Cys Arg Arg Cys Arg Ser Tyr Ile Asn Pro Phe Val Thr Phe Leu Asp
65                  70                  75                  80
His Gly His Arg Trp Arg Cys Asn Met Cys Asn Leu Thr Asn Asp Val
                85                  90                  95
Pro Gln Ala Phe Asp Trp Asp Ala Ala Leu Gln Lys Pro Ala Asp Arg
            100                 105                 110
Ser Leu Arg Pro Asp Leu Asn His Ala Val Val Glu Phe Val Ala Pro
        115                 120                 125
Gln Glu Tyr Met Val Arg Pro Pro Gln Pro Leu Val Tyr Leu Phe Leu
    130                 135                 140
Ile Asp Val Ser Tyr Ala Ser Val Thr Asn Gly Leu Leu Ala Thr Ser
145                 150                 155                 160
Ala Arg Cys Ile Lys Glu Ser Leu Asp Arg Ile Pro Asn Ala Asp Arg
                165                 170                 175
Arg Thr Arg Leu Gly Phe Ile Ala Val Asp Ser Ser Leu His Tyr Phe
            180                 185                 190
Ser Ile Pro Arg Asp Gly Ser Glu Asn Ser Asp Pro Arg Met Leu Val
        195                 200                 205
Ile Ser Asp Leu Asp Glu Pro Phe Leu Pro Ile Pro Gly Asp Leu Leu
    210                 215                 220
Val Thr Leu Ser Glu Cys Arg Glu Asn Ile Glu Thr Phe Leu Asp Lys
225                 230                 235                 240
Leu Gln Glu Met Phe Gln Asn Thr Gln Asn Asn Gly Cys Ala Met Gly
                245                 250                 255
Ser Ala Leu Arg Ala Gly Tyr Lys Leu Ile Ala Pro Val Gly Gly Lys
            260                 265                 270
Met Thr Val Leu Ser Ser Ser Leu Pro Asn Val Gly His Gly Ser Leu
        275                 280                 285
Thr Met Arg Glu Asp Lys Lys Val Leu Gly Thr Ser Lys Glu Ser Ile
    290                 295                 300
Leu Leu Gln Thr Ala Asn Ser Phe Tyr Lys Ser Phe Ala Val Glu Cys
305                 310                 315                 320
Ser Lys Ala Gln Ile Val Phe Thr Thr Gly Gly Leu Arg Asn Arg Pro
                325                 330                 335
Arg Xaa Thr Xaa Thr
            340
```

<210> 27838
<211> 188
<212> PRT
<213> A.fumigatus

```
<400> 27838
Ser Ile Asp Ser Ile Ile Ala Asn Leu Gly Lys Leu Ser Gly Gly Gly
1               5                   10                  15
Asn Val Asn Leu Gly Trp Ile Ile Gly Arg Pro Ile Val Ala Ser Val
            20                  25                  30
Ala Met Ala Val Leu Thr Pro Leu Leu Thr Lys Tyr Val Phe Ala Arg
        35                  40                  45
Ile Phe Arg Arg Tyr Ile Glu His Ala Phe Ala Gln Phe Asp His Val
    50                  55                  60
Ser Asn Ile Ile Leu Met Val Leu Val Leu Cys Ala Phe Ile Ala Ile
65                  70                  75                  80
Ala Ala Tyr Ala Gly Thr Ser Val Leu Phe Gly Ala Phe Leu Ala Gly
```

```
                85                  90                  95
Thr Phe Leu Thr Tyr Ile Pro Ser Lys His Pro Ser Gly Pro Phe Val
            100                 105                 110
Val Met Ser Arg Glu Glu Gly Glu Arg Glu Ala His Lys Ser Pro Thr
        115                 120                 125
Phe Val His Thr Phe Glu Val Tyr Leu Leu Asp Val Gln Ser Tyr Leu
    130                 135                 140
Met Glu Pro Leu Phe Phe Ala Ser Ile Gly Phe Ala Ile Pro Phe Val
145                 150                 155                 160
Gln Leu Trp Thr Gly Thr Arg Ile Trp Arg Gly Val Val Phe Ser Leu
                165                 170                 175
Leu Met Val Ala Ala Lys Val Cys Thr Ser Gln Pro
            180                 185
```

<210> 27839
<211> 333
<212> PRT
<213> A.fumigatus

<400> 27839

```
Leu Ser Asn Ile Ala Asp His Ala Ile Asp Pro Arg Phe Tyr Cys Cys
1               5                   10                  15
Leu Ser Arg Met Phe Leu Asp Gly Leu Arg Leu Arg Phe Ala Gly Ser
            20                  25                  30
Leu Phe Asn Leu Val Ser Leu Ala Leu Leu Phe Ser Arg Gly Cys Asp
        35                  40                  45
Gly Arg Leu Cys Asn Met Leu Ser Asn Arg Phe Ser Asn Arg Leu Ile
    50                  55                  60
Asn Gly Leu Arg Leu Ser Ser Gly Leu Ser Gly Arg Leu Ser Asp Arg
65                  70                  75                  80
Leu Ser Asp Arg Phe Ser Asp Arg Leu Ser Asp Arg Leu Ser Asp Gly
                85                  90                  95
Leu Ser Asp Arg Leu Gly Asn Arg Leu Ile Asn Gly Leu Gly Leu Ser
            100                 105                 110
Gly Gly Leu Ser Ser Ser Arg Leu Ser Gly Gly Leu Ile Gly Gly Leu
        115                 120                 125
Ser Gly Arg Leu Ser Asp Arg Leu Ser Asn Arg Leu Ser Asn Arg Leu
    130                 135                 140
Ser Asn Arg Leu Ser Asn Arg Leu Ser Asn Arg Leu Gly Asn Arg Leu
145                 150                 155                 160
Ser Asn Arg Leu Ser Asn Met Leu Ile Asn Arg Leu Ser Asn Arg Leu
                165                 170                 175
Ser Asn Arg Leu Gly Asn Arg Leu Ser Gly Arg Leu Ser Asp Gly Leu
            180                 185                 190
Ser Asn Arg Leu Ser Asn Arg Leu Ser Asn Arg Leu Ser Asn Arg Leu
        195                 200                 205
Ser Asn Arg Leu Ser Asn Arg Leu Ser Ser Arg Leu Ser Asp Gly Leu
    210                 215                 220
Ser Asn Arg Leu Ser Asn Arg Leu Ser Asn Arg Leu Ser Asn Arg Leu
225                 230                 235                 240
Ser Asn Arg Leu Ser Asn Arg Leu Ser Asn Arg Leu Gly Asn Arg Leu
                245                 250                 255
Ile Asn Gly Leu Ile Asn Gly Leu Ile Asn Gly Leu Ile Asn Gly Leu
            260                 265                 270
Ile Asn Gly Leu Ile Asn Gly Leu Gly Leu Ser Gly Gly Leu Ser Gly
        275                 280                 285
```

```
Arg Leu Ser Asp Gly Leu Ser Asn Gly Phe Leu Leu Phe Phe Asn Arg
    290                 295                 300
Cys His Ile Gly Asn Phe Ile Leu Ser Arg Tyr Leu Asn Ala Gly Phe
305                 310                 315                 320
Arg Leu Ser Thr Tyr Ser Arg Leu Thr Gly Leu Arg Leu
                325                 330
```

<210> 27840
<211> 274
<212> PRT
<213> A.fumigatus

<400> 27840

```
Ala Ser Leu Cys Phe Ser Val Ala Gly Ala Met Val Gly Ser Ala Thr
1               5                   10                  15
Cys Ser Ala Thr Gly Ser Ala Ile Gly Ser Ser Thr Gly Ser Gly Ser
            20                  25                  30
Ala Ala Gly Ser Ala Ala Gly Ser Val Thr Gly Ser Val Thr Gly Ser
        35                  40                  45
Val Thr Gly Ser Val Thr Gly Ser Val Thr Gly Ser Val Thr Gly Ser
    50                  55                  60
Ala Thr Gly Ser Ser Thr Gly Ser Gly Ser Ala Ala Gly Ser Ala Ala
65                  70                  75                  80
Ala Gly Ser Ala Ala Gly Ser Ser Ala Gly Ser Ala Ala Gly Ser Ala
                85                  90                  95
Thr Asp Ser Ala Thr Gly Ser Val Thr Gly Ser Ala Thr Gly Ser Ala
            100                 105                 110
Thr Gly Ser Ala Thr Gly Ser Ala Thr Gly Ser Ala Thr Gly Ser Ala
        115                 120                 125
Thr Cys Ser Ser Thr Gly Ser Ala Thr Gly Ser Ala Thr Gly Ser Ala
    130                 135                 140
Thr Gly Ser Ala Ala Gly Leu Val Thr Gly Ser Ala Thr Gly Ser Ala
145                 150                 155                 160
Thr Gly Ser Ala Thr Gly Ser Ala Thr Gly Ser Ala Thr Gly Ser Ala
                165                 170                 175
Thr Gly Ser Ala Ala Gly Leu Val Thr Gly Ser Ala Thr Gly Ser Ala
            180                 185                 190
Thr Gly Ser Ala Thr Gly Ser Ala Thr Gly Ser Ala Thr Gly Ser Ala
        195                 200                 205
Thr Gly Ser Ala Thr Gly Ser Ala Thr Gly Ser Ser Thr Gly Ser Ser
    210                 215                 220
Thr Gly Ser Ser Thr Gly Ser Ser Thr Gly Ser Ser Thr Gly Ser Ser
225                 230                 235                 240
Thr Gly Ser Gly Ser Ala Ala Gly Ser Ala Ala Gly Leu Val Thr Gly
                245                 250                 255
Ser Ala Thr Ala Ser Cys Cys Ser Ser Ile Ala Ala Thr Ser Ala Thr
            260                 265                 270
Ser Ser
```

<210> 27841
<211> 68
<212> PRT
<213> A.fumigatus

<400> 27841

```
Arg Ala Gln Gln Gln Ala Gln Gln Gln Ala Gln Gln Gln Ala Gln Gln
1               5                  10                  15
Gln Ala Gln Gln Gln Ala Gln Gln Gln Ala Gln Gln Gln Ala Arg Gln
            20                  25                  30
Gln Ala His Gln Arg Ala His Gln Arg Ala His Gln Arg Ala His Gln
        35                  40                  45
Arg Ala His Gln Arg Ala His Gln Arg Ala Arg Ala Gln Arg Arg Ala
    50                  55                  60
Gln Arg Gln Ala
65
```

<210> 27842
<211> 585
<212> PRT
<213> A.fumigatus

<400> 27842

```
Glu Ala Thr Glu Thr Val Met Glu Pro Glu Ala Val Ala Pro Val Ala
1               5                  10                  15
Glu Glu Pro Val Lys Thr Ala Ile Ala Gln Glu Asp Asn Ile Glu Lys
            20                  25                  30
Lys Phe Ala Glu Glu Thr Val Ser Lys Asp Val Thr Val Glu Glu Pro
        35                  40                  45
Ser Val Ala Glu Lys Val Val Pro Ser Glu Pro Ala Thr Glu Glu Pro
    50                  55                  60
Val Ser Glu Pro Gln Thr Ser Glu Ala Thr Val Arg Ala Glu Pro Glu
65                  70                  75                  80
Ala Ser Ile Gln Val Pro Ala Gln Asp Glu Val Ala Asp Val Ala Ala
                85                  90                  95
Ile Glu Glu Gln Gln Glu Ala Val Ala Glu Pro Val Thr Lys Pro Ala
            100                 105                 110
Ala Glu Pro Ala Ala Glu Pro Glu Pro Val Asp Glu Pro Val Asp Glu
        115                 120                 125
Pro Val Asp Glu Pro Val Asp Glu Pro Val Asp Glu Pro Val Asp Glu
    130                 135                 140
Pro Val Ala Glu Pro Val Ala Glu Pro Val Ala Glu Pro Val Ala Glu
145                 150                 155                 160
Pro Val Ala Glu Pro Val Ala Glu Pro Val Ala Glu Pro Val Ala Glu
                165                 170                 175
Pro Val Thr Lys Pro Ala Ala Glu Pro Val Ala Glu Pro Val Ala Glu
            180                 185                 190
Pro Val Ala Glu Pro Val Ala Glu Pro Val Ala Glu Pro Val Ala Glu
        195                 200                 205
Pro Val Thr Lys Pro Ala Ala Glu Pro Val Ala Glu Pro Val Ala Glu
    210                 215                 220
Pro Val Ala Glu Pro Val Asp Glu His Val Ala Glu Pro Val Ala Glu
225                 230                 235                 240
Pro Val Ala Glu Pro Val Ala Glu Pro Val Ala Glu Pro Val Ala Glu
                245                 250                 255
Pro Val Thr Glu Pro Val Ala Glu Ser Val Ala Glu Pro Ala Ala Glu
            260                 265                 270
Pro Ala Asp Glu Pro Ala Ala Glu Pro Ala Ala Ala Glu Pro Ala Ala
        275                 280                 285
Glu Pro Glu Pro Val Asp Glu Pro Val Ala Glu Pro Val Thr Glu Pro
    290                 295                 300
Val Thr Glu Pro Val Thr Glu Pro Val Thr Glu Pro Val Thr Glu Pro
```

305 310 315 320
Val Thr Glu Pro Ala Ala Glu Pro Ala Ala Glu Pro Glu Pro Val Asp
325 330 335
Glu Pro Ile Ala Glu Pro Val Ala Glu His Val Ala Glu Pro Thr Ile
340 345 350
Ala Pro Ala Thr Glu Lys Gln Ser Glu Ala His Glu Val Glu Glu Thr
355 360 365
Thr Ser Lys Ala Lys Pro Glu Ala Val Lys Glu His Ser Thr Glu Thr
370 375 380
Ala Val Glu Pro Gly Val Asn Gly Val Val Ser Asn Ile Gly Glu Leu
385 390 395 400
Asp Gln Pro Pro Ile Gly Gly Lys Glu Ala Ala Lys Val Glu Ser Glu
405 410 415
Pro Val Ala Ser Lys Glu Pro Lys Ala Glu Glu Pro Ala Pro Thr Ser
420 425 430
Asn Gly Asp Ser Ser Val Glu Lys Asp Val Asp Ser Ser Ser Gln Pro
435 440 445
Ala Pro Pro Val Gln Asp Ala Ile Pro Glu Pro Thr Val Glu Pro Thr
450 455 460
Lys Asp Thr Glu Glu Lys Asp Ser Ile Val Pro Pro Glu Leu Val Gly
465 470 475 480
Ala Gly Ala Ala Ala Ala Ile Ala Ala Gly Ala Val Val Ala Gly Val
485 490 495
Val Ser Lys Ser His Lys Glu Pro Glu Val Val Ala Thr Leu Lys Asp
500 505 510
Asp Val Asn Ile Lys Glu Gln Ser Arg Pro Asn Asp Asp Lys Gln Glu
515 520 525
Ile Ser Arg Leu Val Pro Ala Pro Gln Ile Ala Glu Ser Ser Thr Ser
530 535 540
Lys Glu Met Pro Thr Pro Glu Pro Glu Ser Asp Pro Ala Leu Val Ala
545 550 555 560
Leu Ala Gly Asp Arg Glu Ala Leu Val Phe Thr Thr Gly Ala Ala Lys
565 570 575
Ser Arg Ala Lys Arg Leu Ala Ala Ile
580 585

<210> 27843
<211> 331
<212> PRT
<213> A.fumigatus

<400> 27843
Phe Leu Arg Ser Pro Arg Arg Arg Ser Leu Phe Gln Ser Arg Arg Pro
1 5 10 15
Val Arg Arg Leu Tyr Val Leu Ser Arg Lys Pro Ala Phe Arg Tyr Leu
20 25 30
Leu Lys Met Lys Leu Pro Met Trp Gln Arg Leu Lys Asn Ser Arg Lys
35 40 45
Pro Leu Leu Ser Pro Ser Leu Ser Leu Pro Leu Ser Pro Pro Leu Ser
50 55 60
Pro Ser Pro Leu Met Ser Pro Leu Met Ser Pro Leu Met Ser Pro Leu
65 70 75 80
Met Ser Pro Leu Met Ser Pro Leu Met Ser Leu Leu Pro Ser Leu Leu
85 90 95
Leu Ser Leu Leu Leu Ser Leu Leu Leu Ser Leu Leu Leu Ser Leu Leu
100 105 110

```
Leu Ser Leu Leu Leu Ser Leu Leu Leu Ser Pro Ser Leu Ser Leu Leu
        115                 120                 125
Leu Ser Leu Leu Leu Ser Leu Leu Leu Ser Leu Leu Leu Ser Leu Leu
    130                 135                 140
Leu Ser Leu Leu Leu Ser Leu Leu Leu Ser Pro Ser Leu Ser Leu Pro
145                 150                 155                 160
Leu Ser Leu Leu Pro Ser Leu Leu Leu Ser Leu Leu Leu Ser Leu Leu
                165                 170                 175
Met Ser Met Leu Leu Ser Leu Leu Leu Ser Leu Leu Pro Ser Leu Leu
            180                 185                 190
Leu Ser Leu Leu Leu Ser Leu Leu Leu Ser Leu Leu Leu Ser Leu Leu
        195                 200                 205
Leu Ser Leu Ser Leu Ser Leu Pro Leu Ser Pro Pro Met Ser Pro Pro
    210                 215                 220
Leu Ser Leu Leu Leu Leu Ser Pro Pro Leu Ser Pro Ser Pro Leu Met
225                 230                 235                 240
Ser Leu Leu Pro Ser Leu Ser Leu Ser Pro Ser Leu Ser Leu Ser Leu
                245                 250                 255
Ser Leu Ser Leu Asn Leu Ser Leu Ser Leu Ser Leu Ser Leu Pro Leu
            260                 265                 270
Ser Pro Leu Leu Ser Leu Ser Pro Leu Met Ser Leu Leu Leu Asn Leu
        275                 280                 285
Leu Leu Ser Met Leu Gln Ser Arg Pro Ser His Pro Arg Leu Lys Ser
    290                 295                 300
Lys Ala Arg Leu Thr Arg Leu Lys Arg Leu Pro Ala Lys Arg Ser Leu
305                 310                 315                 320
Arg Pro Ser Arg Asn Ile Leu Leu Arg Gln Gln
                325                 330
```

<210> 27844
<211> 261
<212> PRT
<213> A.fumigatus

<400> 27844

```
Val Leu Ala Ser Tyr Asn Arg Arg Tyr Cys Ala Pro Arg Cys Leu Cys
1               5                   10                  15
Leu Asp Glu Arg Ala Leu Asp Ser Ser Gln Ser Ala Val Leu Lys Ser
            20                  25                  30
Pro Ser Val Val Thr Ser His Gln Ser Ala Ser Val Leu Val Pro Ser
        35                  40                  45
Tyr Ser Glu Ser His Leu Lys Asn Val Glu Trp Ser Asn Leu Leu Val
    50                  55                  60
Gln Val Gly Gln Asn Leu Val Gln Ala Arg Gly Val Ser Pro Val Ala
65                  70                  75                  80
His Gln Val Gly Asp Asp Ala Lys Cys Ala His Glu Gly Asp Ala Ser
                85                  90                  95
Leu Leu His Ala Thr Val Gly Ile Gly Arg Gln Phe Val Val Lys Gly
            100                 105                 110
Thr Thr Ser Leu Gly Val Gly Glu Thr Ser Tyr Pro Ser Ser Met Ser
        115                 120                 125
Glu Arg Ala Lys Lys Ala Val Pro Ile Ser Leu Val Ser Phe Tyr Leu
    130                 135                 140
Asp Ala Gly Arg Lys Thr Lys Leu Thr Asn Phe Ser Asp Asn Thr Ala
145                 150                 155                 160
Asp Asn Gln Leu Phe Leu Ala Ser Gly Leu Asp Gly Arg Ala Glu Leu
```

```
                165                 170                 175
Gly Ile Val Pro Gly Val Asp Leu Ala Leu Ala Met Asn Asn Gly His
            180                 185                 190
Ile Gly Val Gln Ile His Asp Phe Leu Asp Arg Gln Ser Ile Gly Thr
        195                 200                 205
Arg Val Gly Gly Ser Gly His Asp Asp Arg Gln Val Lys Gln Val Ala
    210                 215                 220
Gln Gly Gly Val Gly Lys His Val Val Ala Glu Val Val Gly Val Glu
225                 230                 235                 240
Ile Ala Val Gln Leu Gly Glu Thr Asp Met Val Val Asp Asp Glu Asn
                245                 250                 255
Ser Leu Val Gly Asn
            260
```

<210> 27845
<211> 147
<212> PRT
<213> A.fumigatus

```
<400> 27845
Leu Ser Lys Pro Gly Thr Asn Trp Thr Lys Arg Met Arg Tyr Ser Phe
1               5                   10                  15
Ile Pro Ile Leu Val Val Gln Pro Leu Ile Pro Asn Gln Ala Val Leu
            20                  25                  30
Ile Ile Asp Tyr His Val Gly Leu Ala Gln Leu Asp Arg Asp Phe Asn
        35                  40                  45
Thr Asn Asp Phe Arg Asn Asn Met Leu Ala His Ala Ala Leu Gly Asn
    50                  55                  60
Leu Phe Asp Leu Ser Val Val Met Thr Thr Ser Ser Asp Ala Gly Pro
65                  70                  75                  80
Asn Gly Leu Thr Ile Lys Glu Val Val Asp Leu Asn Pro Asn Val Thr
                85                  90                  95
Ile Val His Arg Gln Gly Glu Val Asn Ala Trp Asp Asn Ala Glu Phe
            100                 105                 110
Arg Ala Ala Ile Gln Ala Thr Gly Lys Lys Gln Leu Ile Val Ser Gly
        115                 120                 125
Ile Val Thr Glu Val Cys Lys Leu Arg Leu Thr Ser Ser Val Glu Val
    130                 135                 140
Glu Arg Asp
145
```

<210> 27846
<211> 76
<212> PRT
<213> A.fumigatus

```
<400> 27846
Arg Asp Arg His Arg Leu Leu Gly Pro Leu Ala His Arg Arg Arg Ile
1               5                   10                  15
Arg Gly Leu Ala Asn Thr Glu Ala Ser Gly Thr Phe Asp Asp Lys Leu
            20                  25                  30
Ala Ala Asp Ala Asn Arg Arg Met Glu Lys Ala Gly Val Thr Leu Met
        35                  40                  45
Gly Thr Phe Gly Val Val Thr Asp Leu Met Arg Asp Trp Arg Asn Thr
    50                  55                  60
Pro Gly Leu Asp Gln Val Leu Pro Tyr Leu Asp Lys
```

65 70 75

<210> 27847
<211> 62
<212> PRT
<213> A.fumigatus

<400> 27847
Arg Gln Thr Gly Gly Arg Cys Gln Pro Ser His Gly Glu Gly Trp Arg
1 5 10 15
His Pro His Gly His Ile Trp Arg Arg His Arg Pro Asp Ala Arg Leu
20 25 30
Glu Lys His Pro Trp Pro Gly Pro Gly Ser Ala Leu Pro Gly Gln Val
35 40 45
Ser Cys Ser Ile Arg His Phe Ser Asn Gly Thr His Cys Asn
50 55 60

<210> 27848
<211> 147
<212> PRT
<213> A.fumigatus

<400> 27848
Gln Leu Glu His Arg Thr Pro Ile His Arg Leu Glu Ala Asp Ala Arg
1 5 10 15
Thr Leu Arg Asp Asp Cys Ser Arg Gly His Ala Leu Arg Val Pro Asp
20 25 30
Cys Ala Glu Asp Thr Ala Pro Val Cys Val Ala Ala Val Glu Gly Gly
35 40 45
Leu Asp Glu Arg Gly Pro Ser Asp Gly Gly Arg Asp Glu Thr Gly Gly
50 55 60
Leu Val Val Arg Gly Val Leu Asp Ala Asp Gly Asp Glu Leu Gly Gly
65 70 75 80
Ala Phe Ala Val Ala Asp Asp Glu Leu Arg Glu Arg Leu Arg Glu Arg
85 90 95
Gly Glu Asp Phe Leu His Gly Gly Val Val Val Arg Gly Gly Gly Thr
100 105 110
Asp Gly Gly Thr Ala Gly Gly Ala Val Gly Lys Asp Gly Asp Arg Val
115 120 125
Val Cys Ala Cys Val Ala Val Val Phe Thr Thr Gly Val Glu Gly Gln
130 135 140
Arg Trp Ser
145

<210> 27849
<211> 211
<212> PRT
<213> A.fumigatus

<400> 27849
Arg Pro Pro Leu Ser Phe His Pro Arg Gly Glu Asp Asp Gly Asp Thr
1 5 10 15
Ser Thr Asn Asp Thr Val Ala Ile Leu Ala Asn Gly Ala Ala Gly Gly
20 25 30
Ala Pro Ile Ser Ser Pro Ala Ser Asp Asp Tyr Thr Ala Met Gln Glu
35 40 45

```
Ile Leu Thr Ser Phe Ala Gln Ser Leu Ser Gln Leu Val Val Arg Asp
    50                  55                  60
Gly Glu Gly Ala Thr Lys Phe Val Thr Val Arg Val Gln Asn Ser Pro
65                  70                  75                  80
Asp Tyr Glu Ser Ala Arg Leu Ile Ala Ser Thr Ile Ala Arg Ser Pro
                85                  90                  95
Leu Val Lys Thr Ala Leu Tyr Gly Arg Asp Ala Asn Trp Gly Arg Ile
            100                 105                 110
Leu Cys Ala Ile Gly Tyr Thr Gln Gly Val Ala Pro Gly Thr Val Val
        115                 120                 125
Pro Glu Arg Thr Ser Val Ser Phe Lys Pro Val Asp Gly Ser Pro Val
    130                 135                 140
Leu Lys Leu Leu Val Asn Gly Glu Pro Glu Gln Val Asp Glu Glu Arg
145                 150                 155                 160
Ala Ser Val Ile Leu Gln Glu Glu Asp Leu Glu Ile Val Val Asp Leu
                165                 170                 175
Gly Gly Gly Glu Lys Gly Glu Gln Gly Leu Gly Gly Glu Glu Ala Val
            180                 185                 190
Tyr Trp Phe Cys Asp Phe Ser His Glu Tyr Val Thr Ile Asn Gly Asp
        195                 200                 205
Tyr Arg Thr
    210

<210> 27850
<211> 104
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (87),(93),(94)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27850
Gln Asn Tyr Asn Asn Asp Trp Gln Trp Ile Tyr Ser Arg His Gly Lys
1               5                   10                  15
Glu Asp Thr Ser Thr Ala Ala Lys Gly Ala Glu Gln Val Gly Gly Asp
            20                  25                  30
Gly Glu Gly Thr Asn Ala Gly Thr Thr Lys Gly Gly Ser Ser Arg Asn
        35                  40                  45
Asp Ser Leu Lys Leu Leu Ile His Ala Leu Phe Ala Val Ala Gly His
    50                  55                  60
Leu Gln Asp Pro Val Leu Gln Leu Leu Gly Asp Ile Ala Arg Gly Arg
65                  70                  75                  80
Ala Arg Asp Leu Asn Pro Xaa Leu Gly Glu Lys Ala Xaa Xaa Thr Ser
                85                  90                  95
Met Lys Val Met Tyr Thr Ala Val
            100

<210> 27851
<211> 148
<212> PRT
<213> A.fumigatus

<400> 27851
Leu Asp His Arg Cys Pro Ser Thr Pro Val Val Lys Thr Thr Ala Thr
```

```
1               5                   10                  15
Gln Ala Gln Thr Thr Arg Ser Pro Ser Leu Pro Thr Ala Pro Pro Ala
            20                  25                  30
Val Pro Pro Ser Val Pro Pro Pro Arg Thr Thr Thr Pro Pro Cys Arg
        35                  40                  45
Lys Ser Ser Pro Arg Ser Arg Ser Arg Ser Arg Ser Ser Ser Ser Ala
    50                  55                  60
Thr Ala Lys Ala Pro Pro Ser Ser Ser Pro Ser Ala Ser Arg Thr Pro
65                  70                  75                  80
Arg Thr Thr Ser Pro Pro Val Ser Ser Arg Pro Pro Ser Leu Gly Pro
                85                  90                  95
Arg Ser Ser Arg Pro Pro Ser Thr Ala Ala Thr Gln Thr Gly Ala Val
            100                 105                 110
Ser Ser Ala Gln Ser Gly Thr Arg Arg Ala Trp Pro Arg Glu Gln Ser
        115                 120                 125
Ser Leu Ser Val Arg Ala Ser Ala Ser Ser Leu Trp Met Gly Val Leu
    130                 135                 140
Cys Ser Ser Cys
145
```

<210> 27852
<211> 74
<212> PRT
<213> A.fumigatus

<400> 27852

```
Ile His Gln Tyr Ile Asn Ala Pro Arg Ala Ile Leu Ser Arg Cys Thr
1               5                   10                  15
Cys Pro Leu Leu Gly Leu Ser Cys Lys Tyr Phe Asn Leu Val Tyr Phe
            20                  25                  30
Leu Ser Asn Val His Leu Ala Ile Ile Asp Leu Phe Cys Phe Tyr Lys
        35                  40                  45
Thr Phe Gln Val Thr Cys Ile Gln Cys Ile Leu His Ser Ala Tyr Arg
    50                  55                  60
Leu Asp Asn Leu Leu Leu Thr Asn Phe Gly
65                  70
```

<210> 27853
<211> 66
<212> PRT
<213> A.fumigatus

<400> 27853

```
Val Cys Val Gln Cys Leu Phe Thr Arg Ala Asp Tyr Ser Trp Val Gly
1               5                   10                  15
Asn Trp Thr Ser Val Phe Leu Ala Ser Ala Thr Ser Gly Met Glu Ile
            20                  25                  30
Ser Asn Ile Tyr Val Arg Lys Phe Asp Ser Asn Phe Met Ile Cys Thr
        35                  40                  45
Trp Arg Ile Gln Leu Gly Pro Gln Phe Cys Ser Arg Thr Glu Thr Leu
    50                  55                  60
Lys His
65
```

<210> 27854
<211> 170

<212> PRT
<213> A.fumigatus

<400> 27854
Ser Ser Pro Val Ser Ala Ser Tyr Lys Glu Ala Lys Ile Met Ser Val
1 5 10 15
Asp Ala Asp Glu Glu Thr Pro Leu Ala Gly Thr Ser Pro Pro Asn Pro
20 25 30
Ser Gln Ile Pro Ser Ile Ala Leu Asn Ala Ile Ser Asn Pro Asp Glu
35 40 45
Pro Tyr Val Val Asp Pro Ser Ser Leu Thr Thr Tyr Glu Lys Arg Leu
50 55 60
Tyr Asp Phe Leu Cys Ser Gln Glu Trp Thr Asp Thr Gln Phe Ser Cys
65 70 75 80
Phe Ile Thr Gln Ile Lys Pro Met Lys Glu Ala Leu Ser Arg Tyr Phe
85 90 95
Tyr Ser His Gly Trp Asn Thr Val Gln Val Gln Cys Leu His Glu Arg
100 105 110
Cys Glu Met Glu Phe Pro Glu His Phe Pro Ala Pro Arg Gly Asn Ala
115 120 125
Glu Gln Gln Asp Thr Gln Met Gln Leu Arg Leu Val Glu Glu Met Asn
130 135 140
Arg Arg Arg Ala Met Gly Glu Arg Met Tyr Pro Ser Ile Gly Thr Met
145 150 155 160
Asp Gly Gly Ile Val Glu Glu Gly Arg Ala
165 170

<210> 27855
<211> 89
<212> PRT
<213> A.fumigatus

<400> 27855
Tyr Arg Ile Ser Met Ser Leu Ser Asn Pro Thr Ile Asp Asp Tyr Pro
1 5 10 15
Gly Pro Asp Leu Gly Thr Asn Ser Asp Ala Ser Glu Glu Ser Ser Cys
20 25 30
Lys His Tyr Ser Tyr Val Cys Thr Lys Glu Ser Lys Ser Ile Ser Ile
35 40 45
Glu Glu Ser Leu Lys Asn Ser Ile Pro Asn Gly Ile Leu Ser Ile Ser
50 55 60
Ser Val Val Pro Gly His Ile Thr Tyr Val Lys Gly Gly Leu Ala Lys
65 70 75 80
Tyr Pro Tyr Val Ala Glu Thr Pro Asn
85

<210> 27856
<211> 227
<212> PRT
<213> A.fumigatus

<400> 27856
Pro Asp Asp Glu Asp Pro Gly Tyr Gln Ala Phe Leu Asp His Pro Ala
1 5 10 15
Phe Glu Arg Gly Asp Phe Pro Glu Ser Lys Asp Glu Pro Cys Ala Phe
20 25 30

```
Ala Val Asp Val Gly Pro Val Val Thr Thr Cys Asn Gly Cys Gly Ala
        35                  40                  45
Thr Phe Pro Leu Arg Asn Arg Leu His Thr His Leu Ser Glu Cys Pro
    50                  55                  60
Arg Thr Gln Glu Pro Ile Pro Val Thr Pro Thr Thr Asn Asp Pro Thr
65                  70                  75                  80
Ala Val Cys Ile Ile Glu Ser Thr His Lys Pro Thr Gly Leu Val Gly
                85                  90                  95
Ile Cys Ser Trp His Cys Ala Thr Ala Lys Ile Arg Ile Asn Ser Thr
            100                 105                 110
Ser Glu Tyr His Glu Ile Cys Leu Asn Ile Gly Cys Ser Ser Thr Ile
        115                 120                 125
Gly Asn Thr Glu Phe Ile Glu Ala Leu Pro Ser Val Thr Ile Thr Glu
    130                 135                 140
Leu Thr Asp Gly Ile Thr Val Ser Gly Ile Gly Ser Cys His Arg Ser
145                 150                 155                 160
Asn Cys Ser Ala Met Leu Thr Leu Trp Phe Pro Gly Leu Met Asn Asp
                165                 170                 175
Gly Gly Ser Val Asn Ala Phe Ala Lys Ile Thr Ile Arg Cys His Leu
            180                 185                 190
Val Asp Gly Leu Lys Pro Lys Leu Leu Ile Gly Thr Asp Val Ile Cys
        195                 200                 205
Ser Glu Gly Phe Met Leu Asn Phe Glu His Gly Ile Thr Ile Ile Ser
    210                 215                 220
Ser Cys Ser
225
```

<210> 27857
<211> 144
<212> PRT
<213> A.fumigatus

<400> 27857

```
Leu Thr Phe Leu Ile Ile Thr Gln Ala Lys Leu His Arg Ile Thr Cys
1               5                   10                  15
Val Val Val Tyr Ala Lys Gln Arg Ser Leu Leu Leu Val Tyr Ser Val
            20                  25                  30
Ser Lys Leu Ala Val Arg Leu Lys Thr Asp Leu Pro Ala Asn His Asp
        35                  40                  45
Phe Ile Phe Asp Pro Leu Asp Gly Ser Thr Leu Asn Gly Ala Thr Ile
    50                  55                  60
Tyr Ala His Met Val Asp His Glu Phe Ser Phe Ile Glu Val Arg Asn
65                  70                  75                  80
Glu Thr Pro Thr Pro Ile Met Val Thr Arg His Ala Arg Ile Gly Thr
                85                  90                  95
Ile Ser Asp Ala Asn Phe Val Thr Ala Tyr Gln Val Ser Glu Asp Ala
            100                 105                 110
Ile Pro Leu Ala Lys Pro Leu Glu Ser Lys Leu Leu Glu Phe Glu Ser
        115                 120                 125
Thr Lys Leu Ser Tyr Pro Ser Ser Arg Tyr Arg Glu His Val Lys His
    130                 135                 140
```

<210> 27858
<211> 92
<212> PRT
<213> A.fumigatus

<400> 27858
Leu Thr Glu Val Leu Met Ser Phe Asn Val Trp Gly Asp Asp Gly Ser
1 5 10 15
Thr Ala Arg Ile Pro Glu Glu Glu Trp Met Glu Val Pro Leu Lys Glu
20 25 30
Gly Trp Glu Asn Arg Leu Pro Lys Pro Tyr Val Tyr Arg Val Ser Pro
35 40 45
Lys Asp His Glu Cys Ile Asp Arg Met Phe Asp Pro Leu Arg Glu Ala
50 55 60
Gly Lys Leu Ser Pro Ala Thr Gly His Thr Pro Ser Ala Tyr Leu Val
65 70 75 80
Phe Val Val Trp Lys Thr Val Thr Asp Gln Asn Ser
85 90

<210> 27859
<211> 133
<212> PRT
<213> A.fumigatus

<400> 27859
Lys Ile Leu Asp His Gly Thr Asn Arg Trp Ser Ala Thr Thr Arg Ser
1 5 10 15
Thr Val Gly Leu Ala Val Lys Asn Ala Met Leu Gly Pro Glu Ser Val
20 25 30
Ser Asn Gln Tyr Leu Phe Ile Glu Ser Phe Asn Val Ser Gln Arg Asp
35 40 45
Val Leu Ala Ala Leu Glu Asp Val Thr Gly Thr Arg Trp Asp Val Thr
50 55 60
Tyr His Asp Ala Glu Glu Glu Lys Arg Leu Ala Leu Glu Lys Leu Ala
65 70 75 80
Lys Gly Asn Tyr Ser Gly Ile Pro Ala Leu Met Arg Tyr Ile Thr Cys
85 90 95
Val Lys Gly Tyr Gly Gly Asn Tyr Met Asp Ser Glu Glu Ser Ala Asn
100 105 110
Lys Leu Leu Ser Leu Pro Ala Glu Ser Leu His Ala Val Leu Ala Gly
115 120 125
Leu Thr Arg His Glu
130

<210> 27860
<211> 75
<212> PRT
<213> A.fumigatus

<400> 27860
Gln Asn Ser Lys Ala Gln Leu Asp Asn Arg Asp Leu Thr Phe Asp Gly
1 5 10 15
Lys Cys Val Gly Glu Ser Leu Leu Tyr Glu Gly Phe Tyr Thr Trp Ala
20 25 30
Glu Thr Ala Arg Gly Met Asp Trp Ala Gly Val Asp Asn Glu Gln Ser
35 40 45
Thr Leu Cys Ile Gly Gly Asp Pro Thr Tyr Gly Ala Ser Ser Val Met
50 55 60
Leu Phe Asn Phe Glu Ser Pro Thr Asp Ile Glu
65 70 75

<210> 27861
<211> 335
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (13)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27861
Ala Gly Pro Leu Gly Glu Asp Gln Phe Arg His Gly Xaa Trp Tyr Gly
1 5 10 15
Thr Met Leu Ala Asp Tyr Thr Thr Asp Ser Thr Arg Pro Ile Leu Phe
20 25 30
Phe Arg Ile Gly Val Val Ser Glu Ile Ala Thr Phe Leu Ala Gly Ala
35 40 45
Ile Ser Ala Gln Ile Met Ala Leu Asn Pro Trp Ile Pro Thr Leu Ile
50 55 60
Gly Cys Gly Ile Val Ala Val Gly Leu Thr Cys Ala Phe Phe Leu Pro
65 70 75 80
Glu Thr Leu Asn His Cys Ala Lys Lys Lys Ala Thr Ile His Arg Asp
85 90 95
Glu Pro Val Ser Cys Met Gly Gly Leu Ile Val Gly Glu Glu Ser Phe
100 105 110
Tyr Cys Ser Pro Lys Val Leu Leu Lys Ser Ser Arg His Cys Leu Ile
115 120 125
Leu Gly Lys Ile Arg Arg Phe Leu Asn His Asp Ile Phe Ile Phe Asp
130 135 140
His Arg Leu Met Leu Leu Leu Phe Ala Phe Ala Val Tyr Gly Leu Ala
145 150 155 160
Gln Gly Ser Ser Gly Phe Leu Ala Gln Tyr Met Ser Thr Arg Phe Asn
165 170 175
Trp Thr Leu Ala Gln Ala Asn Leu Leu Lys Ser Phe His Thr Ala Ala
180 185 190
Thr Leu Pro Val Phe Leu Phe Leu Leu Pro Tyr Leu Ser Thr His Val
195 200 205
Leu Asn Tyr Leu Ser Leu Arg Gly Arg Asp Leu Tyr Leu Ala Arg Met
210 215 220
Ser Ile Thr Cys Leu Ala Val Gly Ser Leu Ser Val Gly Leu Ala Pro
225 230 235 240
Asn Ile Val Phe Leu Val Pro Ser Leu Cys Leu His Ala Ala Gly Gly
245 250 255
Gly Phe Pro Leu Val Ala Arg Ser Leu Ala Thr Ala Leu Val Glu Ser
260 265 270
Asp Lys Thr Ala Arg Leu Asn Ser Thr Ile Glu Ile Leu His Ser Met
275 280 285
Gly Ser Val Leu Gly Ser Leu Cys Phe Thr Lys Val Phe Thr Leu Gly
290 295 300
Leu Lys Leu Arg Gly Val Trp Ile Gly Leu Val Trp Ile Met Ser Ser
305 310 315 320
Leu Leu Phe Ala Leu Val Gly Ile Pro Leu Thr Val Leu Arg Val
325 330 335

<210> 27862

<211> 365
<212> PRT
<213> A.fumigatus

<400> 27862
Thr Pro Pro Pro Ser Pro Ser Gln Ser Ser Gln Gly Arg Gln Gly Ile
1 5 10 15
Lys Ile Glu Arg Tyr Thr Thr Met Gly Phe Phe Arg Ser His Ser Lys
20 25 30
Lys Thr Met Ser Pro Val His Ser Leu Ile Glu Glu Cys Asn Arg Leu
35 40 45
Met Asp Glu Asn Met Trp His Glu Ala Gly Glu Lys Leu Ser His Ala
50 55 60
Val Lys Gln Leu Glu Glu Ser Gln Gly Leu Tyr His Glu Glu Thr Leu
65 70 75 80
Phe Met Lys Thr Asn Leu Ala Tyr Ala Leu Arg Arg Arg Gly Glu Tyr
85 90 95
Gln Glu Ala Glu Arg Met Asp Gln Gln Ala Tyr Ala Val Arg Leu Gln
100 105 110
Val Ser Gly Pro Asp Asn Val Glu Thr Ala Lys Ser Leu Asn Asn Leu
115 120 125
Ala Leu Asp Leu Lys Gly Leu Gly Arg Phe Asp Glu Ala Leu Asp Leu
130 135 140
Glu Glu Arg Ala Leu Glu Thr Phe Leu Lys Ile Asn Gly Glu Gly Ser
145 150 155 160
Arg Glu Thr Gln Thr Ser Met Asn Asn Leu Ala Asn Ser Phe His Arg
165 170 175
His Gly Arg Leu Gln Asp Ala Ala Arg Leu His Glu Arg Ala Leu Ala
180 185 190
Leu Gln Thr Asn Thr Leu Gly Arg Glu His Phe Glu Thr Ile Ile Thr
195 200 205
Met Asp Leu Leu Gly Val Asp Tyr Arg Glu Leu Gly Gln Leu Asp Arg
210 215 220
Ala Leu His Tyr Gln Ser Glu Ala Leu Glu Leu Ser Lys Ala Asn Leu
225 230 235 240
Gly Glu Ala His Ala Thr Thr Ile Arg Cys Ser Ala Asn Leu Ala Thr
245 250 255
Thr Tyr Gln Arg Leu Asp Thr Glu Asp Gly Glu Ala Lys Ala Leu Ala
260 265 270
Leu Leu Glu Gln Ala Leu Thr Leu Ser Arg Arg Thr Phe Gly Glu Asn
275 280 285
Ser Ser Asp Thr Val Pro Val Met Asn Asn Leu Ala Ala Ala Tyr Ala
290 295 300
Arg Glu Gly Arg Phe Ala Asp Ala Val Pro Leu Leu Gln Ser Ala Tyr
305 310 315 320
Ala Trp Asn Gln Arg Thr Leu Gly Pro Asp His Pro Gln Thr Arg Ala
325 330 335
Ser Glu Gly Asn Leu Asn Tyr Val Met Glu Lys Met Gly Leu Thr Arg
340 345 350
Ala Thr Arg Leu His His Glu Ala Gly Arg Thr Arg Leu
355 360 365

<210> 27863
<211> 268
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (110)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27863
Thr Asp Ile Pro His Gly Lys Ser Ile Pro Leu Val Gly Leu Cys Gly
1 5 10 15
Gly Asp Lys Glu Asp Pro Leu Gln Leu Lys Cys Leu Ala Pro Leu Phe
20 25 30
Gln Ala Pro Phe Trp Glu Ala Glu Leu Thr Gly Arg Cys Val Val Tyr
35 40 45
Val Gly Ala Tyr Phe Phe Leu Pro Phe Met Ser Ser Gly Phe Ala Leu
50 55 60
Gly Gln Thr Ile Val Thr Ile Leu Val Cys Arg Ala Leu Leu Ala Leu
65 70 75 80
Leu Gly Cys Val Ala Thr Ile Leu Val Ala Ala Pro Phe Asp Asp Met
85 90 95
Tyr Thr Pro Asn Lys Arg Ala Val Pro Met Pro Thr Phe Xaa Tyr Ile
100 105 110
Ala Ile Phe Gly Thr Val Gly Ala Pro Ile Tyr Ala Gly Phe Ile Asp
115 120 125
Glu Thr Leu Gly Trp Arg Trp Ile Ser Arg Lys Cys Ser Thr Ile Pro
130 135 140
Pro Ser Lys Ala Ile His Ile Leu Ala Thr Lys Pro Ala Leu Leu Gly
145 150 155 160
Phe Gly Leu Trp Phe Ser Leu Ala Trp Phe Leu Thr Ser Ser Ser Ser
165 170 175
Pro Ser Ser Pro Ser Pro Ser Arg Lys Lys Thr Pro Gly Ala Arg Ala
180 185 190
Leu Pro Val Gly Ser Thr Leu Tyr Arg Pro Leu Gln Arg His Asn Leu
195 200 205
Arg Leu Arg Ala Gln Leu Pro Pro Asp Gln Gln Ile Pro Leu His Arg
210 215 220
His Arg Leu Arg Pro Arg Thr Asn Thr Arg Gly Thr Pro Leu Arg Arg
225 230 235 240
Thr Ala Arg Leu Tyr Leu Ala Ala Tyr Arg Thr Val Leu Ser Thr Ala
245 250 255
Ser Arg Ser Ser Arg Ser Tyr Ile Gly Phe Arg Arg
260 265

<210> 27864
<211> 223
<212> PRT
<213> A.fumigatus

<400> 27864
Ala Pro Pro Tyr Thr Pro Ala Ser Ser Thr Lys Pro Ser Val Gly Ala
1 5 10 15
Gly Ser Arg Gly Asn Ala Pro Gln Phe Leu Arg Pro Arg Gln Ser Thr
20 25 30
Tyr Ser Pro Pro Asn Pro Pro Ser Ser Ala Leu Val Cys Gly Leu Val
35 40 45
Ser Pro Gly Ser Ser Pro Pro Leu Pro Leu Arg His Pro His His Leu
50 55 60

```
Pro Gly Lys Lys Arg Leu Glu Arg Gly Arg Cys Arg Ser Val Val Pro
65                  70                  75                  80
Tyr Ile Ala Leu Cys Arg Gly Thr Thr Phe Gly Phe Ala Leu Asn Phe
                85                  90                  95
Pro Gln Ile Ser Lys Tyr Arg Phe Ile Val Thr Asp Ser Ala Arg Glu
            100                 105                 110
Pro Thr Pro Glu Ala Arg Leu Tyr Gly Ala Leu Leu Gly Ser Ile Trp
        115                 120                 125
Gln Pro Ile Gly Leu Phe Tyr Leu Gln Leu His Val Val Gln Gly Ala
    130                 135                 140
Thr Leu Asp Phe Ala Gly Asp Cys Leu Gly Pro Gln Tyr Arg Gly His
145                 150                 155                 160
Phe Leu Tyr Leu Glu Ser Cys Tyr Ser Phe Thr Ser Asp Cys Tyr Arg
                165                 170                 175
Glu Asn Ser Ser Ser Ala Ile Ala Gly Gln Gly Phe Met Arg Asn Thr
            180                 185                 190
Leu Gly Ala Leu Ser Pro Leu Phe Ala Ser Gln Phe Phe Ser Ile Ile
        195                 200                 205
Trp Ala Val Gly Ile Arg Gly Cys Trp Arg Leu Trp Arg Arg Cys
    210                 215                 220
```

<210> 27865
<211> 420
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (49)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27865

```
Gly Asn Leu Ser His Cys Gly Arg Cys Ser Leu Arg Gln Ser Thr Ile
1               5                   10                  15
Gly Leu Leu Ala Ala Arg Arg Pro Gln Glu Arg Asp Leu Tyr Val Glu
            20                  25                  30
Trp Thr Leu Ile Val Pro Ala Arg Cys Ser His Leu Leu Pro His Leu
        35                  40                  45
Xaa Tyr Leu Met Arg Pro Ile Val Val Ala Leu Arg Ala Asp Ser Asp
    50                  55                  60
Phe Val Gly Gln Gly Leu Arg Thr Leu Glu Leu Cys Val Asp Asn Leu
65                  70                  75                  80
Thr Ala Asp Tyr Leu Asp Pro Ile Met Ala Pro Ile Met Asp Glu Leu
                85                  90                  95
Met Thr Ala Leu Trp Asp His Leu Arg Pro His Pro Tyr Asn His Phe
            100                 105                 110
His Ala His Thr Thr Met Arg Ile Leu Gly Lys Leu Gly Gly Arg Asn
        115                 120                 125
Arg Lys Phe Leu Asn His Pro Pro Glu Leu Thr Phe Glu Gln Phe Ser
    130                 135                 140
Asp Asp Ser Pro Ser Phe Asp Ile Lys Leu Ile Gly Pro Ser Glu Lys
145                 150                 155                 160
Arg Pro Phe Pro Ser Ser Ile Gly Val Asp Leu Ala Ile Arg Lys Leu
                165                 170                 175
Met Glu Val Pro Lys Thr Ala Ala Ala Lys Ala Ser Asp Gly Tyr Tyr
            180                 185                 190
```

```
Lys Gln Gln Ala Phe Arg Met Leu Ser Ser Gln Leu Lys Leu Tyr Ile
        195                 200                 205
Gly His Glu Asn Val Pro Glu Asp Leu Ala Ala Leu Leu Arg Leu His
    210                 215                 220
Ala Asn Asp Leu Phe Glu Gly Lys Thr Thr Ala Met Thr Asp Ile Leu
225                 230                 235                 240
Asp Lys Ser Glu Arg Ser Ser Ser Ile Ala Lys Lys Leu Ala Gln Glu
                245                 250                 255
Gly Thr Leu Lys Gln Leu Leu Lys Ala Cys Ile Phe Ala Thr Thr Leu
            260                 265                 270
Pro Asp Ile Glu Gln Ser Ala Thr Ala Phe Val Ala Asp Val Cys Lys
        275                 280                 285
His Phe Ala Val Val Glu Val Gly Arg Ala Leu Ala Leu Ala Arg His
    290                 295                 300
Asn Arg Lys Pro Phe Asp Val His Ser Gly Glu Gly Pro Val Tyr Leu
305                 310                 315                 320
Asp Ser Arg Ile Leu Ala Glu Ala Ile Val Glu Ser Leu Ser Ser Asp
                325                 330                 335
Asn Leu Arg Val Arg Asp Gly Ala Glu Ala Ala Met Gln Val Met Lys
            340                 345                 350
Asp Ala Ala Gly Ile Ile Phe Gly Ala Pro Glu Arg Val Ala Lys Leu
        355                 360                 365
Pro Phe Phe Gln His Leu Gly Arg Val Phe Cys His Ser Cys His Ser
    370                 375                 380
Glu Glu Trp Phe Thr Lys Ala Gly Gly Ser Leu Gly Ile Arg Leu Phe
385                 390                 395                 400
Ala Thr Lys Leu Asp Leu Gly Asp Ser Val Phe Thr Thr Gly Leu Glu
                405                 410                 415
Gly Ala Glu Pro
            420
```

<210> 27866
<211> 550
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5),(486)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 27866
Gln Asn Thr Ser Xaa Trp Tyr Glu Pro Ile Leu Pro Ala Glu Gln Met
1               5                   10                  15
Phe Leu Leu Ser Cys Arg Lys Leu Leu Arg Asp Phe Ile Ile Ser Leu
            20                  25                  30
Ser Ser His Leu Ser Arg Lys Arg Pro Ala Asp Ala Phe Leu Glu Phe
        35                  40                  45
Leu Thr Asn Ser Ser Ser Met Val Ile Val Leu Leu Asn Glu Leu Ser
    50                  55                  60
Ala Ala Phe Gln His Val Glu Gly Arg Leu Thr Pro Glu Asp Ala Val
65                  70                  75                  80
Lys Arg Tyr Leu Asp Leu His Pro Glu Ser Ser Leu Ala Asn Ile Leu
                85                  90                  95
Ser Glu Gln Gln Gln Arg Met Lys Leu Lys Met Val Ala Asp Asp Ile
            100                 105                 110
```

```
Leu Ser Ser Phe Leu Glu Pro Gly Val Tyr Ala Cys Ser Val Leu Arg
        115                 120                 125
Asp Phe Leu Arg Glu Ile Leu Ala Gly Val Val Leu Glu Ser Ala Ile
    130                 135                 140
Ser Asn Leu Ser Arg Ser Glu Thr Ile Asn Gly Trp Ile Ile His Leu
145                 150                 155                 160
Leu Arg Glu Gly Glu Ser Glu Leu Leu Asn Ala Ile Asp Ala Gly Val
                165                 170                 175
Glu Gly Ala Lys Glu Gln Val Val Ala Val Glu Gly Ala Asn Glu Glu
            180                 185                 190
Asn Lys Pro Thr Ala Val Pro Ser Ser Glu Ser Asp Met Glu Gly Lys
        195                 200                 205
Pro Ala Gly His Ser Asp Thr Tyr Gly Ile Leu Pro Thr Thr Lys Val
    210                 215                 220
Ile Glu Val Pro Ile Tyr Pro Pro Gly Gly Thr Thr Val Gln Thr Gln
225                 230                 235                 240
Asp Leu Gln Pro Gln Thr Ala Arg Leu Cys Ser Pro Glu Asp Met Leu
                245                 250                 255
Ser Ser Asp Ala Gln Ser Thr Met Leu Pro His His Ser Pro Val Gly
            260                 265                 270
Ile Gln Asp Lys Glu Ala Thr Ile His Thr Pro Lys Val Lys Asp Ala
        275                 280                 285
Ala Glu Ile Gln Asn Asp Tyr Asp Ser Thr Lys Ile Glu Ser Thr Glu
    290                 295                 300
His Tyr Pro Pro Val Gln Pro Thr Asp Pro Cys Met Ala Pro Pro Ala
305                 310                 315                 320
Ser Arg Leu Pro Asp Phe Gln Ser Lys Lys Ser Pro Ala Thr Thr Leu
                325                 330                 335
His His Ala Ser Val Ser Val Glu Glu Leu Ser Glu Ala Ser Glu Lys
            340                 345                 350
Ala Leu Ile Arg Ser Lys Pro Thr Ser Ser Tyr Leu Ile Gln Ile Glu
        355                 360                 365
Pro Ala Ala Thr Arg Arg Thr Gly Trp Met Ile Phe Arg Asn Tyr Ala
    370                 375                 380
Asp Phe Glu Ser Leu His Gly Thr Leu Gly Thr Ile Ala Arg Leu Asn
385                 390                 395                 400
Lys Ile Gln Asp Phe Thr Glu Ser His Pro Val Leu Pro Pro Trp Lys
                405                 410                 415
Gly Gln Thr Lys Gly Ala Leu Val Arg Asn Leu Glu Arg Tyr Leu Lys
            420                 425                 430
Asp Ala Leu His Tyr Glu Ala Leu Ala Asp Cys Glu Arg Met Lys Arg
        435                 440                 445
Phe Leu Glu Lys Asp Glu Arg Leu Asp Pro Gly Ala Ser Asp Ala Pro
    450                 455                 460
Ala Lys Ser Gly Phe Pro Phe Ala Thr Ser Val Ala Leu Glu Asn Met
465                 470                 475                 480
Gly Lys Gly Met Leu Xaa Val Leu Thr Asn Ala Pro Lys Gly Val Ala
                485                 490                 495
Glu Gly Gly Lys Ala Val Ile Gly Gly Val Thr Gly Val Phe Gly Gly
            500                 505                 510
Ala Asn Gly Lys Lys Thr Ser Phe Asn Ser Lys Gly Tyr Gln Gly Asn
        515                 520                 525
His Gly Arg Ser Leu Ser Thr Arg Ser Thr Ser Gln Met Asn Tyr Gly
    530                 535                 540
Ser Ala Val Ser Asp Gly
545                 550
```

<210> 27867
<211> 135
<212> PRT
<213> A.fumigatus

<400> 27867
Pro Leu Ala Leu Ser Val Arg Ser Phe Ile Ser Ala Phe Gly Gly Ser
1 5 10 15
Ser Arg Lys Glu Asn Ala Gly Gln His His Arg Thr Ala Ser Ala Ser
20 25 30
Ile Thr Leu Gly Asp Pro Pro Ser Arg Phe Glu Thr Pro Ser Pro Asp
35 40 45
Thr Pro Ser Pro Ile Glu Gly Ser Pro Ser Gln Leu Thr Thr Lys Ala
50 55 60
Glu Arg Arg Ile Ser Arg Pro Ala Ser Thr Val Phe Ser His Asn Pro
65 70 75 80
Pro Leu Thr Glu Leu Ser Glu Asp Thr Pro Pro Glu Leu Gln Pro Ile
85 90 95
Phe Thr Tyr Leu Asn Asn His Ala Asn Lys Leu Tyr His Glu Gly Tyr
100 105 110
Phe Leu Lys Leu Asn Asp Leu Asp Thr Arg Met Cys Phe Ala Ser Ser
115 120 125
Val Cys Arg Thr Ser Thr Thr
130 135

<210> 27868
<211> 91
<212> PRT
<213> A.fumigatus

<400> 27868
Val Ser Gly Ser His Pro Ser Asn Pro Arg Cys Gln Arg Lys Thr Leu
1 5 10 15
Pro Gln Thr Gly Ser Met Ala Pro Ser Ile Leu Ser Thr Glu Ser Ser
20 25 30
Ile Ile Val Ile Gly Ala Gly Thr Trp Gly Cys Ser Thr Ala Leu His
35 40 45
Leu Ala Arg Arg Gly Tyr Lys Asp Val Thr Val Leu Asp Pro His Pro
50 55 60
Val Pro Ser Pro Ile Ala Ala Gly Asn Asp Ile Asn Lys Ile Met Glu
65 70 75 80
His Ser Glu Leu Lys Gly Thr Thr Gly Val Ile
85 90

<210> 27869
<211> 67
<212> PRT
<213> A.fumigatus

<400> 27869
Asp Glu Gly Ile Gly Arg Ala Arg Arg Ile Asp Asn Pro Leu Leu Leu
1 5 10 15
Val His Arg Gln Asp Asn Glu Thr Arg Glu Asn Leu Leu Ile Val Leu
20 25 30
Ser Ala Met Leu Ser Ser Ile Gly Ser Cys Tyr Leu Ile Val Val Trp

```
        35                  40                  45
Ser Phe Leu Val Ser Thr Thr Tyr Arg Ile Phe Pro Ser His Glu Gly
    50                  55                  60
Asn Ala Lys
65

<210> 27870
<211> 89
<212> PRT
<213> A.fumigatus

<400> 27870
Glu Leu Thr Trp Val Ser Phe Glu Glu His Ser Asn Met Thr Leu Tyr
1               5                   10                  15
Asn Val Ser Cys Ala Lys Phe Tyr Tyr Thr Ser Thr Asp Tyr Ser Ile
            20                  25                  30
Ser Arg Ile Gly Phe Lys Gly Val Lys Val Gly Val Phe Leu Trp His
        35                  40                  45
Ala Ile Leu Leu Ile Arg Ala Val Ala Ser Leu Thr Leu Asn Leu Gly
    50                  55                  60
Ala Pro Lys Thr Ala Gln Arg Glu Thr Ile Asp Leu Ile Arg Ile Ala
65                  70                  75                  80
Leu Leu Phe Ile Gly Ser Ile Ala Lys
                85

<210> 27871
<211> 558
<212> PRT
<213> A.fumigatus

<400> 27871
His Gly Pro Ser Phe Ser Gln Phe Ala Ser Tyr Tyr Leu Gln Arg Thr
1               5                   10                  15
Tyr Phe Phe Asp Val His Pro Pro Phe Gly Lys Leu Leu Phe Ala Phe
            20                  25                  30
Met Gly Trp Leu Ile Gly Tyr Asp Gly His Phe Leu Phe Asp Asn Ile
        35                  40                  45
Gly Asp Ser Tyr Ile Asp Asn Lys Val Pro Tyr Val Ala Leu Arg Ala
    50                  55                  60
Met Pro Ala Thr Leu Gly Ala Leu Thr Ile Pro Val Val Phe Leu Ile
65                  70                  75                  80
Met Trp Glu Ser Gly Tyr Ser Leu Pro Ala Cys Val Leu Ala Ala Gly
                85                  90                  95
Leu Val Leu Phe Asp Asn Ala His Val Gly Glu Asp Arg Leu Ile Leu
            100                 105                 110
Leu Asp Ala Ser Leu Val Leu Ser Met Ala Leu Ser Ile Leu Cys Tyr
        115                 120                 125
Val Arg Phe Tyr Lys Leu Arg His Glu Pro Phe Gly Arg Lys Trp Trp
    130                 135                 140
Lys Trp Leu Leu Leu Thr Gly Val Ser Leu Ser Cys Val Ile Ser Thr
145                 150                 155                 160
Lys Tyr Val Gly Val Phe Thr Phe Val Thr Ile Gly Ala Ala Val Leu
                165                 170                 175
Val Asp Leu Trp Asn Leu Leu Asp Ile Asn Arg Pro Ser Gly Ala Leu
            180                 185                 190
Ser Met Ala His Trp Thr Lys His Phe Ala Ala Arg Ala Phe Ala Leu
```

```
        195                 200                 205
Ile Ile Val Pro Phe Phe Phe Tyr Leu Phe Trp Phe Gln Val His Phe
    210                 215                 220
Ala Ile Leu Thr Arg Ser Gly Pro Gly Asp Asp Phe Met Thr Pro Glu
225                 230                 235                 240
Phe Gln Glu Thr Leu Ser Asp Asn Leu Met Ser Ala Gln Ser Ile Gly
                245                 250                 255
Ile Gln Tyr Tyr Asp Thr Ile Thr Ile Arg His Lys Asp Thr Lys Val
            260                 265                 270
Phe Leu His Ser His Trp Glu Lys Tyr Pro Leu Arg Tyr Asp Asp Gly
        275                 280                 285
Arg Ile Ser Ser Gln Gly Gln Gln Val Thr Gly Tyr Pro Phe Asn Asp
    290                 295                 300
Thr Asn Asn His Trp Gln Ile Leu Pro Ser Val Pro Tyr Pro Glu Thr
305                 310                 315                 320
Asp Arg Gln Gly His Ser Val Lys Asn Gly Asp Ile Val Gln Leu Arg
                325                 330                 335
His Val Gly Thr Asp Thr Ile Leu Leu Thr His Asp Val Ala Ser Pro
            340                 345                 350
Tyr Tyr Pro Thr Asn Gln Glu Phe Thr Thr Val Ser His Glu Leu Ala
        355                 360                 365
Asn Gly Glu Arg His Asn Asp Thr Leu Phe Glu Ile Lys Ile Glu Asn
    370                 375                 380
Gly Lys Pro Gln Gln Glu Phe Arg Ser Leu Ser Ser His Phe Lys Leu
385                 390                 395                 400
Ile His Val Pro Thr Arg Val Ala Met Trp Thr His Thr Thr Pro Leu
                405                 410                 415
Pro Glu Trp Ala Phe Lys Gln Ala Glu Ile Asn Gly Asn Lys Asn Ile
            420                 425                 430
Leu Gln Thr Ser Asn Leu Trp Phe Val Asp Thr Ile Glu Ser Leu Glu
        435                 440                 445
Glu Asn Ser Pro Arg Ala Ile Lys Lys Glu Arg Gln Val Lys His Leu
    450                 455                 460
Pro Phe Trp Arg Lys Tyr Leu Glu Leu Gln Arg Ala Met Phe Phe His
465                 470                 475                 480
Asn Asn Ala Leu Thr Ser Ser His Pro Tyr Ala Ser Glu Pro Phe Gln
                485                 490                 495
Trp Pro Phe Leu Leu Arg Gly Val Ser Phe Trp Thr Lys Asn Asp Thr
            500                 505                 510
Arg Glu Gln Ile Tyr Phe Leu Gly Asn Pro Ile Gly Trp Trp Ile Ala
        515                 520                 525
Ser Ser Leu Leu Ala Val Phe Val Gly Val Ile Gly Ala Asp Gln Leu
    530                 535                 540
Ser Leu Arg Arg Gly Val Asp Ala Leu Glu Glu Ser Lys His
545                 550                 555
```

<210> 27872
<211> 101
<212> PRT
<213> A.fumigatus

<400> 27872

```
Ser Val Phe Ser Gln Phe Leu Trp Ser Leu His Ile Asn Pro Leu Ala
1               5                   10                  15
Glu Thr Thr Arg Gln Gln Asp Val Asn Ile Tyr Leu Pro Ser Ser Leu
            20                  25                  30
```

```
Lys Thr Glu Thr Leu Lys Thr Ala His Ala Lys Phe Phe Glu Glu Lys
        35                  40                  45
Tyr Lys Gly Gly Phe Arg Asn Ala Arg Asn Arg Leu Gln Asp Tyr Ala
    50                  55                  60
Ser Trp Leu Gln Gly Gln Ala Gly Phe Gly Asn Leu Asp Gln Ala Thr
65                  70                  75                  80
Lys Asp Glu Val Ala Lys Leu Ala Ser Asn Pro Glu Ala His Cys Thr
                85                  90                  95
Glu Ile Trp Pro Leu
            100
```

<210> 27873
<211> 78
<212> PRT
<213> A.fumigatus

<400> 27873

```
Arg Thr Ser Ser Ser Cys Val Leu Leu Leu Tyr Phe Tyr Phe Ile Phe
1               5                   10                  15
Phe Tyr Leu Phe Leu Ala Leu Leu Ala Val Leu Ile Asn Asn Ser Ser
            20                  25                  30
Phe Ile Gly Cys Asn Ser Ser Asp Thr Phe Glu Ser Val Phe Leu Thr
        35                  40                  45
Ser Asn Tyr Ser Met Lys Gly Thr Asn Asn Gly Arg Ile Leu Val Asp
    50                  55                  60
His Leu Ser Val Glu Pro Glu His Leu Ser Phe Thr Phe Leu
65                  70                  75
```

<210> 27874
<211> 163
<212> PRT
<213> A.fumigatus

<400> 27874

```
Gly Leu Tyr Arg Arg Glu Met Lys Glu Thr Thr Arg Ser His Ser Ile
1               5                   10                  15
Ser Asp Ser Asp Lys Ile Pro Ala Ala Ile Pro Ser Leu Trp Glu Thr
            20                  25                  30
Thr Met Gly Phe Pro His Asp Leu Glu Arg Leu Gly Cys Cys Asn Cys
        35                  40                  45
Lys Leu Ala Ala Asp Arg Phe Gln Arg Cys Ile Phe Leu Ser Val Ser
    50                  55                  60
Phe Ser Ser Ser Phe Leu Ile Leu Ile Leu Phe Phe Phe Tyr Phe Leu
65                  70                  75                  80
Phe Phe Tyr Phe Ile Phe Tyr Phe Phe Ile Leu Phe Tyr Phe Phe Phe
                85                  90                  95
Phe Phe Ser Phe Phe Leu Leu Pro Pro Leu Phe Val Ser Leu Val Phe
            100                 105                 110
Val Pro Trp Leu Val Leu Gly Phe Gly Ala Pro Cys Gln Thr Asp Gly
        115                 120                 125
Ser Gly Pro Leu Asp Phe Pro Lys Arg Ile Leu Arg Lys Lys His Pro
    130                 135                 140
His Thr Ser Leu Ser Val Cys Pro Asn Val Met Trp Asp His Cys His
145                 150                 155                 160
Asp Arg Ile
```

<210> 27875
<211> 91
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (78),(81)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27875
Asp Ile Ile Ser Gly Asp Glu Val Leu Ser Asp Asn Phe Lys Ile Lys
1 5 10 15
Glu Val Asp Gly Val Leu Tyr Glu Cys Glu Leu Arg Lys Tyr Leu Lys
20 25 30
Arg Lys Asn Lys Asp Ile Gln Leu Glu Gly Ala Asn Pro Ser Ala Glu
35 40 45
Glu Gly Asp Asp Asp Ala Gly Arg Asp Gly Glu Glu Val Met Val His
50 55 60
Asp Ile Glu Asp Gln Phe Arg Leu Val Trp Leu Lys Asn Xaa Glu Gly
65 70 75 80
Xaa Glu Pro Ser Lys Asp Ala Phe Gln Asn Thr
85 90

<210> 27876
<211> 87
<212> PRT
<213> A.fumigatus

<400> 27876
Val Ala Pro Leu Phe Ser Val Pro Lys Ser Leu Thr Val Asp Val Val
1 5 10 15
Ala Trp Asn Trp Gly Ala Lys Thr Gly Leu Phe Tyr Ala Gly Thr Asn
20 25 30
Leu Leu Cys Asn Val Trp Cys Trp Phe Arg Leu Pro Glu Thr Lys Asp
35 40 45
Arg Thr Phe Gly Glu Ile Asp Leu Leu Phe His His His Val His Ala
50 55 60
Arg Lys Phe Lys His Thr Lys Val Asp Arg Lys Leu Leu Leu Val Tyr
65 70 75 80
Ser Gly Ser Ser Ile Leu Thr
85

<210> 27877
<211> 105
<212> PRT
<213> A.fumigatus

<400> 27877
Arg His Met Ser Gly Leu Ser Phe Met Phe Ala Cys Met Val Ile Ile
1 5 10 15
Gly Gly Leu Gly Phe Ala Glu Gly Asn Lys Gly Ala Gln Leu Ala Ile
20 25 30
Gly Ile Leu Leu Val Ile Cys Thr Leu Cys Asn Met Ile Thr Val Gly
35 40 45

```
Pro Val Cys Tyr Pro Ile Val Ala Glu Thr Pro Ser Gly Arg Leu Arg
    50                  55                  60
Tyr Lys Thr Ile Val Ile Gly Arg Phe Val Tyr Asn Leu Thr Gly Ile
65                  70                  75                  80
Phe Ser Asn Ser Leu Thr Pro Arg Met Ile Ala Ala Ser Cys Glu Leu
                85                  90                  95
His His Ser Leu Val Tyr Arg Asn Arg
            100                 105
```

<210> 27878
<211> 78
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (17),(20),(31),(38)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27878

```
Leu Asn Pro Thr Thr Asn Thr Ser Phe His Leu Ile Tyr Phe Val His
1               5                   10                  15
Xaa Lys Arg Xaa Lys Ser Ala Ile Thr Cys Ile Leu Ile Thr Xaa Lys
            20                  25                  30
Pro Cys Ala Asn Arg Xaa Cys Leu Phe Ala His Arg Val Ile Leu Ser
        35                  40                  45
Leu Asp Glu Asp Pro Leu Phe Ser Pro Thr Ala Thr Ile Ile Ser Pro
    50                  55                  60
Gln Thr Gln Val Phe Pro Thr Arg Arg Asn Gly Phe Ala Asn
65                  70                  75
```

<210> 27879
<211> 190
<212> PRT
<213> A.fumigatus

<400> 27879

```
Leu Thr Arg Glu Leu His Asp Leu Glu Leu Trp Asn Gly Pro Lys Cys
1               5                   10                  15
Gly Ile His Gly Cys Glu Asn Gln Arg Asn Lys Cys Leu Val Gly Gly
            20                  25                  30
Tyr Pro His Asn His Leu His Ser Gly Phe Asn Phe Ala Leu Gln Phe
        35                  40                  45
Val Arg Pro Phe Ser Phe Pro Val Ser Phe Leu Phe Phe Phe Phe Phe
    50                  55                  60
Phe Phe Phe Tyr Gly Arg Thr Thr Ser Lys Ile Pro Leu Lys Phe Ile
65                  70                  75                  80
Leu Phe Leu His Val Glu Val Ser Val Met Val Pro Phe Phe Ser Ser
                85                  90                  95
Leu Ser Pro Cys Val Ser Pro Met Phe Lys Ser Arg Val Met Pro Phe
            100                 105                 110
Met Gly Gly Arg Phe Ser Gly Leu Ala Leu His Ser Asn Ser Ser Leu
        115                 120                 125
Ser Arg Gln Leu Glu Leu Ser Asp Asn Thr Ser Ser His Phe Asp Thr
    130                 135                 140
Tyr Gly Phe Asn Ser Met Ile Arg Tyr Asn Thr Tyr Phe Pro Thr Arg
```

```
145                 150                 155                 160
Val Leu Ser Ala Phe Thr Lys Ala Val His His Lys Phe Ile Thr Thr
                165                 170                 175
Val Glu Pro Asn Lys His Pro Phe Glu Arg Leu Gln Phe Ser
            180                 185                 190
```

<210> 27880
<211> 178
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (17),(23),(30),(32),(50)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27880

```
Leu Thr Thr Pro Phe Ile Pro Asn Glu Leu Asp Gly Val Pro Ala Val
1               5                   10                  15
Xaa Gly Thr Ser Phe Asn Xaa Ile His Phe Leu Ser Asn Xaa Phe Xaa
            20                  25                  30
Pro Tyr Phe Leu Val Thr Ser Lys Ser Ile Leu Glu Gln Leu Asn Ala
        35                  40                  45
Pro Xaa Gly Val Ile Pro Ser Leu Asp Glu Leu Lys Asp Gly Trp Lys
    50                  55                  60
Pro Val Ala Leu Lys Gly Gly His Lys Ile Gly Lys Ala Lys Tyr Leu
65                  70                  75                  80
Phe Ser Arg Ile Asp Pro Lys Lys Ala Asp Glu Trp Arg Glu Leu Phe
                85                  90                  95
Gly Gly Ser Gln Ala Asp Arg Gln Lys Lys Glu Asp Glu Ala Ala Lys
            100                 105                 110
Ala Ala Ala Lys Lys Ala Ala Asn Lys Ala Ser Lys Leu Lys Lys Lys
        115                 120                 125
Glu Lys Lys Ala Ala Gln Ala Ala Gly Thr Ser Val Glu Ala Ser Ala
    130                 135                 140
Lys Gly Gly Ala Glu Val Ile Asp Thr Thr Thr Glu Gly Lys Asn Asp
145                 150                 155                 160
Glu Ala Val Glu Lys Val Val Asp Gly Met Ala Gln Val Thr Ile Pro
                165                 170                 175
Thr Ser
```

<210> 27881
<211> 60
<212> PRT
<213> A.fumigatus

<400> 27881

```
Val Leu Arg Arg His Gln Met Phe Ser Val Cys Thr Glu Glu Ser Leu
1               5                   10                  15
Pro Trp Arg Leu Pro Ala Ala Thr Val Leu Glu Met Ile Tyr Lys Ile
            20                  25                  30
Ala Val Cys Arg Val Val Ser Thr Cys Pro Ile Val Thr Pro Tyr Tyr
        35                  40                  45
Pro Val Lys Glu Asp Ile Val Ser Leu Thr Ile Trp
    50                  55                  60
```

<210> 27882
<211> 134
<212> PRT
<213> A.fumigatus

<400> 27882
Phe Ala Tyr Thr Ala Ser Lys Thr Phe Val Ser Tyr Thr Ala Phe Pro
1 5 10 15
Pro Ser Pro Ala Leu Val Val Cys Leu Ile Ile Pro Gly Thr Cys Cys
20 25 30
Thr Gly Asn Leu Asn His Phe Tyr Cys Leu Ser Ser Val Cys Leu Ile
35 40 45
Val Gly Val His Ser Phe Phe Thr Thr Tyr Arg Ala Ser His Asp Arg
50 55 60
Arg Lys Gln Lys Arg Lys Gly Leu Thr Val Arg Met Ser Leu Phe Gly
65 70 75 80
Asn Val Gly Ala Thr Ser Thr Thr Ala Gly Gln Thr Asn Thr Thr Gly
85 90 95
Asp Ile Ser Lys Asp Val Pro Leu Ser Ser Pro Pro Glu Asp Gly Ile
100 105 110
Ser Asp Leu Arg Phe Ser Leu Ala Ser Glu His Leu Ala Val Pro Ser
115 120 125
Trp Glu Gln Lys Val Arg
130

<210> 27883
<211> 103
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (63),(79),(93),(94),(99)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27883
Asn Tyr Phe Cys Ala Gln Phe Gln Thr Glu Ser Ala Arg Ser Ala Leu
1 5 10 15
Ser Ser Phe Thr Cys Thr Leu Cys Asn Lys Ser Tyr Ser Arg His Pro
20 25 30
Glu Tyr Glu Ala His Ile Ser Ser Tyr Asp His Gln His Arg Lys Arg
35 40 45
Leu Gln Asp Leu Lys Gln Leu Ser Arg Asp Pro Asn Ala Ala Xaa Lys
50 55 60
Ala Arg Lys Ala Glu Arg Lys Ala Asn Ala Lys Ala Gly Leu Xaa Val
65 70 75 80
Ile Gly Asp Asp Ser Arg Ile Arg Asn Arg Gly Ala Xaa Xaa Trp Gly
85 90 95
Arg Gly Xaa Lys Ile Gly Lys
100

<210> 27884
<211> 497
<212> PRT
<213> A.fumigatus

<400> 27884

```
Gly Gln Lys Ile Pro Ser Asp Asp Ala Phe Arg Leu Arg His Asn Gly
1               5                  10                  15
Ile Cys Glu Val Cys Gly Ile Glu Gly Asp Asp Gly Leu Arg Gly Pro
            20                  25                  30
Leu Val Phe Cys Gln Gly Cys Thr Ser Ala Tyr His Gln Ala Cys Leu
        35                  40                  45
Gly Pro Arg Ser Asn Arg Asp His Leu Val Thr Lys Val Ala Asp Glu
    50                  55                  60
Gln Phe Val Leu Gln Cys Arg Arg Cys Ile Gly Val Ser His Ala Lys
65                  70                  75                  80
Asp Pro Ile Ser Pro His Gln Gly Cys Cys Met Lys Cys Asn Asn Gln
                85                  90                  95
Gly Lys Met Ser Lys Pro Leu Arg Glu Arg Leu Thr Pro Lys Gln Glu
            100                 105                 110
Gln Gln Ile Arg Gln Asp Asn Gly Gly Lys Asp Pro Ile Thr Pro Val
        115                 120                 125
Gly Met Thr Thr Val Asn Asn Val Asp Asn Val Leu Phe Arg Cys Thr
    130                 135                 140
Ala Cys His Arg Ala Phe His Phe Glu His Leu Pro Pro Ile Ser Asp
145                 150                 155                 160
Met Thr Asp Asp Pro Ala Thr Ala Arg Phe Glu Glu Tyr Ser Tyr Thr
                165                 170                 175
Trp Lys Cys His Asp Cys Ser Ser Val Pro Ala Glu Ile Gly Ala Val
            180                 185                 190
Val Ala Trp Arg Pro Ala Asp Pro Gln Asn His Val Ala Gly Tyr Thr
        195                 200                 205
Ala Asp Gly Val Asn Glu Ala Asp Lys Glu Tyr Leu Ile Lys Trp Lys
    210                 215                 220
Gly His Ser Tyr His His Thr Ser Trp Met Pro Gly Ser Trp Val Trp
225                 230                 235                 240
Gly Ile Val Ser Pro Ser Met Arg Arg Ala Phe Phe Arg Ser Glu Lys
                245                 250                 255
Asn Phe Gln Pro His Met Thr Ile Glu Glu Ala Ile Pro Glu Asp Phe
            260                 265                 270
Leu Arg Val Asp Ile Val Phe Gln Val Cys Tyr Ser Glu Glu Val Glu
        275                 280                 285
Glu Arg Ser Leu Glu Ser Asp Leu Gln Arg Ile His Lys Val Thr Arg
    290                 295                 300
Ala Tyr Met Lys Phe Lys Gly Leu Pro Tyr Glu Glu Ala Glu Trp Asp
305                 310                 315                 320
Ser Pro Pro Asp Pro Ser Gln Thr Glu Arg Trp Asn Asp Phe Lys Ala
                325                 330                 335
Ala Tyr Asp Asp Trp Val Lys Arg Asp Tyr Ile Tyr Met Pro Glu Pro
            340                 345                 350
Lys Ala Leu Gln Lys His Leu Ala His Ile Arg Glu Gln Asn Phe Glu
        355                 360                 365
Ser Gln Ile Val Arg Asp Thr Gln Pro Glu Thr Met Thr Gly Gly Gln
    370                 375                 380
Leu Met Asp Tyr Gln Lys Asp Gly Val Asn Trp Leu Tyr Tyr Met Trp
385                 390                 395                 400
Phe Lys Gln Gln Asn Ala Ile Leu Ala Asp Glu Met Gly Leu Gly Lys
                405                 410                 415
Thr Ile Gln Val Ile Gly Phe Phe Ala Thr Leu Ser Pro Tyr His Lys
            420                 425                 430
```

```
Cys Trp Pro Phe Leu Val Val Val Pro Lys Ser Asn Leu Phe Gln Ile
        435                 440                 445
Gly Ala Arg Lys Ser Ser His Gly Val Pro Pro Thr Arg Val Arg His
    450                 455                 460
Phe Phe Thr Val His His Ser Pro Gly Lys Phe Gly Pro Trp Ile Thr
465                 470                 475                 480
Asn Leu Phe Pro Pro Trp Leu Glu Pro Arg Phe Phe Arg Met Ser Gly
                485                 490                 495
Cys
```

<210> 27885
<211> 69
<212> PRT
<213> A.fumigatus

<400> 27885

```
Asp Phe Trp His Ile Ser Phe Thr Met Gly Lys Lys Arg Arg Gly Pro
1               5                   10                  15
Thr Leu Glu Glu Leu Leu Ala Arg Pro Trp Cys Tyr Tyr Cys Glu Arg
            20                  25                  30
Asp Phe Asp Asp Leu Lys Ile Leu Ile Ser His Gln Lys Ala Lys His
        35                  40                  45
Phe Lys Cys Asp Arg Cys Ser Arg Arg Leu Asn Thr Ala Gly Gly Glu
    50                  55                  60
Ser Val Gln His Met
65
```

<210> 27886
<211> 199
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (45),(95)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27886

```
Ser Asp Val Lys Pro Cys Asp Arg Tyr Ser Gln Ser His Gly His Val
1               5                   10                  15
Thr Ala Gly Ala Gly Asp Phe Ala Pro Glu His Glu Ser Glu Tyr Val
            20                  25                  30
Gln His Asp Asn Thr Gly Tyr Gly Ala Phe Arg Ser Xaa Tyr Thr Tyr
        35                  40                  45
Thr Thr Asn Thr Ser Phe Gly Ser Leu Ala Gly Glu His Ser Gln Leu
    50                  55                  60
Thr Asn Asp Ile Thr Gly Ser Pro Gln Gln Asn Gly Ser Gly Arg Met
65                  70                  75                  80
Thr Pro Arg Thr Gly Gly Gly Pro Pro Pro Gln Trp Ala Ser Xaa Tyr
                85                  90                  95
Ala Ser Pro Arg Pro Thr Ala Ala Ser Ser Leu Tyr Asn Ile Val Ser
            100                 105                 110
Asp Thr Arg Gly Ser Ser Asn Gly Ala Gly Ser Glu Lys Tyr Thr Val
        115                 120                 125
Ala Ser Asn Thr Ala Pro Thr Tyr Ser Met Gly Gly Ser Leu Gly Ser
```

```
    130                 135                 140
Gly Lys Arg Gly Arg Glu Asp Asp Asp Met Gly Arg Pro Asp Ser Gln
145                 150                 155                 160
Gly Asp Tyr Glu Ser Lys Arg Arg Arg Thr Asn Glu Thr Thr Val Gly
                165                 170                 175
Gly Pro Val Gly Gly Val Leu Leu Gly Leu Gln Pro Met Lys Ala Gly
            180                 185                 190
Gly Ala Met Pro Arg Arg Arg
        195
```

<210> 27887
<211> 76
<212> PRT
<213> A.fumigatus

<400> 27887
```
Lys Thr Ala Thr Pro Ala Asp Ile Asp His Glu Tyr Met Glu Ile Val
1               5                   10                  15
Ala Ser Ser Gln Glu Ser Lys Pro Ser Ser Pro Ile Glu Phe Val Lys
            20                  25                  30
Ile Leu Ile Gly Lys Gly Gly Arg Pro Gly Ser Asn Leu Gly Arg Arg
        35                  40                  45
Ala Trp Leu Cys Val Trp Leu Gln Ile Met Ala Ser Trp Thr Gly Ile
    50                  55                  60
Thr Val Ser Leu Cys Val Pro Gln Glu Val Leu Gly
65                  70                  75
```

<210> 27888
<211> 267
<212> PRT
<213> A.fumigatus

<400> 27888
```
Lys Leu Thr Met Ile Thr Gly Cys Tyr Arg Val Phe Ser Arg Ala Ser
1               5                   10                  15
Gln Pro Ser Arg Val Gln Arg Gly Asp Ser Lys Arg Ser Arg Arg Arg
            20                  25                  30
Thr Glu His Asp Arg Tyr Cys Arg His Asp His Gln Cys Ala Asp Cys
        35                  40                  45
Arg Ser Thr Arg Pro Glu Lys Val Ser Asp Ala Arg Val His Gly Pro
    50                  55                  60
Val Cys Cys Arg Ala Cys Gly Lys Ser Pro Pro Trp Pro Ser Asn Leu
65                  70                  75                  80
Leu Arg Ala Gly Leu Ile Lys Ser Ser Leu Gln Ala Gly Gly Val Tyr
                85                  90                  95
Glu Gly Ser Leu Gln Asn Pro Ser Lys Ala Ala Gln Tyr Ala Pro Ala
            100                 105                 110
Ala Val Ala Met Leu Phe Leu Phe Asn Leu Gly Tyr Ala Ala Thr Trp
        115                 120                 125
Gly Thr Val Ala Phe Leu Val Pro Thr Glu Ile Phe Pro Ser Asp Leu
    130                 135                 140
Arg Ala Gln Gly Asn Gly Phe Gly Ile Thr Gly Trp Ala Ile Gly Val
145                 150                 155                 160
Gly Met Thr Thr Leu Val Asn Pro Ile Met Phe Gly Ser Leu Lys Ser
                165                 170                 175
Arg Ser Tyr Phe Leu Leu Ser Gly Leu Asn Leu Leu Trp Ile Pro Ile
```

```
            180                 185                 190
Val Tyr Leu Leu Tyr Pro Glu Thr Cys Asn Arg Ser Leu Glu Ser Ile
        195                 200                 205
Asp Ala Leu Phe Ser Thr Pro Ser Pro Phe Tyr Trp Asp Met Glu Arg
    210                 215                 220
Ala Tyr Lys Leu His Ser Asp Val Leu Ala Glu Arg Ala Ala Arg Lys
225                 230                 235                 240
Leu Thr Asp Glu Asp Ala Thr Lys Ala Asp Gly His Glu Ser Ala His
                245                 250                 255
Glu Glu Phe His Gly Ala Thr Thr Val Gly Val
            260                 265
```

<210> 27889
<211> 76
<212> PRT
<213> A.fumigatus

```
<400> 27889
Ser Gln Ala Val Thr Ala Tyr Ser Pro Val Leu Leu Ser Gln Ala Gly
1               5                   10                  15
Tyr Ser Glu Val Thr Gln Asn Gly Leu Ala Gly Gly Leu Asn Thr Ile
            20                  25                  30
Gly Ile Val Gly Thr Ile Ile Ser Ala Gln Ile Val Asp Arg Leu Gly
        35                  40                  45
Arg Arg Lys Cys Leu Met Leu Gly Ser Met Val Leu Phe Ala Val Glu
    50                  55                  60
Leu Val Val Ser Leu Arg His Gly Arg Pro Thr Phe
65                  70                  75
```

<210> 27890
<211> 60
<212> PRT
<213> A.fumigatus

```
<400> 27890
Phe Ile Arg Ala Asn Thr Thr Ser Pro Gln Arg Arg Thr Gln Tyr Asp
1               5                   10                  15
Leu Ser Trp Arg Ser Pro Ser Gln Pro Asp Ile Asp His Pro Arg Arg
            20                  25                  30
Arg Asn Cys Arg Ile Asn Ser Cys Leu Ala Cys Arg Gln Arg Lys Leu
        35                  40                  45
Lys Cys Asn Arg Gln Gln Pro Cys Ala Asn Cys Ala
    50                  55                  60
```

<210> 27891
<211> 62
<212> PRT
<213> A.fumigatus

```
<400> 27891
Asp Thr Glu Val Thr Lys Ser Thr Lys Pro Gly Ser Gly Ser Pro Glu
1               5                   10                  15
Glu Asp Val Asp Asp Met Leu Val Ala Ser Leu Glu Leu Thr Leu Leu
            20                  25                  30
Gly Ile Gln Asp Ala Ala Tyr Asp His Glu Glu Asp Asp Asp Ser Asp
        35                  40                  45
```

```
Asp Asp Leu Tyr Asp Leu Gly Phe Arg Phe Gly Lys Cys Ala
    50                  55                  60

<210> 27892
<211> 212
<212> PRT
<213> A.fumigatus

<400> 27892
Pro Met Leu Asp Phe Pro Phe Pro Met Tyr Gly Ser Tyr Asp Ala Leu
1               5                  10                  15
Gly Leu Asp Gly Phe Ser Cys Met Asp Arg Tyr Thr Arg Phe Gly Ala
            20                  25                  30
Tyr Gly Tyr Ser Gly Thr Asp Ser Gln Leu Gln Gly Ala Arg Pro Leu
        35                  40                  45
Pro Pro Val Asp Trp Lys Lys Val Asn Trp Arg Thr Leu Gln Glu Glu
    50                  55                  60
Cys Phe Glu Arg Asn Ser Asp Arg Tyr Glu Ser Ala Gln Gln Ser Leu
65                  70                  75                  80
Ser Met His Ser Leu Pro Leu Thr Ser Val Ser His Glu Thr Leu Pro
                85                  90                  95
Arg Tyr Ser Arg Leu Asp Gln Ser Leu Pro Gln Phe Lys Pro Arg Ser
            100                 105                 110
Ala Val Ile Leu Arg Ala Trp His Asp Met Pro Trp Thr Glu Asn Met
        115                 120                 125
Lys His Tyr Val Arg Ser Leu Val Met Glu Leu Ser Leu His Thr Gly
    130                 135                 140
Ser Glu Tyr Gln Val Phe Ile Leu Thr His Val Lys Asp Asn Asn Ile
145                 150                 155                 160
Pro Ile Tyr Ala Val Asn Gly Asp Asp Asn Ala Gln Arg Leu Lys Glu
                165                 170                 175
Lys Tyr Met Pro Lys Glu Phe His Asp Met Thr Ile Leu Phe Asn Asp
            180                 185                 190
His Thr Leu Glu Ser Trp Tyr Pro Ala Ile Glu Glu His Arg Tyr Val
        195                 200                 205
Leu Ala Thr Pro
    210

<210> 27893
<211> 66
<212> PRT
<213> A.fumigatus

<400> 27893
Asp Ala Ala Ser Arg Ser Gly Asp Ala Leu Met Gly Pro Cys Phe Gly
1               5                  10                  15
Phe Ser Asp Ser Gln Arg Thr Ser Thr Ser Ile Glu Asp Tyr Gly Asn
            20                  25                  30
Gly Ser Cys Val Gln Lys Arg Ala Arg Ser Leu Phe Lys Arg Cys Thr
        35                  40                  45
Arg Asn Thr Gly Gly Gln Thr Ala Ile Gly Ala Ser Thr Tyr Cys Phe
    50                  55                  60
Ala Glu
65

<210> 27894
```

<211> 101
<212> PRT
<213> A.fumigatus

<400> 27894
Leu Ala Asn Ser Ser Pro Ser Ser Ile Arg Ser Ser Lys Gln Tyr Leu
1 5 10 15
Asn Asp Leu Phe Lys Thr Ser Ser Ser Pro Val Val Ala Ser Ala Pro
20 25 30
Ser Ser Ser Ser Ser Ser Ser Pro Thr Ala Thr Thr Thr Leu Ala Leu
35 40 45
Pro Ser Arg Gly Ile Val Ala His Leu Ser Lys Leu Val Asp Gly His
50 55 60
Gln Cys Arg Leu Pro Gln Gln Arg His Ile Gln Leu Thr Leu Glu Ser
65 70 75 80
Pro Val Trp Thr Met Glu Met Asn Lys Gln Lys Thr Arg Arg Cys Val
85 90 95
Ser Tyr Ser Arg Pro
100

<210> 27895
<211> 373
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (251)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27895
Arg Val Ser Ser Tyr Arg Pro Ser Phe Leu Phe His Phe Ile Ser Val
1 5 10 15
Pro Arg Cys Arg Thr Thr Arg Pro Arg Ser Thr Pro Ala Cys Ser Val
20 25 30
Ile Pro Met Asp Asp Leu His Gln His Ile Thr Pro Arg Gly His Gly
35 40 45
Ile Asn Thr Thr Tyr Val Tyr Glu Tyr Ser Arg Gly Leu Gly Gly Val
50 55 60
Asn Val Pro Arg Asp Val Ile Ile Thr Arg Ile Ile Tyr Trp Ser Val
65 70 75 80
Ile Ile Gly Ala Leu Ala Val Phe Cys Gly Arg Ile Ala Gln Ile Ser
85 90 95
His Ala Tyr Leu Arg His Val Thr Ser Leu Thr Ala Ser Gln Arg Gln
100 105 110
Gln Met Phe Trp Ser Val Glu Glu Ser Arg Leu Trp Ala Asn Ile Lys
115 120 125
Lys His Leu Leu Tyr Ala Pro Leu Gly Arg Lys Arg His Asn Arg Glu
130 135 140
Ile Gln Leu Ser Ser Ala Ile Asn Val Gly Thr Leu Pro Ser Arg Phe
145 150 155 160
His Ser Ile Leu Ile Leu Leu Tyr Val Ala Ser Gln Val Ala Tyr Cys
165 170 175
Cys Phe Leu Asp Tyr Ala Val Asn Glu Lys Ala Ala Leu Val Ala Glu
180 185 190
Leu Arg Gly Arg Ser Gly Thr Leu Ala Val Leu Asn Met Val Pro Leu

```
        195                 200                 205
Phe Ile Leu Ala Gly Arg Asn Asn Pro Leu Ile Pro Leu Leu His Ile
    210                 215                 220
Ser Phe Asp Thr Tyr Asn Leu Leu His Arg Trp Leu Gly Arg Ile Val
225                 230                 235                 240
Val Leu Glu Ser Val Val His Thr Ala Ala Xaa Ala Val Asn Ala Cys
                245                 250                 255
Asp Glu Glu Asp Phe Ser Arg Met Leu Val Arg Leu Thr Gly Asp Pro
            260                 265                 270
Phe Phe Thr Trp Gly Phe Val Gly Thr Val Ala Met Val Phe Leu Cys
        275                 280                 285
Pro Pro Ile Pro Leu Ala Arg Ser Ala Cys Phe Leu Arg Asp Leu Pro
    290                 295                 300
Thr Ser Ala Ser Ala Cys Arg Ala Pro Gly Pro Pro Ser Ala Ser Met
305                 310                 315                 320
Phe Thr Leu Asp Leu Asp Lys Leu Pro Pro Asp Pro Leu Gly Pro Gly
                325                 330                 335
His Trp Arg Phe Leu Ala Val Arg Thr Ile Ser Ala Ala Val Pro Leu
            340                 345                 350
Ala Val Pro Gln Leu Phe Thr Gln Lys Gly Leu Asn Gln Thr Gly Arg
        355                 360                 365
Arg Ser Val Ala Arg
    370
```

<210> 27896
<211> 182
<212> PRT
<213> A.fumigatus

<400> 27896

```
Pro Leu Gln Gly Asp Leu Pro Leu Ala Glu Ala Cys Pro His Gln Pro
1               5                   10                  15
Trp Arg Ser Arg Leu Arg Leu His Pro Glu Arg Leu Pro Leu Asp Val
            20                  25                  30
Ala Pro Leu Leu Asn Arg Leu Gly Arg Thr Lys Gln Leu Arg Asp Ser
        35                  40                  45
Phe Ser Arg Ala Arg Gln Arg Asn Glu Ser His Asp Ala Val Thr Pro
    50                  55                  60
Gly Lys Ala Glu Pro Ser Ala Leu Gly Arg Val His Glu Gly His Ser
65                  70                  75                  80
Thr His Leu Arg Leu Ser His Arg Arg Arg Pro Pro Arg His Asp Pro
                85                  90                  95
Gln Ala Leu Gln Gln Ser Pro Arg Arg Pro Ala Ala Asp Pro Leu His
            100                 105                 110
His Gly Leu His Arg Gly Pro Leu Leu Leu Pro Arg Val Gln His Gly
        115                 120                 125
Gln Leu Arg His Gly Arg Pro Leu Leu Cys Trp Arg Arg His His Thr
    130                 135                 140
Pro His Ala Leu Arg Ala Arg Pro His His Pro Arg Leu Arg Gly Pro
145                 150                 155                 160
Arg Arg Asn Pro Ala Asp Leu Pro His Leu Val Arg Pro Gln His Arg
                165                 170                 175
Thr Pro His Leu Gly Pro
            180
```

<210> 27897

<211> 344
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (11)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27897
Tyr Ser Arg Ala Trp Ser Thr Gln Arg Leu Xaa Gln Ser Met Pro Ala
1 5 10 15
Met Lys Lys Thr Ser Leu Ala Cys Trp Tyr Asp Ser Pro Val Thr Pro
20 25 30
Ser Ser Pro Gly Gly Leu Leu Glu Pro Leu Arg Trp Ser Ser Cys Ala
35 40 45
Leu Gln Ser Pro Ser Pro Asp Pro His Ala Phe Tyr Glu Thr Phe Leu
50 55 60
His Leu His Gln Leu Ala Ala Leu Leu Ala Leu Pro Arg Arg Leu Cys
65 70 75 80
Ser Pro Trp Thr Trp Thr Ser Phe Pro Gln Ile Pro Leu Ala Leu Ala
85 90 95
Ile Gly Ala Phe Trp Leu Phe Glu Arg Ser Ala Arg Leu Phe Arg Leu
100 105 110
Leu Tyr Leu Asn Phe Ser Leu Lys Lys Gly Ser Thr Lys Leu Val Val
115 120 125
Glu Ala Leu Pro Gly Asp Pro Cys Lys Val Thr Phe His Leu Pro Lys
130 135 140
His Val Arg Ile Asn Pro Gly Gly His Val Tyr Ala Tyr Ile Pro Ser
145 150 155 160
Val Ser Leu Trp Met Ser His Pro Phe Ser Ile Ala Trp Val Glu Pro
165 170 175
Asn Ser Cys Val Thr Pro Ser Ala Ala Pro Asp Asn Val Met Ser Pro
180 185 190
Met Thr Pro Ser Leu Leu Glu Lys Gln Asn Pro Leu His Leu Asp Glu
195 200 205
Tyr Met Arg Gly Thr Gln Pro Thr Ser Val Ser Leu Ile Val Gly Ala
210 215 220
Arg Gln Gly Met Thr Arg Lys Leu Tyr Asn Lys Ala Leu Ala Ala Pro
225 230 235 240
Gln Gln Thr Leu Tyr Thr Thr Gly Tyr Ile Glu Gly Pro Tyr Ser Ser
245 250 255
His Ala Ser Asn Met Gly Ser Tyr Gly Thr Val Val Leu Phe Ser Ala
260 265 270
Gly Ala Gly Ile Thr His His Met Leu Phe Val Arg Asp Leu Ile Ile
275 280 285
Arg Ala Ser Glu Gly Arg Val Ala Thr Gln Gln Ile Tyr Leu Ile Trp
290 295 300
Ser Val Arg Asn Thr Glu His Leu Thr Trp Val Arg Asp Trp Met Asp
305 310 315 320
Gln Ile Leu Arg Leu Pro Gly Val Phe Thr Thr Gly Leu Glu Gly Ser
325 330 335
Asp Gly Gly Ala Ser Asn Gln Ala
340

<210> 27898

<211> 170
<212> PRT
<213> A.fumigatus

<400> 27898
His Pro Ala Pro Pro Glu Pro Ser Ala His Ser Tyr Ser Thr Phe Ser
1 5 10 15
Pro Leu Pro Tyr Leu Leu Phe Pro Ala Pro Leu Arg Pro Pro Leu Pro
20 25 30
Thr Pro Pro Pro Pro Gly Pro Thr Ile Met Thr Tyr Tyr Pro Ser Phe
35 40 45
Thr Ala Leu Ser Phe Pro Ser Leu Pro Ser Ser Thr Pro Pro Ser Ser
50 55 60
Leu Ile Tyr Glu Leu Arg Thr Asp Tyr His Pro Ile Ser Leu Thr Ser
65 70 75 80
Leu Pro Ile Leu Tyr Ser Arg Pro Tyr Leu Val Arg Ser His Phe Ala
85 90 95
Thr Phe Ser His Tyr Pro Leu Phe Leu Leu Pro Thr Ala Pro Tyr Arg
100 105 110
Arg Tyr Val Gln Cys His His Cys Ile Val Pro Pro Ser Leu Ala Leu
115 120 125
Arg Pro Val Ser Leu Phe Pro Thr Leu Leu Thr Leu Leu Thr Ile Ala
130 135 140
Cys Tyr Leu Ser Leu His Ala Met His Ala Ser Leu Leu Tyr Arg Ser
145 150 155 160
Leu Ala Ile Leu His Val Ser Ile Phe Arg
165 170

<210> 27899
<211> 191
<212> PRT
<213> A.fumigatus

<400> 27899
Arg Arg Pro Ile Gln Phe Gln Ala Leu Ala Arg Lys Ile Leu Asp Thr
1 5 10 15
Val Leu Pro Pro Ile Gly Gly Phe Lys Thr Val Gly Ala Pro Ala Pro
20 25 30
Ala Pro Ala Arg Pro Ile Gly Glu Lys Lys Ala Pro Pro Pro Ile Lys
35 40 45
Val Thr Gly Pro Pro Lys Pro Asn Pro Ser Asn Ala Arg Ala Ala Ser
50 55 60
Pro Val Val Ala Arg Ala Leu Glu Ile Leu Ala Ala Glu Val Gly Leu
65 70 75 80
Ser Glu Ala Glu Met Thr Asp Ser Leu Asn Phe Ala Asp Tyr Gly Val
85 90 95
Asp Ser Leu Leu Ser Leu Thr Val Thr Gly Arg Tyr Arg Glu Glu Leu
100 105 110
Asn Leu Asp Leu Glu Ser Ser Val Phe Met Asp Tyr Pro Thr Ile Lys
115 120 125
Asp Phe Lys Ala Tyr Leu Ala Glu Lys Gly Phe Cys Asp Ser Ser Ser
130 135 140
Pro Glu Pro Ser Ser Glu Pro Glu Ser Lys Phe Ser Phe Asn Ser Asp
145 150 155 160
Ala Ser Ser Glu Ala Ser Ser Gly Leu Thr Thr Pro Gly Ile Thr Ser
165 170 175

```
Pro Val Lys His Glu Ala Pro Lys Gly Gly Gln Ser Ser Arg Arg
            180                 185                 190

<210> 27900
<211> 254
<212> PRT
<213> A.fumigatus

<400> 27900
Gly Arg Gly Pro Ser Ser Pro Val Ala Lys Arg His Leu Ile Thr Glu
1               5                  10                  15
Tyr Lys Pro Glu Tyr Gln Gly Leu Gly Leu Asp Val Cys Asp Met Thr
            20                  25                  30
Val Pro Lys Pro Leu Ile Ala Lys Ser Gly Asp Gln Phe Phe Arg Val
        35                  40                  45
Ser Ala Val Met Ser Trp Ala Glu Gln Lys Ala Ser Val Gln Val Trp
    50                  55                  60
Ser Val Asn Gly Asp Gly Lys Lys Met Ala Glu His Ala His Cys Thr
65                  70                  75                  80
Val Lys Leu Phe Asn Cys Ala Glu Arg Glu Thr Glu Trp Lys Arg Asn
                85                  90                  95
Ser Tyr Leu Ile Lys Arg Ser Val Ser Leu Leu Gln Asp Lys Ala Gln
            100                 105                 110
Thr Gly Glu Ala His Arg Met Gln Arg Gly Met Val Tyr Lys Leu Phe
        115                 120                 125
Ala Ala Leu Val Asp Tyr Asp Glu Asn Phe Lys Ala Ile Gln Glu Val
    130                 135                 140
Ile Leu Asp Ser Asn Glu His Glu Ala Thr Ala Arg Val Lys Phe Gln
145                 150                 155                 160
Ala Pro Pro Gly Asn Phe His Arg Asn Pro Phe Trp Ile Asp Ser Phe
                165                 170                 175
Gly His Leu Ser Gly Phe Ile Met Asn Ala Ser Asp Ala Thr Asp Ser
            180                 185                 190
Lys Asn Gln Val Phe Val Asn His Gly Trp Asp Ser Met Arg Cys Leu
        195                 200                 205
Lys Lys Phe Ser Gly Asp Ala Thr Tyr Gln Thr Tyr Val Lys Met Gln
    210                 215                 220
Pro Trp Lys Asp Ser Ile Trp Ala Gly Asp Val Tyr Val Phe Glu Gly
225                 230                 235                 240
Asp Asp Ile Ile Ala Val Tyr Gly Gly Val Lys Val Cys Leu
                245                 250

<210> 27901
<211> 228
<212> PRT
<213> A.fumigatus

<400> 27901
Ala Pro His Pro Pro Thr Gly Gln Pro Ala Val Phe Gln Pro Arg Gly
1               5                  10                  15
Glu Asp Gly Arg Pro Ser Ser Ala His Ser Ala Gln Gly Pro Ser Leu
            20                  25                  30
Pro Ser Pro Ile Gln Asn Arg Pro Ser Met Ser Pro Thr Gln Gly Asn
        35                  40                  45
His Asp Val Gly Pro Leu Ala Gly Phe Pro Pro Thr Gly Pro Ser Asp
    50                  55                  60
```

```
Gly Ser Ala Pro Trp Thr Pro Phe Gly Pro His Arg Ala Ala Leu Trp
65                  70                  75                  80
Pro Asp Val Gly Asn Asn Ser Ser Leu Ser Ser Ile His Ser Gly Arg
                85                  90                  95
Pro Ser Phe Ser Ala Glu Thr Pro Ser Gly Ser Arg Ser Ser Pro Pro
            100                 105                 110
Gln Ser Ser His Gly Val Pro Phe Ser Gly Ile Ser Pro Thr Lys Gln
        115                 120                 125
Ser Pro Arg Pro Met Thr Ser Gly Ser Leu Ser Gly Ala Pro Ile Leu
    130                 135                 140
Pro Pro Ile Gln Lys Leu Glu Pro Ser Pro Lys Leu Met Gly Arg Ser
145                 150                 155                 160
Ser Pro Asp Ala Pro Ile Pro Pro Pro Val Lys Ser Met Thr Pro Glu
                165                 170                 175
Gln Glu Glu Arg Arg Gln Arg Glu Asn Ala Leu Met Phe Gln Ser Gln
            180                 185                 190
Pro His Ser Leu Ser Asn Gly Gln Tyr Ser Ala Met Ser Ser Pro Ser
        195                 200                 205
Leu Asn Arg Ile Pro Pro Leu Gly Pro Ser Ala Leu Ser Arg Asn Asn
    210                 215                 220
Glu Pro Gln Ser
225
```

<210> 27902
<211> 609
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (20),(503)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27902

```
Arg Leu Glu Thr Thr Val Ser Ala Thr Met Glu Ala His Arg Gly Arg
1               5                   10                  15
Gln His His Xaa Cys Asp Pro Cys Arg Lys Gly Lys Arg Ala Cys Asp
            20                  25                  30
Ala Pro Ala Arg Arg Asp Arg His Ala Asp Ala Gly Ser Arg Arg Val
        35                  40                  45
Leu Ala Glu Ser Asn Leu Asn Ile Pro Cys Ser Asn Cys Arg Lys Tyr
    50                  55                  60
Asn Arg Glu Cys Thr Phe Asn Trp Leu Val Glu Asn Arg Ala Ala Ala
65                  70                  75                  80
Arg Ala Gly Arg Lys Gln Lys Ser Arg Asn Val Ser Asn Leu Pro Arg
                85                  90                  95
Ala Asp Asp Val Ser Ser Ser Arg Ser Gly Thr Asp Leu Leu Asp Asp
            100                 105                 110
Leu Arg Tyr Ser Ser Ser Trp Leu Ser Asn Ser Pro Gly Asn Gly Val
        115                 120                 125
Ser Ser Asn Gly Ser Thr Glu Asp Gln Pro Gly Thr Trp Ser Met Pro
    130                 135                 140
Ser Asn Ala Val Ser Ile Pro Leu Arg Ser Lys Glu Ser Glu Leu Asp
145                 150                 155                 160
Pro Phe Ser Val Met Leu Trp Asn Ala Asn Thr Ala His Val Pro Pro
                165                 170                 175
```

```
Ser Asn Ala Glu Thr Ala Gly Ser Ala Glu Asp Thr Cys Ser Ser Leu
            180                 185                 190
Asp Tyr Tyr Gln Gln Ser Leu Ser Ser Ser Gly Pro His Ser Leu Asp
        195                 200                 205
Glu Thr Leu Asp Leu Leu Gln Gln Phe Asp Asp Ser Ser Pro Gly Leu
    210                 215                 220
Ser Ser Ser Tyr Tyr Ser Ser Pro Pro Gly Phe Val Ile Pro Glu Gly
225                 230                 235                 240
Ser Asp Gly Leu Pro Thr Phe Pro Ala Asp Ser Leu Tyr Pro Ser Gly
                245                 250                 255
Asn Lys Asp Ser Leu Phe Val Leu Ser Asp Asn Ile Ser Asp Ser Tyr
            260                 265                 270
Ala Arg Ser Met Met Thr Gln Asn Leu Ile Arg Ile Tyr His Asp Ser
        275                 280                 285
Met Glu Asn Ala Leu Ser Cys Trp Leu Thr Glu Gln Asn Cys Pro Tyr
    290                 295                 300
Asn Thr Ala Val Pro Tyr Thr Ser Pro Ser Gly Leu Ala Ser Lys Ala
305                 310                 315                 320
Gln Ala Ala Trp Ala Pro Asn Trp Thr Asn Arg Ile Cys Thr Arg Val
                325                 330                 335
Cys Arg Leu Asp Arg Ala Tyr Ala Ser Val Arg Gly Arg Asn Leu Ser
            340                 345                 350
Ala Ala Glu Glu Lys Met Ala Ser Arg Ala Leu His Thr Ala Ile Met
        355                 360                 365
Ala Phe Ala Ser Gln Trp Ala Gln Lys Met Pro Arg Ser Asn Gly Phe
    370                 375                 380
Ser Leu Thr Ser Pro Val Ala Gln His Glu Arg Val Ile Arg Glu Asn
385                 390                 395                 400
Leu Trp Asn Gln Ala Arg Arg Ala Leu Glu Asn Ala Ala Gly Ile Pro
                405                 410                 415
Ser Phe Arg Val Ala Phe Ala Asn Ile Ile Phe Ser Ile Gly Gln Arg
            420                 425                 430
Pro Leu Asn Val Asp Glu Asp Met Glu Leu His Glu Leu Leu Glu Asn
        435                 440                 445
Asp Ser Ala Pro Leu Phe Met Glu Ala Ala Val Arg Gln Leu Phe Ser
    450                 455                 460
Ile Arg Tyr Lys Leu Thr Arg Leu Glu Arg Gln Lys Pro Lys Ser Arg
465                 470                 475                 480
Ser Ser Pro Glu Gln Ser Lys Ile Asp Leu Ala Ser Met Asp Met Pro
                485                 490                 495
Ser Pro Gln Thr Asp Ala Xaa Tyr Ala Asp Pro Glu His Gln Glu Thr
            500                 505                 510
Val Asn Leu Leu Phe Trp Leu Val Val Met Phe Asp Thr Leu Gln Ala
        515                 520                 525
Ala Met Tyr Gln Arg Pro Leu Ala Ile Ser Asp Glu Asp Ser Gln Ile
    530                 535                 540
Thr Ser Val Ser Pro Ala Val Ser Asn Ala Lys Pro Asp Ser Ser Val
545                 550                 555                 560
Asp Leu Asp Gly Trp Asn Ile Thr Tyr Ser Arg Ala Leu Lys Glu Lys
                565                 570                 575
Gln Asp Leu Trp Gly Asp Phe Phe Leu His Lys Arg Ala Ala Arg Gln
            580                 585                 590
Gly Ala Asn Pro Pro Val Phe Asn Arg Arg Gly Ser Gln Gly Tyr Arg
        595                 600                 605
Ala
```

<210> 27903
<211> 191
<212> PRT
<213> A.fumigatus

<400> 27903
His Arg Ile Leu Ser Ala Tyr Thr Met Thr Ala Trp Arg Met Arg Cys
1 5 10 15
Pro Ala Gly Ser Arg Ser Lys Thr Val Pro Thr Thr Arg Gln Ser Arg
20 25 30
Thr Pro His Arg Ala Gly Ser Pro Val Arg His Lys Arg His Gly Pro
35 40 45
Arg Thr Gly Arg Thr Gly Ser Val Leu Gly Ser Val Gly Ser Ile Glu
50 55 60
Arg Met His Pro Ser Val Gly Glu Thr Ser Ala Pro Gln Lys Arg Lys
65 70 75 80
Trp His Arg Glu Arg Ser Thr Pro Pro Ser Trp Arg Ser Pro Arg Ser
85 90 95
Gly Arg Arg Arg Cys Pro Glu Ala Met Ala Phe Leu Leu Pro Arg Pro
100 105 110
Ser Arg Ser Thr Ser Val Ser Ser Gly Arg Ile Cys Gly Thr Arg Arg
115 120 125
Gly Val Leu Trp Arg Met Gln Arg Val Ser Leu Arg Ser Gly Leu Arg
130 135 140
Leu Arg Thr Ser Ser Ser Pro Ser Asp Ser Val Arg Ser Met Ser Met
145 150 155 160
Arg Thr Trp Ser Cys Met Ser Cys Trp Arg Met Thr Ala Arg Arg Cys
165 170 175
Ser Trp Arg Arg Arg Cys Asp Ser Cys Phe Gln Ser Asp Ile Asn
180 185 190

<210> 27904
<211> 168
<212> PRT
<213> A.fumigatus

<400> 27904
Asp Glu Tyr Pro Leu Val His Ser Gly Ser Glu Asn Gln Pro Leu His
1 5 10 15
Thr Ala Ile Asp Val Gln Thr Lys Ile Met Ala Thr Ile Arg Arg Leu
20 25 30
Gln Gln Thr Leu Ser His Leu Arg Pro Pro Lys Ala Pro Gln Leu Leu
35 40 45
Ser Ile Val Glu Gly Pro Thr Gln Pro Glu Leu Leu Asp Ile Thr Leu
50 55 60
Gly Glu Leu Leu Thr Leu Gln Ser Leu Gln Tyr Gly Asp Tyr Glu Cys
65 70 75 80
Leu Val Phe Pro Trp Thr Gly Ala Arg Trp Thr Tyr Thr Asp Leu Lys
85 90 95
Asp Glu Ala Asp Arg Val Ala Arg Gly Leu Leu Ala Met Gly Ile Gln
100 105 110
Lys Gly Asp Arg Ile Gly Ile Met Ala Gly Asn Cys Glu Gln Tyr Ile
115 120 125
Ser Val Phe Phe Ala Ala Ala Arg Val Gly Ala Ile Leu Val Val Leu
130 135 140

```
Asn Asn Thr Tyr Thr Pro Ser Glu Leu Tyr Tyr Ala Leu Gly His Thr
145                 150                 155                 160
Gly Met Tyr Tyr Leu Gln His Ser
                165
```

<210> 27905
<211> 116
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (65),(70)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27905

```
Ser Ala Asp Cys Arg Leu Leu Phe Leu Thr Pro Arg Ile Gly Arg His
1               5                   10                  15
Ser Leu Glu Glu Val Leu Ala Lys Leu Gly Pro Arg Pro Lys Glu Gln
            20                  25                  30
Gly Thr Ser Ser Ala Leu Glu Glu Ile Ile Ile Leu Arg Gly Gln Tyr
        35                  40                  45
Ser Gly Phe Ser Thr Tyr Glu His Val Ile Gln Arg Gly Leu Pro Leu
    50                  55                  60
Xaa Ser His Ala Leu Xaa Asp Arg Glu Ala Glu Leu His Ser Thr Asp
65                  70                  75                  80
Val Cys Asn Leu Gln Phe Thr Ser Gly Ser Thr Gly Asn Pro Lys Ala
                85                  90                  95
Ala Met Leu Thr His Gln Tyr Ala Ser Arg Ala Thr Gly Met Lys Ala
            100                 105                 110
Ala Asn Ser Ala
        115
```

<210> 27906
<211> 184
<212> PRT
<213> A.fumigatus

<400> 27906

```
Phe Asn Val Glu Ile Glu Asp Thr Asp Ile Leu Arg Glu Gln Leu Arg
1               5                   10                  15
Ile Trp Arg Thr Cys Asp Ala Ile Glu Asn Arg Pro Pro Pro Leu Ile
            20                  25                  30
Ile Glu Thr Tyr Leu Glu Thr Lys Gly Leu Thr Asn Asn Gln Ser Leu
        35                  40                  45
Val Ile Leu Asp Glu Asn Gly Lys Arg Trp Asp Val Leu Glu Ala Leu
    50                  55                  60
Thr Ala Ser Gly Gln Ala Ser Pro Val Arg Pro Pro His Ser Asn Ser
65                  70                  75                  80
Asp Asp Val Ile Leu Glu Arg Trp Arg Val Glu Leu Gly Ser Ala Ser
                85                  90                  95
Ser Lys Pro Pro Ser Asp Leu Gly Ser Ile Leu Pro Thr Val Tyr Lys
            100                 105                 110
Lys Ser Ile Val Leu Phe Arg Ser Leu Phe Thr Tyr Ser Lys Phe Leu
        115                 120                 125
Pro Ala Trp Lys Phe Ala Lys Arg Asn Gly Arg Leu Arg Ser Asn Pro
```

```
    130                 135                 140
Ala Leu Gln Ile Arg Tyr Arg Ile Leu Asp Gly Arg Thr Ala Ser Asp
145                 150                 155                 160
Arg Arg Gln Val Asp His Leu Thr Val Pro Ser Ser Pro Gln Arg Arg
                165                 170                 175
Asp Pro Leu Trp Leu Asp Pro Pro
            180
```

<210> 27907
<211> 309
<212> PRT
<213> A.fumigatus

<400> 27907

```
Ile Val Arg Gly Tyr Asn Pro Leu Thr Pro Pro Asn Leu Leu Gln His
1               5                  10                  15
Glu Ile Ala Met Thr Glu Lys Ser Arg Gln Thr Val Leu Glu Ala Arg
            20                  25                  30
Arg Glu Ala Val Ala Ile Val His Gly Thr Asp Thr Asp Lys Gln Arg
        35                  40                  45
Leu Leu Val Val Ile Gly Pro Cys Ser Ile His Asp Pro Asp Met Ala
    50                  55                  60
Leu Glu Tyr Cys Asp Trp Leu Leu Lys Met Lys Glu Lys Tyr Asn Asp
65                  70                  75                  80
Glu Leu Leu Ile Val Met Arg Ala Tyr Leu Glu Lys Pro Arg Thr Thr
                85                  90                  95
Val Gly Trp Lys Gly Ile Ile Asn Asp Pro Asp Ile Asp Asn Ser Phe
            100                 105                 110
Lys Ile Asn Lys Gly Leu Arg Thr Ser Arg Gln Leu Phe Val Asp Leu
        115                 120                 125
Thr Asn Lys Gly Met Pro Ile Ala Ser Glu Met Leu Asp Thr Ile Ser
    130                 135                 140
Pro Gln Phe Leu Ala Asp Cys Leu Ser Val Gly Ala Val Gly Ala Arg
145                 150                 155                 160
Thr Thr Glu Ser Gln Val His Arg Glu Leu Ala Ser Gly Leu Ser Phe
                165                 170                 175
Pro Val Gly Phe Lys Asn Gly Thr Asp Gly Ser Leu Asp Val Ala Val
            180                 185                 190
Asp Ala Ile Gly Ser Val Lys His Pro His His Phe Leu Ser Val Thr
        195                 200                 205
Lys Pro Gly Val Val Ser Ile Val Gly Thr Val Gly Asn Pro Asp Cys
    210                 215                 220
Phe Val Ile Leu Arg Gly Gly Lys Arg Gly Pro Asn Tyr Asp Ala Gln
225                 230                 235                 240
Ser Ile Ala Glu Ala Lys Ala Lys Leu Thr Ser Lys Gly Leu Pro Pro
                245                 250                 255
Arg Leu Met Val Asp Cys Ser His Gly Asn Ser Gln Lys Asn His Lys
            260                 265                 270
Asn Gln Pro Lys Val Ala Ala Val Leu Ala Glu Gln Ile Ala Ala Gly
        275                 280                 285
Glu Thr Ala Ile Met Gly Val Met Ile Glu Ser Asn Ile Asn Glu Gly
    290                 295                 300
Lys Pro Gln Phe Thr
305
```

<210> 27908

<211> 147
<212> PRT
<213> A.fumigatus

<400> 27908
Asp Pro Pro Cys Pro Gln Glu Glu Pro Phe Gly Tyr Leu Asn Gly Gln
1 5 10 15
Leu Val Asn Trp Ser Ser Cys Leu Thr Leu Cys Glu Leu Arg Leu Thr
20 25 30
Leu Ile Asn Ile Ala Phe Asp His Asp Thr His Asp Ser Gly Leu Ser
35 40 45
Arg Gly Asn Leu Leu Gly Gln Asn Gly Ser Asn Leu Gly Leu Ile Phe
50 55 60
Val Val Leu Leu Arg Val Ser Met Ala Ala Val Asp His Glu Thr Arg
65 70 75 80
Arg Gln Thr Phe Arg Gly Gln Leu Ser Leu Gly Phe Gly Asp Ala Leu
85 90 95
Ser Val Val Val Gly Ala Pro Leu Ser Thr Ala Lys Asp Asp Glu Thr
100 105 110
Val Gly Ile Ala His Gly Ala Asn Asn Gly Asp His Thr Arg Leu Cys
115 120 125
Asn Gly Lys Glu Val Met Arg Val Leu Asp Gly Ser Asn Gly Val His
130 135 140
Gly Asn Val
145

<210> 27909
<211> 226
<212> PRT
<213> A.fumigatus

<400> 27909
Arg Ala Ile Arg Thr Ile Leu Glu Thr Asp Gly Lys Arg Lys Thr Gly
1 5 10 15
Gly Gln Phe Thr Val Asp Leu Arg Leu Gly Cys Pro Arg Pro Asn Arg
20 25 30
Thr Asp Arg Glu Thr Ile Gly Lys Glu Leu Arg Arg Asn Cys Ile Gln
35 40 45
His Leu Thr Gly Asp Arg His Ala Leu Val Gly Gln Ile Asp Lys Lys
50 55 60
Leu Thr Arg Gly Ala Gln Thr Leu Val Asp Leu Glu Ala Val Val Asp
65 70 75 80
Ile Gly Ile Val Asp Asp Thr Leu Pro Ser Asn Cys Cys Ala Gly Leu
85 90 95
Leu Glu Ile Arg Ala His His Asn Gln Gln Phe Val Ile Val Phe Leu
100 105 110
Leu His Phe Gln Lys Pro Ile Ala Val Phe Glu Arg His Val Gly Val
115 120 125
Val Asn Arg Ala Trp Pro Asp Asn Asn Gln Gln Thr Leu Leu Val Gly
130 135 140
Ile Cys Ala Met Asp Asn Arg Asn Ser Leu Ser Thr Ser Phe Gln Tyr
145 150 155 160
Arg Leu Pro Gly Leu Leu Cys His Gly Asp Phe Met Leu Glu Glu Val
165 170 175
Arg Arg Cys Glu Gly Val Ile Ser Ser Asn Tyr Ser Phe Ala Arg Lys
180 185 190

```
Leu Val Asn Glu Gly Arg Gly Asp Arg Gly Lys Lys Gly His Thr Pro
        195                 200                 205
Arg Ile Phe Glu Val Val Thr Val Pro Tyr Ile Arg Val Phe Asp Lys
    210                 215                 220
Glu Leu
225
```

<210> 27910
<211> 194
<212> PRT
<213> A.fumigatus

<400> 27910

```
Gly Tyr Ala Val Phe Lys Asp Asn Ile Arg Ile Pro Leu Arg Pro Phe
1               5                  10                  15
Leu Gly Cys Ile Gly Leu Ala Pro Ala Thr Asp Glu Asp Leu Ser Thr
            20                  25                  30
Val Pro Pro Thr Asn Ala Gly Gly Asn Leu Asp Cys Arg Asp Leu Thr
        35                  40                  45
Val Gly Ser Thr Leu Tyr Leu Pro Val Gln Thr Asp Gly Ala Leu Phe
    50                  55                  60
Ser Cys Gly Asp Gly His Ala Ala Gln Gly His Gly Glu Val Cys Gly
65                  70                  75                  80
Thr Ala Ile Glu Thr Ser Ile Lys Ala Thr Leu Arg Phe Glu Leu Cys
                85                  90                  95
Lys Asp Met Pro Trp Val Thr Ser Pro Gln Tyr Glu Thr Pro Pro Ser
            100                 105                 110
Leu Leu Thr Thr Arg Met Pro Val Phe Gly Gln Tyr Ala Thr Thr Gly
        115                 120                 125
Val Gly Gln Thr Leu His Glu Ala Ser Lys Thr Ala Val Arg Asn Ile
    130                 135                 140
Ile Gln Trp Met Val Ala Thr Lys Gly Leu Thr His Cys Glu Ala Tyr
145                 150                 155                 160
Met Ile Ala Ser Val Ala Gly Asp Leu Gln Ile Ile Glu Ala Val Asn
                165                 170                 175
Met Pro Asn Tyr Val Val Ala Met Thr Ile Pro Leu Glu Ile Phe Gly
            180                 185                 190
Pro Ser
```

<210> 27911
<211> 156
<212> PRT
<213> A.fumigatus

<400> 27911

```
Ser Ala Cys Asn Thr Lys Gln Arg Gln Tyr Ile Phe Leu Asp His Met
1               5                  10                  15
Asp Ser Thr Leu Glu Gly Leu Asn Ser Ala Gln Lys Ala Ala Val Thr
            20                  25                  30
Ser Pro Ala Ser Val Leu Gln Val Leu Ala Pro Pro Gly Ser Gly Lys
        35                  40                  45
Thr Lys Thr Leu Thr Ala Arg Val Ala Tyr Leu Leu Ser His Tyr Gly
    50                  55                  60
Tyr Gln Pro Gln Asp Val Ile Cys Cys Thr Phe Thr Ile Lys Ala Ser
65                  70                  75                  80
```

```
Arg Glu Met Arg Glu Arg Leu Ala Ser Leu Val Gly Asn Glu Val Gln
                85                  90                  95
Ser Arg Leu Ile Leu Gly Thr Phe His Ser Ile Cys Arg Arg Tyr Leu
            100                 105                 110
Val Ser Tyr Gly Tyr Leu Ile Gly Leu Arg Lys Gly Phe Gly Ile Ala
        115                 120                 125
Asp Ser Ser Asp Ser Leu Ala Ile Ile Lys Val Gly Ser Thr Cys Trp
    130                 135                 140
His His Gly Phe Leu Tyr Thr Leu Val Ile Cys Tyr
145                 150                 155
```

<210> 27912
<211> 165
<212> PRT
<213> A.fumigatus

<400> 27912

```
Tyr Leu Gln Arg Ile Val Lys Arg Leu Arg Cys Ser Ile Gln Pro Asn
1               5                  10                  15
Thr Ala Arg Ala Arg Ile Ser His Gln Lys Ala His Gly Val Ser Pro
            20                  25                  30
Asp Glu Pro Ala Val Lys Tyr Ser Thr Gly Ser Lys Ser Ala Glu His
        35                  40                  45
His Glu Phe Val Gln Ile Tyr Arg Ala Tyr Glu Ser Tyr Leu Glu Thr
    50                  55                  60
Ser Asn Leu Phe Glu Tyr Asp Asp Phe Leu Leu Arg Cys Ala Asp Leu
65                  70                  75                  80
Leu Arg Arg His Pro Gln Cys Val Ser Asn Val Gln Ala Val Leu Val
                85                  90                  95
Asp Glu Phe Gln Asp Thr Asn His Ile Gln Tyr Glu Leu Met Asn Leu
            100                 105                 110
Phe Ala Val Arg Asn Arg Arg Ile Thr Val Val Gly Asp Pro Asp Gln
        115                 120                 125
Ser Ile Tyr Gly Phe Arg Ser Ala Glu Ile Lys Asn Leu Gly Arg Met
    130                 135                 140
Gln Gln His Tyr Lys Asp Thr Ser Val Ile Leu Leu His His Arg Gly
145                 150                 155                 160
Ser Lys His Pro Arg
                165
```

<210> 27913
<211> 135
<212> PRT
<213> A.fumigatus

<400> 27913

```
Leu Pro Ala Ser Thr Ile Leu Pro Ala Arg Lys Thr Lys Met Gln Ser
1               5                  10                  15
Ala Ser Leu Ile Val Leu Asn Arg Cys Ala Thr Ala Met Val Leu Leu
            20                  25                  30
Phe Pro Ser Leu Ala Ala Ser Leu Ser Ala Ala Cys Thr Ile Leu Ser
        35                  40                  45
Leu Ser Val Ser Ser Ala Leu Val Ala Ser Ser Ser Ser Arg Ile Phe
    50                  55                  60
Gly Ser Arg Ile Arg Ala Arg Ala Ile Ala Thr Arg Trp Arg Cys Pro
65                  70                  75                  80
```

```
Pro Glu Ser Phe Val Pro Arg Gly Pro Thr Ser Leu Phe Lys Pro Ser
                85                  90                  95
Gly Asn Glu Met Thr Lys Ser Lys Met Leu Ala Ser Leu Gln Ala Cys
            100                 105                 110
Ser Ile Cys Ala Ser Val Ala Ser Leu Asp Ser Thr Arg Pro Ile Ala
        115                 120                 125
Thr Phe Ser Arg Met Leu Pro
    130                 135
```

<210> 27914
<211> 346
<212> PRT
<213> A.fumigatus

<400> 27914

```
Glu Ser Arg Glu Gly Glu Tyr Val Tyr Lys Leu Ala Ser Pro Gln Ser
1               5                  10                  15
Leu Ile Gln Arg Leu Ala Pro Ala His Leu Val Val Ala Pro Ser Cys
            20                  25                  30
Leu Gln Gln Leu Gly Met Thr Ala Arg Leu His Asn Pro Pro Ser Pro
        35                  40                  45
Lys Asp Lys Asp Ala Val Arg Val Leu Asp Arg Thr Gln Pro Met Arg
    50                  55                  60
Asn Arg Asn Gly Thr Pro Leu Pro Ile Val Gly Ser Leu Ala Gln Arg
65                  70                  75                  80
Arg Leu His Asn Pro Leu Ala Leu Arg Ile Gln Arg Thr Arg Cys Phe
                85                  90                  95
Val Gln Gln Gln Asp Leu Trp Ile Ala Tyr Gln Ser Pro Cys Asp Cys
            100                 105                 110
Asp Pro Leu Ala Leu Ser Thr Arg Glu Leu Arg Ala Ala Arg Thr Asn
        115                 120                 125
Leu Ala Val Gln Ala Val Arg Gln Arg Asp Asp Glu Ile Lys Asp Val
    130                 135                 140
Gly Val Phe Ala Gly Leu Phe Asp Leu Cys Phe Gly Gly Val Pro Arg
145                 150                 155                 160
Phe Asp Gln Ala His Arg Asp Val Phe Thr Asp Ala Pro Leu Ile Gln
                165                 170                 175
Asp Arg Leu Leu Leu Asn Glu Cys Gln Ala Ala Thr Val Ile Leu Trp
            180                 185                 190
Ala Glu Val Val Asp Trp Pro Val Val Asp Arg Asp Ile Ala Gly Arg
        195                 200                 205
Trp Val Ile Lys Ala Gly Glu Gln Val Asp His Cys Gly Leu Ala Ala
    210                 215                 220
Ala Gly Arg Thr Asn Lys Gly His Glu Phe Ala Arg Trp Asp Ala Asp
225                 230                 235                 240
Ile Asp Ala Gly Tyr Asp Val Gly Ala Arg Ala Arg Trp Val Gly Lys
                245                 250                 255
Val Glu Gly Val Ala Ile Asp Gly Asn Gly Ala Arg Val Leu Arg Ser
            260                 265                 270
Val Arg Arg Arg Leu Val Arg Lys Ala Ile Val Asp Ser Gly Asp Pro
        275                 280                 285
Leu Ala Gln Pro Glu Asp Val Val Cys Arg Pro Gly Arg Phe Gly Asp
    290                 295                 300
Ala Ser Arg Val Leu Glu Asp Arg Ser Cys Ile Leu Ala Ser Asp Tyr
305                 310                 315                 320
Asp Gly Ser Glu Asp His Glu Glu Leu Leu Val Gly Val Leu Ala Arg
```

```
                325                 330                 335
Arg Asp Glu Leu Ala Pro Val Pro Glu Ala
            340                 345

<210> 27915
<211> 529
<212> PRT
<213> A.fumigatus

<400> 27915
Gln Val Ile Ile Pro Gly Glu Asp Ile Leu Pro Gln Gly Val Gly Ser
1               5                  10                  15
Lys Leu Thr Met Pro Gln Lys Val Gly Arg Arg Tyr Arg Arg Glu Leu
            20                  25                  30
Phe Arg Asn Thr Arg Lys Gln Glu Ile Ala Val Phe Asp Leu Glu His
        35                  40                  45
Asn Ala Thr Gly Ala Ile Ser Ser Arg Leu Leu Ile His Ala Ser Asn
    50                  55                  60
Leu Asn Glu Leu Leu Gly Ile Asn Ser Gly Leu Ile Leu Ile Tyr Ile
65                  70                  75                  80
Val Thr Val Ile Ser Val Ser Val Leu Gly Ile Ala Tyr Gly Trp Lys
                85                  90                  95
Leu Gly Leu Val Cys Val Phe Gly Ala Leu Pro Pro Leu Leu Leu Ser
            100                 105                 110
Gly Tyr Phe Arg Ile Arg Leu Glu Tyr Lys Leu Glu Glu Asp Thr Ser
        115                 120                 125
Ala Arg Phe Ala Ser Ser Ala Ala Ile Ala Ala Glu Ala Ile Ser Ala
    130                 135                 140
Ile Arg Thr Val Ala Ser Leu Thr Leu Glu Asn Lys Leu Leu Gln Ile
145                 150                 155                 160
Tyr Arg Glu Arg Leu Thr Ala Val Ala Glu Gln Ser Val Lys Ala Leu
                165                 170                 175
Thr Phe Thr Met Phe Trp Tyr Ala Leu Thr Gln Ser Ile Asn Phe Leu
            180                 185                 190
Ala Met Ala Leu Gly Phe Trp Tyr Gly Gly Lys Leu Ile Ser Thr Gly
        195                 200                 205
Glu Tyr Thr Asn Glu Gln Phe Phe Val Val Phe Thr Ala Val Val Val
    210                 215                 220
Gly Gly Glu Asn Ala Ala Ala Ile Phe Gln Tyr Thr Thr Ser Ile Thr
225                 230                 235                 240
Lys Ala Thr Gly Ser Thr Asn Tyr Ile Phe Trp Leu Arg Gln Arg Val
                245                 250                 255
Pro Ala Ile Asp Asn Cys Phe Ser Asp Glu Pro Pro Ser Asp Gly Ser
            260                 265                 270
Gln Asp Pro Gly Pro Val Thr Val Asp Cys His Ala Leu Asp Phe Ala
        275                 280                 285
Tyr Pro Ser Arg Pro Arg Ser Asn Val Ile Ser Gly Ile Asp Val Ser
    290                 295                 300
Ile Pro Pro Gly Lys Phe Val Ala Phe Val Gly Pro Ser Gly Cys Gly
305                 310                 315                 320
Lys Ser Thr Met Ile Asn Leu Leu Ala Arg Phe Tyr Asp Pro Thr Ser
                325                 330                 335
Gly Tyr Ile Ala Val Asn Asp Arg Pro Ile His Asp Leu Ser Pro Gln
            340                 345                 350
Asp His Arg Arg Arg Leu Ala Leu Val Gln Gln Glu Pro Val Leu Tyr
        355                 360                 365
```

```
Gln Gly Ser Ile Arg Glu Asn Val Ala Met Gly Leu Val Glu Ser Arg
    370                 375                 380
Asp Ala Thr Glu Ala Gln Ile Glu Gln Ala Cys Lys Asp Ala Asn Ile
385                 390                 395                 400
Phe Asp Phe Val Ile Ser Leu Pro Asp Gly Leu Asn Ser Glu Val Gly
                405                 410                 415
Pro Arg Gly Thr Lys Leu Ser Gly Gly Gln Arg Gln Arg Val Ala Ile
            420                 425                 430
Ala Arg Ala Leu Ile Arg Asp Pro Lys Ile Leu Leu Leu Asp Glu Ala
        435                 440                 445
Thr Ser Ala Leu Asp Thr Glu Ser Glu Arg Ile Val Gln Ala Ala Leu
    450                 455                 460
Ser Glu Ala Ala Asn Asp Gly Lys Arg Ser Thr Ile Ala Val Ala His
465                 470                 475                 480
Arg Leu Ser Thr Ile Lys Asp Ala Asp Cys Ile Phe Val Phe Arg Ala
                485                 490                 495
Gly Arg Ile Val Glu Ala Gly Ser His Ala Glu Leu Leu Glu Thr Arg
            500                 505                 510
Gly Ser Tyr Tyr Glu Met Cys Arg Gly Gln Ala Leu Asp Lys Ala Leu
        515                 520                 525
Gly
```

<210> 27916
<211> 471
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (469)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27916

```
Leu Gly Gly Leu Arg Arg Leu Leu Gln Glu Ala Pro Gly Arg Ser Tyr
1               5                   10                  15
Asp Asp Gly Met Tyr His Pro Gly Asp Asn Arg Leu Ser Gly Val Ala
            20                  25                  30
Asn Pro Ser Asn Gly Ile Asp His Pro Glu Thr Lys Pro Ile Ala Ala
        35                  40                  45
Ala Asp Ala Thr Leu Asp Gly His Gly Trp Ser Glu Ser Gly Met Leu
    50                  55                  60
Arg Gly Ala Thr Thr Asp Thr Leu Pro Asn Pro Val Val Ala Ala Val
65                  70                  75                  80
Lys Pro Ala Ala Leu Pro Ser Glu Ala Ala Leu Asp Leu His Gln Gly
                85                  90                  95
His Phe Asp His Pro Val Gln Pro Ile Thr Thr Ile Thr Thr Ser Thr
            100                 105                 110
Asn Ala Ser Pro Ser Thr Thr Ser Ala Thr Thr Phe Tyr Lys Ser Thr
        115                 120                 125
Ile Arg Thr Thr Leu His Thr Val Ser Met Pro Thr Ala Thr Arg Ala
    130                 135                 140
Ser Leu Thr Lys Ser Ala Ser His Ala Thr Ser Thr Ser Thr Ser Ala
145                 150                 155                 160
Pro Ala Ala Arg Gly Gly Gly Gly Thr Ala Pro Gly Thr Gln Ala Gly
                165                 170                 175
```

```
Ile Val Ile Ser Ala Met Ser Leu Val Ile Ile Leu Ile Val Ile Ile
            180                 185                 190
Phe Trp Trp Leu Asn Arg Lys Lys Arg Ala Leu Met Lys Ser Leu Arg
        195                 200                 205
Gly Glu Glu Ser Pro Pro Pro Thr Glu Lys Pro Asn Pro Ala Tyr Arg
    210                 215                 220
Phe Ala Ser Asn Leu Tyr Thr Ser Ser Thr Ser Thr Leu Val Asn Val
225                 230                 235                 240
Thr Glu Ile Phe Lys Ala Ser Arg Glu Lys Lys Ser Pro Ser Val Asn
                245                 250                 255
Asp Gly Ser Ser Ser Ile Tyr Ser Thr Asp Gln Ile Gln Ser Asn Gln
            260                 265                 270
Thr Trp Arg Thr Leu Phe Thr Arg Ala Ala Ala Lys Val Arg Ala Phe
        275                 280                 285
Arg Gly Arg Lys Gln Pro Pro Asp Arg Arg Ser Arg Tyr Ser His Gly
    290                 295                 300
Tyr Ile Phe Ala Gln Glu Phe Gln His Val Pro Pro Leu Pro Pro Pro
305                 310                 315                 320
Arg Leu Gln Lys Ile Val Ala Gly Leu Tyr Ala Asn Gly Ser Ser Thr
                325                 330                 335
Ile Lys Thr Val Ile Ala Ser Phe Arg Ala His Pro Pro Pro Pro Lys
            340                 345                 350
Asp Ser Ala Ser Ser Ser Thr Trp Ser Ser Thr Ser Ser Arg Thr Pro
        355                 360                 365
Cys Ser Arg Ala Tyr Glu Ser Tyr Pro Gln Ala Asp Gln Phe Gln Pro
    370                 375                 380
Pro Cys Asp Ile Ser Asp Ser Leu Asp Leu Val Lys Val Arg Ser Val
385                 390                 395                 400
Ser Ser Gly Thr Val Ala Met Ser Asn Pro Ala Glu Ile Ser Val Asp
                405                 410                 415
Ala Gln Ala Gly Arg Ile Ser Gly Glu Ser Arg Pro His Gln Glu Ala
            420                 425                 430
Ala Trp Glu Ser Ser Ser Pro Ser Leu Ser Gln His Ile Ser Ala Pro
        435                 440                 445
Ser Gln Arg Gln Ser Pro Pro Val Phe Thr Arg Gly Leu Gln Arg Ala
    450                 455                 460
Asp Gln Leu Lys Xaa Pro Pro
465                 470
```

<210> 27917
<211> 393
<212> PRT
<213> A.fumigatus

<400> 27917

```
Ile Gly Glu Thr Gly Ala Asp Arg Val Glu Glu Pro Ser Ala Glu Glu
1               5                   10                  15
Asn Gly Asp Ala Lys Ala Ser Val Gly Ala Glu Asn Asp Thr Ala Gly
            20                  25                  30
Ala Val Glu Lys Gly Glu Gly Ala Glu Asp Lys Asp Ser Ser Lys Pro
        35                  40                  45
Thr Lys Leu Ile Leu Lys Thr Lys Glu Pro Asp Pro Ser Arg Pro Val
    50                  55                  60
Pro Ser Ile Glu Gly Thr Gly Asp Gly Val Gln Pro Pro Val Arg Arg
65                  70                  75                  80
Arg Gly Pro Gly Arg Pro Pro Lys Asp Gly Ile Met Ser Lys Arg Glu
```

```
                85                  90                  95
Arg Ala Glu Leu Ala Arg Glu Gln Lys Leu Ala Ala Lys Arg Glu Ala
            100                 105                 110
Asn Gly Gly Val Thr Pro Pro Pro Leu Asn Arg Pro Lys Ala Gly Lys
        115                 120                 125
Thr Thr Thr Thr Thr Thr Ser Thr Val Gly Thr Ala Thr Ala Thr Pro
    130                 135                 140
Ser Leu Pro Gly Glu Gly Glu Ser Pro Gly Ser Lys Pro Glu Lys Arg
145                 150                 155                 160
Lys Tyr Thr Lys Arg Lys Lys Pro Asp Gly Thr Leu Met Asp Tyr Pro
                165                 170                 175
Leu Pro Ser Thr Glu Gly Gly Pro Phe Pro Met Glu Gln Arg Pro Glu
            180                 185                 190
Glu Phe Ile Lys Ala Pro Pro Val Lys Lys Arg Lys Pro Ser Arg Ser
        195                 200                 205
Pro Ser Pro Asn Tyr Pro Pro Glu Ser Ala Tyr Thr Pro Glu Asp Leu
    210                 215                 220
Ala Lys Pro Pro Tyr Asn Tyr Ala Val Leu Ile Phe Asp Ala Leu Thr
225                 230                 235                 240
Glu Ala Gly Thr Pro Met Thr Leu Lys Gln Ile Tyr Arg Ala Leu Lys
                245                 250                 255
Leu Lys Tyr Pro Tyr Phe Arg Phe Lys Cys Glu Thr Glu Gly Trp Thr
            260                 265                 270
Ser Ser Val Arg His Asn Leu Asn Gly Asn Ser His Leu Phe Met His
        275                 280                 285
Ala Glu Arg Asp Gly Lys Gly Trp Ser Trp Gln Leu Arg Pro Gly Ala
    290                 295                 300
Ser Val Glu Lys Glu Lys Lys Arg Arg Pro Ser Pro Pro Pro Pro Ser
305                 310                 315                 320
Gln Pro Pro Ser Val Pro Ala Ser Ala Pro Gln Tyr Met Pro Pro Leu
                325                 330                 335
Asn Pro Ser Tyr Gly Asn Pro Gln Asn Gly Gln Ser Thr Leu Ala Asn
            340                 345                 350
Gln His Phe Gln Phe Pro Thr Met Pro Pro Asn Thr Tyr Ala Pro Pro
        355                 360                 365
Thr Pro Ala Pro Thr Ser Ser Ala Ala Ala Pro Pro Ser Ala Pro Pro
    370                 375                 380
Arg His Leu Asp Pro Tyr Pro Pro Pro
385                 390
```

<210> 27918
<211> 389
<212> PRT
<213> A.fumigatus

<400> 27918

```
Asp Phe Ile His Leu Asn Ser Arg Val Ala Leu Leu Thr Val Ile Glu
1               5                   10                  15
Met Glu Leu Lys Lys Ile His Val Gly Thr Val Ser Tyr Ala Asn Asp
            20                  25                  30
Ala Met Glu Glu Val Ala Ser Phe Val Arg Gln Ala Phe Ala Gly Asn
        35                  40                  45
Thr Leu Thr Thr Pro Ser Ala Ala Phe Gly Ala Gln Ala Gly Leu Gly
    50                  55                  60
Ala Ala Pro Arg Thr Arg Arg Glu Ile Gly Ser Arg Val Arg Asp Ile
65                  70                  75                  80
```

```
Val Leu Ala Leu Ala Leu Cys His Asn Val Thr Pro Thr Thr Asp Glu
                85                  90                  95
Glu Asp Gly Val Lys Val Thr Asn Tyr Gln Ala Ser Ser Pro Asp Glu
            100                 105                 110
Ile Ala Ile Val Lys Tyr Thr Glu Glu Val Gly Leu Lys Leu Ser Tyr
        115                 120                 125
Arg Asp Arg Gln Ser Ile Val Leu Glu Thr Thr Glu Thr Gly Ser Val
    130                 135                 140
Val Val Arg Val Arg Ile Leu Glu Ile Phe Pro Phe Thr Ser Asp Ser
145                 150                 155                 160
Lys Arg Met Gly Ile Ile Val Gln Phe Glu Thr Ala Asn Ser Ile Leu
                165                 170                 175
Glu Ser Ser Asn Glu Asp Ala Glu Ile Trp Phe Tyr Gln Lys Gly Ala
            180                 185                 190
Asp Thr Val Met Ser Ser Ile Val Ala Ala Asn Asp Trp Leu Asp Glu
        195                 200                 205
Glu Thr Ala Asn Met Ala Arg Glu Gly Leu Arg Thr Leu Val Ile Gly
    210                 215                 220
Arg Lys Arg Leu Ser Leu Gln His Phe Gln Glu Phe Ser Ala Lys Tyr
225                 230                 235                 240
Lys Gln Ala Ser Leu Ala Leu Gln Gly Arg Asp Val Gly Met Ala Lys
                245                 250                 255
Val Val Ser Glu His Leu Glu Arg Asp Leu Glu Leu Leu Gly Val Thr
            260                 265                 270
Gly Val Glu Asp Arg Leu Gln Arg Asp Val Lys Pro Ser Leu Glu Leu
        275                 280                 285
Leu Arg Asn Ala Gly Val Lys Ile Trp Met Leu Thr Gly Asp Lys Val
    290                 295                 300
Glu Thr Ala Arg Arg Val Ala Ile Ser Ala Lys Leu Val Ala Arg Gly
305                 310                 315                 320
Gln Tyr Ile His Thr Val Ala Lys Val Lys Asp Pro Ser Ala Ala Gln
                325                 330                 335
Glu Ala Leu Asp Phe Leu Arg Asn Lys Thr Asp Cys Cys Leu Leu Ile
            340                 345                 350
Asp Gly Glu Ser Leu Leu Leu Met Pro Gly Ser Val Pro Val Gly Ile
        355                 360                 365
His Ile Cys Gly Pro Ser Ser Tyr Arg Ala Val Val Ala Leu Ser Lys
    370                 375                 380
Leu Phe Gln Leu Lys
385
```

<210> 27919
<211> 123
<212> PRT
<213> A.fumigatus

<400> 27919

```
Gly Leu Leu Glu Tyr Glu Ile Asn Asn Leu Thr Lys Ile Leu Cys Ala
1               5                  10                  15
Leu Thr Leu Thr Leu Ser Ile Ile Leu Val Ala Leu Glu Gly Phe Gln
            20                  25                  30
Pro Asn Asn Asp Lys Glu Trp Tyr Ile Ala Ile Met Ile Tyr Leu Ile
        35                  40                  45
Leu Phe Ser Thr Ile Ile Pro Met Ser Leu Arg Val Asn Leu Asp Met
    50                  55                  60
Ala Lys Ser Val Tyr Ser Arg Phe Ile Gln Arg Asp Lys Asp Ile Pro
```

```
65                  70                  75                  80
Gly Thr Val Val Arg Thr Ser Thr Ile Pro Glu Asp Leu Gly Arg Ile
                85                  90                  95
Glu Tyr Leu Leu Ser Asp Lys Thr Gly Thr Leu Thr Gln Asn Gly Lys
            100                 105                 110
Ile Ser Tyr Ile Leu Thr Val Glu Leu Arg Tyr
        115                 120
```

<210> 27920
<211> 220
<212> PRT
<213> A.fumigatus

<400> 27920

```
Val Ala Arg Asp Asp Asn Asn Leu Ser Lys Gly Tyr Gly Phe Val Ser
1               5                  10                  15
Phe Ala Asp Phe Glu Ser Ser Asp Ala Ala Ile Ala Asn Met Asn Gly
            20                  25                  30
Gln Tyr Leu Met Asn Lys Gln Val Ser Val Gln Tyr Ala Tyr Lys Lys
        35                  40                  45
Asp Gly Lys Gly Glu Arg His Gly Asp Gln Ala Glu Arg Met Leu Ala
    50                  55                  60
Ala Gln Ala Arg Lys His Asn Val Arg Pro Pro Thr Gln Pro Leu Pro
65                  70                  75                  80
Pro Gln Phe Thr Asn Pro Gly Thr Pro Met Ala Ala Ala Gly Val Ala
                85                  90                  95
Asn Gly Asp Gly Thr Gln Ala Leu Asn Ala Ala Pro Pro Glu Leu Ala
            100                 105                 110
Thr Gly Arg Gly Ile Pro Pro Pro Asn Leu Gly Phe Gln Asn Ile Pro
        115                 120                 125
Ser Pro Gln Pro Asn Arg Gln Leu Pro Pro Thr Ala Pro Leu Ala Asn
    130                 135                 140
Pro Pro Pro Gly Leu Pro Ala Arg Pro Pro Pro Ser Gln Ala Gly Tyr
145                 150                 155                 160
Gly Gly Pro Gln Thr Phe Leu Pro Ser Gly Phe Asn Ser Ala Gly Gln
                165                 170                 175
Gln Pro Pro Phe Pro Gln Gln Ala Ala Pro Pro Pro Gly Phe Ala Pro
            180                 185                 190
Pro Gly Phe Gly Pro Pro Ser Gly Thr Ala Asn Pro Pro Pro Leu Pro
        195                 200                 205
Pro Gly Phe Gln Gln Pro Gly Tyr Gly Gly Gly Arg
    210                 215                 220
```

<210> 27921
<211> 132
<212> PRT
<213> A.fumigatus

<400> 27921

```
Leu Cys Arg Glu Gln Asp Lys Glu Ala Thr Val Tyr Ile Gly Asn Leu
1               5                  10                  15
Asp Glu Arg Val Thr Asp Ser Leu Val Trp Glu Leu Met Leu Gln Ala
            20                  25                  30
Gly Arg Ile Val Asn Val His Leu Pro Lys Asp Arg Val Thr Gln Ser
        35                  40                  45
His Gln Gly Tyr Gly Phe Val Glu Phe Ile Ser Glu Glu Asp Ala Glu
```

```
    50                  55                  60
Tyr Ala Ser Arg Ile Met Asn Gly Ile Arg Leu Tyr Gly Lys Pro Ile
65                  70                  75                  80
Arg Val Asn Lys Ala Ser Ala Asp Lys Gln Lys Ala Val Glu Ile Gly
                85                  90                  95
Ala Glu Leu Phe Val Gly Asn Leu Asp Pro Leu Val Thr Glu Gln Val
            100                 105                 110
Leu Tyr Asp Thr Phe Ser Arg Phe Gly Thr Leu Val Asn Ile Pro Lys
        115                 120                 125
Val Arg Arg Gln
    130
```

<210> 27922
<211> 75
<212> PRT
<213> A.fumigatus

<400> 27922

```
Ser Lys Met Ser Ala Gln Asn Ser Gly Arg Gln Ser Pro Pro Pro Glu
1               5                   10                  15
Thr Gln Ser Gly Ala Gln Gln Gln Asp Pro Pro Ser Ala Gly Lys Thr
            20                  25                  30
Gln Ser Glu Leu Arg Gly Asp Pro Gln His Ser Gln Arg Glu Ser Asn
        35                  40                  45
Glu Thr Lys Glu Trp Lys Leu Glu Ser Asn Pro Lys His Pro Leu Glu
    50                  55                  60
Asp Ile Glu Ala Ala Lys Tyr Ser Lys Val His
65                  70                  75
```

<210> 27923
<211> 103
<212> PRT
<213> A.fumigatus

<400> 27923

```
Pro Cys Cys Phe Pro Ser Tyr Ser Glu Ser Ile Asp His Thr Pro Arg
1               5                   10                  15
Pro His Pro Ala Ser Pro Ser Gly Ile Leu Pro Asp Ser Phe Ala Ala
            20                  25                  30
Tyr Arg Ser Lys Ala Gln Gln His Gly Pro Leu Gly Arg Ala Ser Phe
        35                  40                  45
Thr Gln Gly Ser Ile Gly Arg Leu Pro Gly Ala Ala Leu Gly Pro Val
    50                  55                  60
Gln Pro Lys Gln Gly Glu Phe Phe Asp Arg Ala Glu Leu Pro Ala Arg
65                  70                  75                  80
Phe His Arg Leu Pro Trp Thr Glu Ala Glu Ile Glu Ala Ile Glu Thr
                85                  90                  95
Gly Gly Ala Ser Leu Tyr Ala
            100
```

<210> 27924
<211> 70
<212> PRT
<213> A.fumigatus

<400> 27924

```
Ile Ser Ile His Arg His Ala Lys Cys Pro Val Glu Cys Leu Cys Phe
1               5                   10                  15
Val Ser Arg Val Gln Ser Ser Val Phe Val Pro Arg Ala Leu Ile Arg
            20                  25                  30
Ser Tyr Leu Ser Val Asp Leu Gly Leu Ser Thr Pro Ile Ser Ile Thr
        35                  40                  45
Ser Phe Asn Tyr Thr Leu Gln Ala Lys Thr Val Thr Leu Arg Phe Cys
    50                  55                  60
Ser Met Arg Ser Thr Ala
65                  70
```

<210> 27925
<211> 69
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (52)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27925

```
Tyr His Lys Ala Glu Gly Leu Ala Ala Lys Phe Val Phe Leu Phe Phe
1               5                   10                  15
Phe Phe Leu Arg Asn Phe Phe Pro Leu Phe Asp Ile Asp Ile Ser Ile
            20                  25                  30
Val Gly Leu Ser Glu Phe Tyr Leu Pro Met Tyr Tyr Ile Asp Ser Thr
        35                  40                  45
Leu Arg Ile Xaa Ala Ser Val Pro Cys Ala Ser Ala Ile Arg Ile Phe
    50                  55                  60
Leu Met Phe Leu Tyr
65
```

<210> 27926
<211> 79
<212> PRT
<213> A.fumigatus

<400> 27926

```
Ala Ala Phe Leu Thr Gln Lys Cys Ser Leu Pro Thr Arg Thr Ile Lys
1               5                   10                  15
Phe Glu Ile Trp Asp Thr Ala Gly Gln Glu Arg Phe Ala Ser Leu Ala
            20                  25                  30
Pro Met Tyr Tyr Arg Asn Ala Gln Ala Ala Leu Val Val Tyr Asp Val
        35                  40                  45
Thr Lys Pro Ser Ser Leu Thr Lys Ala Lys His Trp Val Ala Glu Leu
    50                  55                  60
Gln Arg Gln Ala Gln Pro Trp Asn Arg Asp Cys Thr Cys Trp Gln
65                  70                  75
```

<210> 27927
<211> 62
<212> PRT
<213> A.fumigatus

<400> 27927

```
Ser Leu Val Leu Pro Gln Ile Phe Thr Pro Phe Ile Ser Met Asp Asp
1               5                  10                  15
Val Glu Glu Ile Ile Tyr Ser Leu Val Lys Tyr Gln Ile His Ala Arg
            20                  25                  30
Leu Leu Val Ser Phe Gln Ser Thr Phe Leu His Ile Gln Glu Thr Lys
        35                  40                  45
Pro Met Gly Val Val Tyr Ala Trp Pro Ala Phe Leu Lys Arg
    50                  55                  60
```

<210> 27928
<211> 544
<212> PRT
<213> A.fumigatus

<400> 27928

```
Met Ala Leu Glu His Asp Pro Asn Ser Ala Arg Arg Lys Arg Arg Lys
1               5                  10                  15
Thr Glu Asp Val Asn Gln Arg Thr Arg Asp Leu Ser Thr Glu Gly Glu
            20                  25                  30
Pro His Gln Gly Asp Asn Ser Leu Leu Leu Asp Gln Pro Leu Ala Thr
        35                  40                  45
Leu Asn Thr Pro Ser Gly Glu Ile Gln Phe Ala Ala Asn Ala Gly Ala
    50                  55                  60
Ser Asn Ala Thr Leu Pro Pro Val Val Ser Asp Val Ala Ser Ser Glu
65                  70                  75                  80
Ser Ser Ser Gly Ser Asn Ser Ala Ser Asp Leu His Asn Pro Asp Arg
                85                  90                  95
Gly Val Leu Asp Asp Ala Asn Gln Ala Leu Gln Ser Arg Ser Pro Pro
            100                 105                 110
Gln Lys Ile Met Lys Leu Thr Ala Asn Gly Lys Leu Leu Ser Ser Pro
        115                 120                 125
Val Ala Lys Gln Ser Asp Asp Thr Pro Gln Lys Lys Arg Arg Ser Lys
    130                 135                 140
Arg Thr Lys Ala Gly Ser Gln Gly Leu Glu Gln Gly Lys Lys Lys Leu
145                 150                 155                 160
Val Val Leu Lys Tyr Ala Ser Glu Pro Asp Lys Asn Gln Asn Ile Gly
                165                 170                 175
Gln Leu Ile Asp Lys Ile Ile Cys Gly Gln Thr Arg Tyr Ile Pro Ser
            180                 185                 190
Arg Ala Thr Val Pro Pro Leu Pro Val Ala Gln Lys Pro Gln Pro Pro
        195                 200                 205
Lys Pro Thr His Pro Phe Phe Leu Lys Pro Ala Leu Arg Lys Pro Asp
    210                 215                 220
Pro Ser Ala Glu Thr Val Pro Pro Ser Asn Leu Ser Gln Gly Ile Pro
225                 230                 235                 240
Ser Thr Thr Ser Val Pro Glu Thr Lys Pro Ser Phe Thr Arg Ser Thr
                245                 250                 255
Ser Arg Pro Val Leu Phe Ser Ser Phe Arg Pro Arg Pro Lys Phe Pro
            260                 265                 270
Glu Pro Ile Asp Pro Val Trp Pro Pro Arg Gly Leu Gly His Val Arg
        275                 280                 285
Gly Ile Pro Gly Gly Ser Asp Arg Gln Asp Lys Asn Leu Cys Tyr Pro
    290                 295                 300
Leu Asn Ile Asp Gln Lys Lys Ala Lys Met Pro Ala Val Arg Val Leu
305                 310                 315                 320
Asp Glu Glu Asn Ile Leu Arg Thr Trp Thr Asn Leu Asn Lys Asp Val
```

```
                325                 330                 335
Pro Thr Ala Leu Arg Leu Pro Gln Arg His Thr Ala Ser Gly Arg Asp
            340                 345                 350
Leu Gln Gln Ala Ile Leu Pro Glu Leu Ser Asn Ser Thr Phe Ala Asp
        355                 360                 365
Gly Thr Asn Leu Ile Val Ser His Pro Ala Ile Ser Arg Val Phe Leu
    370                 375                 380
Ser Ile Pro Gln Ser Leu Thr Ala Phe Asp Arg Gly Glu Tyr Asp Met
385                 390                 395                 400
Ser Leu Trp Thr Gln Lys Tyr Ala Pro Glu Ser Ala Ala Gln Val Leu
                405                 410                 415
Gln Met Ser Lys Glu Ala Met Met Leu Arg Asp Trp Leu Lys Tyr His
            420                 425                 430
Thr Val Ser Ala Val Asp Thr Gly Lys Pro Ala Lys Asp Ile Glu Lys
        435                 440                 445
Val Asn Glu Lys Gly Asp Val Lys Lys Arg Lys Lys Lys Pro Lys Lys
    450                 455                 460
Ala Asp Gln Leu Asp Gly Phe Ile Val Asn Ser Ser Asp Asp Asp Tyr
465                 470                 475                 480
Glu Met Ser Glu Val Thr Ala Ser Asp Asp Asp Glu Leu Ala Gly Gly
                485                 490                 495
Val Thr Val Ser Ser Lys Lys Thr Val Ile Arg Ser Gly Asp Ser Asp
            500                 505                 510
Gly Val Trp Arg Ser Gly Thr Gly Asn His Arg Thr Ser Asn Val Ile
        515                 520                 525
Phe Leu Ser Val Val Phe Thr Thr Gly Leu Glu Gly Gln Ala Phe Asn
    530                 535                 540

<210> 27929
<211> 134
<212> PRT
<213> A.fumigatus

<400> 27929
Phe Pro Thr Ala Ser Ala Asn Arg Trp Cys Cys Cys Gly Asp Ser Gly
1               5                   10                  15
Lys Thr Glu Cys Val Asn Ile Thr Met Thr Met Ala Ala Glu Val Asp
            20                  25                  30
Leu Asn His Ser Ala Gly Glu Leu Thr Thr Glu Glu Leu Glu Arg Ile
        35                  40                  45
Val Thr Ile Leu Gln Asn Pro Thr Gln Tyr Lys Ile Pro Thr Trp Phe
    50                  55                  60
Leu Asn Arg Gln Arg Asp Ile Val Asp Gly Lys Asp Ser Gln Val Leu
65                  70                  75                  80
Ser Asn Gly Leu Asp Ser Lys Leu Arg Glu Asp Leu Glu Arg Leu Lys
                85                  90                  95
Lys Ile Arg Ser His Arg Gly Leu Arg His Tyr Trp Gly Leu Arg Val
            100                 105                 110
Arg Gly Gln His Thr Lys Thr Thr Gly Arg Arg Gly Arg Thr Val Gly
        115                 120                 125
Val Ser Lys Lys Lys Gly
    130

<210> 27930
<211> 94
<212> PRT
```

<213> A.fumigatus

<400> 27930
Cys Phe Phe Ser Ile Pro Thr Ala Leu Val Ser Gly Glu Lys Thr Asn
1 5 10 15
Phe Gln Tyr Ile Leu Arg Leu Leu Asn Thr Asn Val Asp Gly Lys Gln
20 25 30
Lys Ile Met Tyr Ala Leu Thr Gln Ile Lys Gly Val Gly Arg Arg Tyr
35 40 45
Ser Asn Leu Val Cys Lys Lys Ala Asp Val Asp Leu Ser Lys Arg Tyr
50 55 60
Val Gln Ser Thr Phe Asp Phe Leu Gln His Leu Gln Ile Ala Gly Val
65 70 75 80
Val Val Glu Thr Ala Gly Arg Leu Asn Ala Ser Ile Ser Leu
85 90

<210> 27931
<211> 123
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (7)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27931
Ser Arg Ala Gly Gly Phe Xaa Lys Arg Ala Pro Val Asp Thr Ser Ser
1 5 10 15
Pro Val Val Lys Thr Lys Asn Pro Ile Ser Gly His Pro Val Gly Tyr
20 25 30
Lys Phe Ile Pro Leu Ala Thr Gln Leu Leu Leu Ala Asp Pro Asn Ser
35 40 45
Val Gln Ala Lys Arg Ala Gln Phe Ala Gln His His Val Trp Val Thr
50 55 60
Lys His Arg Asp Gly Glu Leu Tyr Ala Gly Gly Arg Tyr Thr Leu Gln
65 70 75 80
Ser Gln Gln Glu Val Asp Gly Val Ala Asp Ala Val Lys Arg Gly Glu
85 90 95
Ser Val Val Asp Thr Asp Val Val Val Trp Ser Thr Phe Gly Ile Thr
100 105 110
His Asn Pro Arg Val Glu Asp Trp Pro Val Met
115 120

<210> 27932
<211> 497
<212> PRT
<213> A.fumigatus

<400> 27932
Arg Leu Ile Gly Gly Lys Ile Ile Asp His Arg Leu Glu Arg Ser Arg
1 5 10 15
Ile Thr Ser Val Pro Thr Gly Glu Arg Ser Phe His Val Leu Tyr Tyr
20 25 30
Leu Leu Ala Gly Thr Ser Pro Ala Glu Lys Ala His Leu Gly Phe Asp
35 40 45

```
Lys Ala Val His Val Ser Thr Ser Ser Gly Ala Ile Gly His Lys Arg
    50                  55                  60
Trp Arg Tyr Leu Gly His Pro Thr Gln Leu Lys Val Gly Val Asn Asp
65                  70                  75                  80
Val Glu Gly Phe Gln His Phe Lys Thr Ala Leu Arg Lys Leu Glu Phe
                85                  90                  95
Pro Arg Ser Glu Ile Ala Glu Ile Cys Gln Ile Leu Ala Thr Ile Leu
            100                 105                 110
His Ile Gly Gln Leu Glu Phe Ala Ser Gly Gln Ala Thr Thr Thr His
        115                 120                 125
Ala Glu Glu Ser Gly Gly Tyr Ser His Glu Gly Gly Glu Thr Val Thr
    130                 135                 140
Ile Val Lys Asn Lys Asp Val Leu Ser Ile Ile Ala Ala Phe Leu Gly
145                 150                 155                 160
Leu Ser Val Glu Asp Leu Glu Asn Ser Phe Gly Tyr Arg Thr Lys Thr
                165                 170                 175
Ile His Arg Glu Arg Val Thr Val Met Leu Asp Pro Lys Gly Ala Arg
            180                 185                 190
Gln Asn Ala Asp Glu Leu Ala Arg Thr Ile Tyr Ser Leu Leu Val Ala
        195                 200                 205
Tyr Val Ile Glu Ala Val Asn Gln Arg Ile Cys Ala Ala Glu Asp Ser
    210                 215                 220
Val Ala Asn Thr Ile Ser Ile Val Asp Phe Pro Gly Phe Ala Gln Ala
225                 230                 235                 240
Cys Ala Thr Gly Ser Thr Leu Asp Gln Leu Phe Asn Asn Ala Ala Thr
                245                 250                 255
Glu Leu Leu Tyr Asn Phe Cys Leu Gln Ser Phe Phe Asp Arg Lys Ala
            260                 265                 270
Asp Glu Leu Glu Arg Glu Glu Val Ser Val Pro Ala Thr Ser Tyr Phe
        275                 280                 285
Asp Asn Thr Asp Ala Val Arg Gly Leu Leu Lys His Gly Asn Gly Leu
    290                 295                 300
Leu Ser Ile Leu Asp Asp Gln Thr Arg Arg Gly Arg Thr Asp Asn Gln
305                 310                 315                 320
Leu Leu Glu Ser Leu Arg Arg Arg Phe Glu Asn Lys Asn Pro Thr Ile
                325                 330                 335
Ile Val Glu Gly Ser Lys Arg Thr Ser Leu Ile Ser Gln Asn Ala Arg
            340                 345                 350
Ser Ala Phe Thr Val Lys His Phe Ala Gly Glu Ile Asp Tyr Ser Val
        355                 360                 365
Asn Gly Leu Ile Glu Glu Asn Gly Glu Phe Ile Ser Gly Asp Leu Met
    370                 375                 380
Arg Leu Met Lys Ser Thr Lys Ser Asp Phe Val Arg Glu Leu Phe Gly
385                 390                 395                 400
Gln Ala Ala Leu Gln Thr Val Thr His Pro Lys Glu Lys Thr Ala Ile
                405                 410                 415
Met Gln Ala Gln Val Ser Ser Lys Pro Leu Arg Met Pro Ser Met Ala
            420                 425                 430
Arg Arg Lys Thr Ser Pro Ser Ser Arg Leu Ala Phe Asp Ala Gly Asp
        435                 440                 445
Ala Asp Glu Val Glu Ser Gln Ala Glu Ser Ile Ala Lys Asp Ser Ser
    450                 455                 460
Ser Gly Arg Arg Lys Ser Ala Met Leu Thr Ser Gly Ile Gln Gly Ala
465                 470                 475                 480
Ala Leu Ser Phe Phe Arg His Gln Pro Gly Pro Gly Asn Lys Ser Asn
                485                 490                 495
```

Ala

<210> 27933
<211> 207
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (136),(179),(192)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27933
Gln Arg Val Ile Pro Gln Pro Phe Asn Asn Val Leu Val Ser Asn Ser
1 5 10 15
Ser Phe Pro Ser Ser Ser Ser Thr Ser Thr Ala Ser Ala Phe Leu Phe
20 25 30
Pro Arg Phe Lys Tyr Ile Pro Ser Ile Ser Ile Asn Val Ser Glu Glu
35 40 45
Gln Asn Ala Pro Thr Asn Leu Ala Thr Phe Val Gln Ala Phe Leu Leu
50 55 60
Pro Ala Gln Leu Asn Pro Met Gln Asp Ser Leu Pro Glu Ser Lys Arg
65 70 75 80
Ala Glu Leu Thr Arg Lys Ser Glu Leu Glu Ser Ser Phe Pro Gly Ala
85 90 95
Val Asp Ile Gln Tyr Ser Pro Val Val Leu Ile Cys Gly His Gly Gly
100 105 110
Arg Asp Met Arg Cys Gly Val Met Ala Pro Val Leu Glu Lys Glu Phe
115 120 125
Ser Arg Val Leu Ser Ala Arg Xaa Phe Ser Pro Ala Gly Ala Asp Gly
130 135 140
Asn Pro Thr Asp Ser Pro Glu His Ala Lys Ile Gly Leu Ile Ser His
145 150 155 160
Val Gly Gly His Lys Tyr Ala Gly Asn Val Ile Val Tyr Ile Pro Pro
165 170 175
Gly Met Xaa Ala Gly Gly Ser Pro His Pro Leu Ala Gly Lys Gly Xaa
180 185 190
Trp Tyr Gly Arg Val Glu Pro Lys His Val Gln Gly His Tyr Gly
195 200 205

<210> 27934
<211> 72
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (11),(39),(52)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27934
Tyr Ile Thr Ile Pro Ile Asn Pro Thr Pro Xaa Met Phe Glu Tyr Thr
1 5 10 15
Ser Ser Thr His Tyr Ser Leu Ile His Asn Ala Pro Gly His Ala Trp
20 25 30

```
Val Gln Pro Val His Thr Xaa Tyr Pro Tyr Pro Pro Ala Asp Glu Gly
        35                  40                  45
Ile Arg Leu Xaa Ser Phe Arg Glu Glu Cys Thr Gln Ser His Phe Gln
    50                  55                  60
His Ile Cys Asp His Arg His Asp
65                  70
```

<210> 27935
<211> 66
<212> PRT
<213> A.fumigatus

<400> 27935

```
Leu Val Ala Ser Ile Leu Ala Ala Leu Ser Ser Ala Tyr Ser Leu Thr
1               5                   10                  15
Thr Ser Arg Lys Gln Tyr Thr Arg Val Gln Tyr Ser Val Ser Val Met
            20                  25                  30
Arg Ser Tyr Arg Met Tyr Asp Val Val Leu Gly Gly Leu Trp Ile Glu
        35                  40                  45
Ser Ile Lys Asn Phe Ile Cys Ala Val Gly Ser Ser Lys Arg Val Ala
    50                  55                  60
Asn Ser
65
```

<210> 27936
<211> 334
<212> PRT
<213> A.fumigatus

<400> 27936

```
Val Ser Gln Lys Lys Met Ser Ser Leu Arg Gly Val Ala Arg Ser Ala
1               5                   10                  15
Pro Arg Gly Ile Gln Ala Ile Gly Leu Trp Arg Gln Ser Glu Ser Val
            20                  25                  30
Ala Ala Asn Phe Thr Thr Ala Lys Ser Arg Phe Gln Ile Ser Ile Ser
        35                  40                  45
Asn Arg Arg Leu Leu Arg Ser Ala Pro Ala Arg Lys Ile Gln Thr Val
    50                  55                  60
Ala Ala Glu Asn Ser Ser Ser Arg Asp Ser Ser Asn Pro Ala Leu Ser
65                  70                  75                  80
Phe Pro Cys Leu Asp Ala Leu Asp Ala Lys Ser Ala Leu Leu Ser Ala
                85                  90                  95
Arg Ser Ile Glu Ser Gly Pro Glu Pro Ser Tyr Thr Thr Gly Gln His
            100                 105                 110
Glu Asn Phe His Cys Glu Glu Pro Leu Leu Leu Asp Trp Gly Gly Val
        115                 120                 125
Leu Pro Glu Phe Asp Ile Ala Tyr Glu Thr Trp Gly Gln Leu Asn Ala
    130                 135                 140
Asp Lys Ser Asn Ala Ile Leu Leu His Thr Gly Leu Ser Ala Ser Ser
145                 150                 155                 160
His Ala His Ser Thr Glu Ala Asn Pro Lys Pro Gly Trp Trp Glu Lys
                165                 170                 175
Phe Ile Gly Ser Gly Lys Pro Leu Asn Thr Asp Lys Tyr Phe Val Ile
            180                 185                 190
Cys Thr Asn Val Ile Gly Gly Cys Tyr Gly Ser Thr Gly Pro Ser Ser
        195                 200                 205
```

```
Ile Asp Pro Ser Asp Gly Lys Arg Tyr Ala Thr Arg Phe Pro Ile Leu
    210                 215                 220
Thr Leu Asp Asp Met Val Arg Ala Gln Phe Arg Leu Leu Asp Ser Leu
225                 230                 235                 240
Gly Ile Gln Lys Leu Tyr Ala Ser Val Gly Ser Ser Met Gly Gly Met
                245                 250                 255
Gln Ser Leu Ala Ala Gly Val Leu Phe Pro Glu Arg Ile Gly Lys Ile
            260                 265                 270
Val Ser Ile Ser Gly Cys Ala Arg Ser His Pro Tyr Ser Ile Ala Met
        275                 280                 285
Arg His Thr Gln Arg Gln Val Leu Met Met Asp Pro Ser Arg His Gly
    290                 295                 300
Val Leu Tyr Arg Tyr Ser Phe Pro Pro Pro Pro Ala Phe Val Asn Ile
305                 310                 315                 320
Gln Ser Ser Pro Ala Gly Ala Gly Lys Asp His Ala Met Gln
                325                 330
```

<210> 27937
<211> 154
<212> PRT
<213> A.fumigatus

```
<400> 27937
Gly His Arg Ser Arg Gly Arg Met Ala Ser Leu Ile Thr Thr Met Phe
1               5                   10                  15
Val Pro Phe Arg Pro Phe Ile Pro Ser Pro Ser Pro Ser Ser Ser Ser
            20                  25                  30
Thr Ser Pro Ser Ala Pro Pro Ser His Pro Leu Ser Ala Leu Thr Pro
        35                  40                  45
Ser Ile Ser Cys Ser Thr Ile His Thr Phe Arg Gly Pro Leu Ser Glu
    50                  55                  60
Pro Pro Ser Tyr Leu Ser Pro Ala Val Arg Ala Leu Lys Gln Asn Leu
65                  70                  75                  80
Cys Gly Leu Thr Pro Pro Ser Asn Ala Arg Thr Arg Ala Pro Phe Lys
                85                  90                  95
Pro Arg Ser Ala Ala Lys Gly Thr Ser Ser Tyr Gln Leu Arg Gln Phe
            100                 105                 110
Ala Glu Ala Thr Leu Gly Ser Gly Ser Leu Arg Lys Ala Val Lys Leu
        115                 120                 125
Pro Glu Gly Glu Asp Leu Asn Glu Trp Leu Ala Val Asn Gly Lys Ser
    130                 135                 140
Thr Gly Gly Ile Val Ala Gly Pro Arg Val
145                 150
```

<210> 27938
<211> 145
<212> PRT
<213> A.fumigatus

```
<400> 27938
Cys Asp Val Met Met Leu Arg Asp Leu Trp Phe Ala Val Ala Thr Ala
1               5                   10                  15
Phe Thr Leu Val Gln Ala Asp Arg Gly Pro Tyr Phe Gln Ser Ser Arg
            20                  25                  30
Phe Glu Asp Gly Asp Leu Gly Gln Trp Pro Thr Glu Thr Tyr Arg Ser
        35                  40                  45
```

```
Ser Ala Leu Met Gly Pro Ile Leu Asn Tyr Val Glu Ser Asn Pro Gln
    50                  55                  60
Cys Lys Asp Gly Gln Tyr Thr Leu Ile Ala Pro Arg Gly Met Ala Val
65                  70                  75                  80
Arg Asn Pro Gly Pro Met Ile Ile Asp Gln Asp Gly His Leu Val Trp
                85                  90                  95
Thr Lys His Tyr Gly Gln Thr Tyr Asn Val Asn Val Tyr Arg Tyr Lys
            100                 105                 110
Gly Gln Asp Tyr Leu Thr Phe Trp Val Gly Asn Asp Gly Ile Val Gly
        115                 120                 125
His Gly Asp Gly Thr Tyr Tyr Met Val Ser Pro Val Ser Val Ser Thr
    130                 135                 140
Trp
145
```

<210> 27939
<211> 173
<212> PRT
<213> A.fumigatus

```
<400> 27939
Leu Asp Ser Ala Tyr Glu Glu Ala Phe Thr Ile Arg Gly Ala Asn Gly
1               5                   10                  15
Leu Pro Ala Asp Leu His Glu Phe Gln Ile Thr Gly His Glu Thr Ala
            20                  25                  30
Leu Phe Thr Val Tyr Asp Val Val Pro Ala Asp Leu Arg Ser Ala Gly
        35                  40                  45
Gly Pro Glu Lys Gly Trp Ile Trp Asp Gly Thr Phe Gln Glu Val Asp
    50                  55                  60
Ile Glu Thr Gly Gln Leu Leu Phe Gln Trp Arg Ala Ser Glu His Phe
65                  70                  75                  80
Asn Leu Thr Asp Ser Tyr Arg Gly Arg Glu Gly Ala Gly Asp Ser Glu
                85                  90                  95
Asp His Pro Trp Asp Phe Phe His Ile Asn Ser Val Asp Lys Asp Ala
            100                 105                 110
Lys Gly Asn Phe Leu Val Ser Ser Arg Tyr Met Ser Cys Leu Thr Tyr
        115                 120                 125
Ile Asp Gly Arg Thr Gly Asn Ile Ile Trp Arg Leu Gly Gly Lys His
    130                 135                 140
Asn Asp Phe His Glu Leu Phe Cys Arg Ala Arg His Lys Leu Asn Leu
145                 150                 155                 160
Gln Gln Gln Ala Arg Phe Ser Arg Thr Thr Val Arg Ala
                165                 170
```

<210> 27940
<211> 215
<212> PRT
<213> A.fumigatus

```
<400> 27940
Val Thr Ile Thr Asn Asn His Asn Ser Leu Ala Ser Ile Ser Ser Trp
1               5                   10                  15
Ile Ser Ile Ile Ser Leu Ser Thr Ser Ile Phe Leu Ala Arg Ser Ser
            20                  25                  30
Arg Lys Met Ala Ser Ser Thr Pro Pro Ile Pro Thr Gln Thr Trp Thr
        35                  40                  45
```

```
Lys Asp Ala Tyr Phe Ile Ser Thr Asp Ser Ser Leu Ile Pro Leu Glu
    50                  55                  60
Thr Leu Asn Asp Trp Phe Ala Ser Asp Asp Ile Tyr Trp Thr Asn Ser
65                  70                  75                  80
Leu Pro Leu Asp Ile Leu Lys Gln Leu Val Glu Asn Ser Met Cys Phe
                85                  90                  95
Gly Leu Tyr Tyr Thr Pro Asp Gln Pro Asp Lys Ala Asp Ala Glu Pro
            100                 105                 110
Glu Phe Ile Gly Ile Ala Arg Phe Val Thr Asp Tyr Thr Thr Phe Val
        115                 120                 125
Tyr Ile Thr Asp Val Tyr Val Leu Ser Cys His Gln Gly Lys Gly Leu
    130                 135                 140
Gly Ser Trp Leu Val Glu Cys Met Gly Glu Val Ile Asp Ala Met Pro
145                 150                 155                 160
Tyr Leu Arg Arg Ser Met Leu Phe Thr Met Asp Trp Ala Arg Ser Val
                165                 170                 175
Pro Phe Tyr Lys Lys Ile Leu Gly Met Ser Val Gln Glu Ser Lys Asn
            180                 185                 190
Gly Glu Gly Met Ala Ile Leu Met Lys Lys Gly Asn Gly Tyr Pro Lys
        195                 200                 205
Tyr Asp Tyr Glu Lys Gly Val
    210                 215

<210> 27941
<211> 63
<212> PRT
<213> A.fumigatus

<400> 27941
Arg Ser Asp Gly Thr Thr Gly Asn Glu Gly Pro Ser Gly Ala Asn Met
1               5                   10                  15
Leu Asn Cys Arg Pro Lys Thr Val Lys Thr Ile Arg Asp Leu Tyr Ser
            20                  25                  30
Met Ser Gly Phe Phe Gly Cys Pro Arg Ser Ser Asn Val Ile Thr Leu
        35                  40                  45
Pro Asp Phe Ile Thr Leu Ala Gln Asn Ala Val Glu Pro Pro Ser
    50                  55                  60

<210> 27942
<211> 372
<212> PRT
<213> A.fumigatus

<400> 27942
Glu Tyr His Ser Glu Met Leu Gln Leu Leu Lys Leu Pro Pro Gln Gln
1               5                   10                  15
Asp Arg Asp Ala Val Met Ile Leu His Met Gly Gly Val Phe Gly Asp
            20                  25                  30
Lys Glu Ala Thr Leu Asp Arg Phe Arg Glu Asn Tyr Lys Ala Leu Ser
        35                  40                  45
Gln Asp Ile Lys Asn Arg Leu Val Leu Glu Asn Asp Asp Val Ser Trp
    50                  55                  60
Ser Val His Asp Leu Leu Pro Ile Cys Glu Glu Leu Asn Ile Pro Leu
65                  70                  75                  80
Val Leu Asp Phe His His His Asn Ile Val Phe Asp Ser Ser Lys Val
                85                  90                  95
```

```
Arg Glu Gly Thr Leu Asp Ile Met Asp Leu Phe Asp Arg Ile Lys Ala
            100                 105                 110
Thr Trp Thr Arg Lys Asn Ile Thr Gln Lys Met His Tyr Ser Glu Pro
        115                 120                 125
Val Pro Ser Ala Ile Thr Asn Arg Gln Arg Arg Lys His Ser Asp Arg
    130                 135                 140
Val Ser Thr Leu Pro Pro Cys Asp Pro Thr Met Asp Leu Met Ile Glu
145                 150                 155                 160
Ala Lys Asp Lys Glu Gln Ala Val Phe Glu Leu Met Arg Arg Phe Lys
                165                 170                 175
Leu Pro Gly His Asp Leu Phe Asn Asp Val Leu Pro Tyr Thr Arg Thr
            180                 185                 190
Asp Glu Asn Arg Pro Phe Lys Pro Pro Arg Lys Thr Lys Lys Asn Gly
        195                 200                 205
Gly Phe Val Asp Leu Glu Ala Gln Val Pro Leu Ala Pro Thr Val Pro
    210                 215                 220
Glu Glu Glu Val Gly Met Gly Gly Pro Glu Arg Arg Val Tyr Trp Pro
225                 230                 235                 240
Pro Gly Met Glu Glu Trp Leu Arg Pro Lys Lys Ile Ile Arg Val Lys
                245                 250                 255
Ala Arg Gln Ser Pro Ala Lys Ser Asn Val Ser Lys Arg Asn Ala Lys
            260                 265                 270
Gly Asn Glu Asp Ser Ser Gln Ile Gln Asp Glu Asp Ala Asp Glu Glu
        275                 280                 285
Asn Glu Gly Pro Ala Thr Pro Lys Pro Lys Asn Ser Arg Pro Pro Lys
    290                 295                 300
Arg Thr Gly Ser Val Lys Lys Gln Thr Ser Arg Lys Arg Lys Ala Ser
305                 310                 315                 320
Pro Thr Pro Pro Ser Thr Pro Ser Val Ser Asp Ile Glu Gly Leu Asp
                325                 330                 335
Leu Ala Lys Pro Pro Ile Leu Ser Gly Thr Glu Thr Ala Asn Thr Arg
            340                 345                 350
Cys Ser Arg Arg Ala Thr Thr Ala Lys Lys Val Asn Tyr Ala Glu Ser
        355                 360                 365
Asp Ser Ala Cys
    370
```

<210> 27943
<211> 239
<212> PRT
<213> A.fumigatus

<400> 27943

```
Leu Asp Tyr Cys Pro Gly Gly Glu Ile Phe Ser Tyr Leu Arg Arg Ala
1               5                   10                  15
Arg Arg Phe Asn Glu Thr Thr Ser Arg Phe Tyr Ala Ala Glu Ile Thr
            20                  25                  30
Leu Thr Ile Glu Tyr Leu His Asp Val Glu Gly Ile Val Tyr Arg Asp
        35                  40                  45
Leu Lys Pro Glu Asn Ile Leu Leu Asp Ala Asp Gly His Ile Lys Leu
    50                  55                  60
Val Asp Phe Gly Phe Ala Lys Gln Ile Asn Asp Arg Glu Thr Tyr Thr
65                  70                  75                  80
Leu Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val Ile His Asn Ser
                85                  90                  95
Gly His Gly Leu Ala Val Asp Trp Trp Ala Leu Gly Ile Leu Ile Tyr
```

```
            100                 105                 110
Glu Phe Leu Val Gly Gln Pro Pro Phe Trp Asp Gln Asn Pro Met Arg
        115                 120                 125
Ile Tyr Glu Gln Ile Val Glu Gly Arg Leu Arg Phe Pro Pro Asn Met
    130                 135                 140
Ser Pro Ala Ala Gln Asn Ile Ile Ser Cys Leu Cys Lys Thr Asn Pro
145                 150                 155                 160
Ser Glu Arg Leu Gly His Ile Ser Gly Gly Ser Ala Arg Val Lys Ala
                165                 170                 175
His Pro Phe Phe Glu Asp Ile Asn Trp Asp Asp Leu Phe His Arg Arg
            180                 185                 190
Met Lys Gly Pro Ile Ile Pro Arg Val Asp His Pro Ala Asp Thr Gly
        195                 200                 205
Asn Phe Glu Asp Tyr Pro Asp Val Asp Val Lys Gly Gln Ala Ile Tyr
    210                 215                 220
Thr Asp Asp Met Lys Lys Lys Tyr Glu Ala Leu Phe Ser Asp Phe
225                 230                 235

<210> 27944
<211> 63
<212> PRT
<213> A.fumigatus

<400> 27944
Val Lys Leu Gln Leu Gln Ala Glu Gln Leu Ser Phe Pro Ala Thr Thr
1               5                   10                  15
Val Glu Pro Ser Lys Ala Lys Gln Ala Ile Pro Asp Ser Phe Arg Leu
            20                  25                  30
Glu Ala Met Thr Ile Leu Pro Ala Gly Thr Asn Asp Thr Trp Asp Leu
        35                  40                  45
Gln Gly Gly Gly Arg Lys Ile Asn Glu Ala Ala Pro Gly Trp Lys
    50                  55                  60

<210> 27945
<211> 170
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (141),(154)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27945
Ser Asn Ser Ala Thr Ser Ser Ser Pro Ile Leu Arg Val Arg Phe Ser
1               5                   10                  15
Pro Phe His Phe Leu Ala Ile Pro Thr Asp Pro Pro Gln Pro Pro Ala
            20                  25                  30
Pro Lys Asn Pro Ser Gly Pro Pro Ser Asn Ser Thr Ser Pro Ser Ser
        35                  40                  45
Ala Ala Ala Ser His Ser Ser Asn Pro Ser Cys Lys Ala Ser Ser Ala
    50                  55                  60
Lys Ser Lys Ala Val Ser Arg Lys Ala Thr Arg Ser Leu Arg Pro Gly
65                  70                  75                  80
Pro Asn Phe Pro Phe Pro Arg Pro Gly Gln Thr Met Thr Gly Ser Ser
                85                  90                  95
```

```
Arg Ser Met Ile Arg Met Gly His Trp Arg Arg Arg His Arg Lys Arg
            100                 105                 110
Phe Met Trp Arg Leu Arg Arg Ala Arg Ile Ala Arg Met Trp Ser Cys
        115                 120                 125
Arg Gly Ser Arg Cys Ile Pro Val Ser Gly Arg Met Xaa Met Gly Gly
    130                 135                 140
Pro Met Leu Gly Val Pro Val Pro Tyr Xaa Ile Arg Ser Gly Gly Asn
145                 150                 155                 160
Asn Ile Cys Ile Leu Leu Ser Leu Tyr Ile
                165                 170
```

<210> 27946
<211> 93
<212> PRT
<213> A.fumigatus

<400> 27946

```
Leu Leu Pro Ile Ser Phe Pro His Ile Ser Val Leu Ser Ile Ala Ile
1               5                   10                  15
Met Ala Tyr Lys Gln Asn Thr Tyr Trp Lys Asn Val Leu Thr Ile Val
            20                  25                  30
Pro Ile Val Gly Ala Gly Val Ala Thr Ile Thr Tyr Leu Leu Arg Leu
        35                  40                  45
Tyr Ser Arg Arg Leu Thr Ala Ala Gly Phe Phe Leu Glu Asp Leu Leu
    50                  55                  60
Met Gly Ile Gly Leu Ile Ile Ser Tyr Cys Ala Thr Ala Phe Val Val
65                  70                  75                  80
Glu Ser Glu Cys Val Trp Pro Thr Ala Arg Asn Gln Asn
                85                  90
```

<210> 27947
<211> 212
<212> PRT
<213> A.fumigatus

<400> 27947

```
Asp Leu Gly Ala Gly Ser Val Lys Ser Val Trp Asp Ala Ser Ala His
1               5                   10                  15
Pro Cys His Phe His Pro Gly Ala Ala Ser Phe Ile Phe Leu Pro Pro
            20                  25                  30
Pro Cys Lys Ser His Val Ser Phe Val Pro Ala Gly Arg Ile Val Met
        35                  40                  45
Ala Ser Ser Leu Lys Leu Ser Gly Ile Ala Cys Leu Ala Leu Leu Gly
    50                  55                  60
Ser Thr Val Val Ala Gly Lys Asp Ser Cys Ser Ala Cys Ser Cys Ser
65                  70                  75                  80
Leu Thr His Phe Asn Ala Thr Val Gly Gly Arg Val Gln Pro Leu Thr
                85                  90                  95
Pro Phe Ser Leu Pro Cys Phe Ser Ser Tyr Asn Gly Arg Pro Val Ala
            100                 105                 110
Arg Asp Asp Ala Ala Cys Ala Ala Ile Gln Ala Lys Tyr Thr Asp Pro
        115                 120                 125
Trp Leu Arg Thr Asn Ser Pro Asn Gly Tyr Met Asn Asn Gln Asp Glu
    130                 135                 140
Met Trp Ser Ser Asp Pro Ser Asp Gln Cys Leu Leu Asp Ser Ser Asp
145                 150                 155                 160
```

```
Pro Thr Asp Pro Leu Ala Phe Val Asn Ala Thr Cys Arg Gln Gly Asn
                165                 170                 175
Met Pro Ser His Tyr Leu Glu Val His Ser Ala Lys Asp Val Ile Glu
            180                 185                 190
Ala Phe Arg Tyr Ser Asn Val Phe Thr Thr Gly Leu Glu Gly Ser Ala
        195                 200                 205
Ala Asp Ala Phe
    210
```

<210> 27948
<211> 380
<212> PRT
<213> A.fumigatus

<400> 27948

```
Leu Leu Ala Gln Val Ala Ala Arg Thr His Asp His Ser Arg Lys Val
1               5                  10                  15
Trp Thr Met Leu Ser Val Ala Leu Arg Ile Ala Gln Ala Leu Ser Leu
            20                  25                  30
His Met Thr Asp Pro Pro Phe Pro Val Thr Pro Phe Glu Arg Glu Met
        35                  40                  45
Arg Arg Arg Leu Trp His Val Ile Gly Trp Leu Asp Leu Glu Ala Ser
    50                  55                  60
Leu Asn Arg Gly Ser Glu Ser Met Met Arg Ser Ala Trp Ile Gln Thr
65                  70                  75                  80
His Ser Leu Thr Asn Ile Asn Asp Asp Asp Phe Gly Cys Asp Ser Glu
                85                  90                  95
Asp Pro Leu Pro Ala Ala Gln Arg Gly Pro Thr Glu Ala Thr Leu Leu
            100                 105                 110
Ile Leu Phe Ala His Gly Gln Cys Ala Leu Arg Ala Leu Asp Leu Ser
        115                 120                 125
His Phe Ala Glu Pro Gly Ile Thr Asp Ile Gln Glu Arg Gln Gln Thr
    130                 135                 140
Val Asp His Phe Arg Arg Thr Thr Lys Glu Leu Leu Ala Gly Cys Asp
145                 150                 155                 160
Pro Glu Asn Val Pro Phe His Trp Phe Ser Ile Gln Ile Gln Glu Gln
                165                 170                 175
Ile Ser Ala Val Leu Gln Leu Ile Ala Leu Arg Pro Leu Gln Arg Ser
            180                 185                 190
Pro Thr Phe Val Pro Ala Glu Leu Pro Ala Pro Gln Ile Leu Ala Leu
        195                 200                 205
Ala Ala Asp Ile Leu Glu Arg Arg Gln Arg Ile Phe Asn Asp Pro Arg
    210                 215                 220
Gly Gln Pro Trp Arg Trp Phe Gly Leu Leu Phe Phe Pro Trp His Ala
225                 230                 235                 240
Leu Val Val Ala Met Thr Glu Val Cys Val Cys Thr Asp Arg Leu Val
                245                 250                 255
Met Asp Arg Tyr Trp Pro Thr Val Glu Arg Ser Tyr Asp Leu Phe Gln
            260                 265                 270
Lys Gln Ala Val Gly Thr His Tyr Asp Trp Leu Ser Ala Ser Met Asp
        275                 280                 285
Ser Leu Met Asn Asn Ala Arg Ala Ala Arg Gln Lys Val Val Asp Ser
    290                 295                 300
Asp Ala Pro Gly Leu Gln Ala Pro Asp Ser His Leu Tyr Met Asp Met
305                 310                 315                 320
Ala Ser Leu Glu Arg Pro Leu Leu Pro Glu Ser Leu Pro Pro Val Pro
```

```
                325                 330                 335
Asp Ala Ala Leu Ala Pro Glu Gly Leu Thr Leu Leu Pro Asp Gln Glu
            340                 345                 350
Ile Ser Ala Trp Ala Gln Tyr Gly Glu Phe Thr Asp Arg Phe Asp Glu
        355                 360                 365
Leu His Ala Ile Phe Asn Ser Gly Leu Thr Trp Arg
    370                 375                 380
```

<210> 27949
<211> 128
<212> PRT
<213> A.fumigatus

<400> 27949

```
Ile Leu Gly Leu Met Pro Leu Gly Thr Ser Met Asp Tyr Glu Ser Ala
1               5                   10                  15
Asp Ser Arg Ser Lys Gly Cys Trp Asp Pro Val Pro Val Leu Lys Pro
            20                  25                  30
Phe Tyr Glu Lys Trp Thr Ser Ala Val Pro Thr Pro Asp Phe Leu Val
        35                  40                  45
Asp Asp Val Trp Cys Gly Met Val Gly Gly Ile Gly Phe Gly Ala Ser
    50                  55                  60
Ala Ser Glu Glu Leu Ser Val Phe Trp Thr Lys Thr Leu Lys Glu Val
65                  70                  75                  80
Tyr Arg Gly Asp Glu Gly Arg Lys Lys Val Arg Met Ala Val Ile Cys
                85                  90                  95
Leu Leu Ser Arg Asp Gly Leu Leu Leu Arg Leu Gly Asp Ile Lys Cys
            100                 105                 110
Pro Val Tyr Trp Leu Gln Val Ser Ser Asn Pro Leu Val Gly Arg Gly
        115                 120                 125
```

<210> 27950
<211> 277
<212> PRT
<213> A.fumigatus

<400> 27950

```
Asp Val Val Arg Pro Ser Ala Gly Glu Asn Gln Thr Ser Arg Ile Pro
1               5                   10                  15
Ser Ala Gly Tyr Arg Arg Pro Pro Ala Cys His Trp Arg Cys Cys Val
            20                  25                  30
His Pro Arg Leu Thr Gly Ile Trp Ser Arg Lys Gly Ser Tyr Pro Leu
        35                  40                  45
Tyr Val Cys Arg Leu Val Trp Asp Gly Thr Gly Asn Gly Val Thr Trp
    50                  55                  60
Arg Gly Ala Glu Pro Arg Ser Cys Pro Trp Arg Gly Gly Val Gly Asp
65                  70                  75                  80
Arg Ser Leu Ile Tyr Met Thr Ser Tyr Ile Gly Thr Leu Leu Thr Pro
                85                  90                  95
Val Val Val Gly Leu Lys Lys Pro His Ile Arg Lys Gln Gln Glu Lys
            100                 105                 110
Glu Lys Lys Lys Lys Lys Lys Lys Tyr Met Ala Ala Thr Lys Thr Ile
        115                 120                 125
Gln Val Pro His Leu Gly Gly Ile Thr Ala Gly Tyr Ala Leu Ser Asn
    130                 135                 140
Asp Arg Tyr Asp Pro Ala Lys Pro Thr Cys Val Leu Ile Asn Ser Met
```

```
145                 150                 155                 160
Cys Thr Thr Val Ser Leu Tyr Arg Asp Gln Phe Ser Asp Ala Ala Leu
                165                 170                 175
Thr Asp Ala Met Asn Leu Leu Ala Ile Glu Pro Leu Gly His Gly Ser
            180                 185                 190
Thr Ser Cys Pro Ser Glu His Phe Thr Tyr Trp Asp Ser Ala Trp Met
        195                 200                 205
Ala Leu Gln Val Met Asp Gln Leu Gly Ile Asp Lys Ala Phe Ala Leu
    210                 215                 220
Gly Thr Ser Gln Gly Gly Trp Ile Val Thr Arg Met Ala Leu Leu Ala
225                 230                 235                 240
Pro Asp Arg Val Gly Ala Pro Ala Ser Val Asn Tyr Leu Ser Cys Glu
                245                 250                 255
Gly Val Pro Trp Gln Thr Lys Lys Leu Leu Thr Asp Val Tyr Cys Ser
            260                 265                 270
Ser Arg Ser Ser Gly
        275
```

<210> 27951
<211> 105
<212> PRT
<213> A.fumigatus

<400> 27951

```
Ser Arg Gln Met Val Gly Arg Arg Leu Arg His Asp Leu Ile Val Ser
1               5                   10                  15
Thr Gly Tyr Val Trp Phe Lys Ser Gln Gln Thr Ile Val Leu Asn Pro
            20                  25                  30
Arg Leu Val Glu Gly Phe Phe Leu Gly Ile Glu Leu Met Arg Gln Gly
        35                  40                  45
Gly Val Phe Asp Ser Ser Cys Leu Arg Asn Ala Ala Arg Asp Leu Val
    50                  55                  60
Gly Val Ala Leu Gly Tyr Leu Ala Ser Arg Thr Ala Ala Ser Ser Phe
65                  70                  75                  80
Val Val Phe Gly His Gly Ser Tyr Phe Glu Lys Tyr Pro Ala Leu Asp
                85                  90                  95
Leu Ile Leu Ser Lys Ser Ser Ser Phe
            100                 105
```

<210> 27952
<211> 215
<212> PRT
<213> A.fumigatus

<400> 27952

```
Pro Leu Ile Pro Ala Leu Thr Gly Glu Glu Cys Asp Ser Tyr Gln Ile
1               5                   10                  15
Met Thr Leu Thr Asn Cys Thr Lys Val Phe Pro Pro Ser Ala His Arg
            20                  25                  30
Ile Val His Leu Val Ser Ser Pro Leu Phe Pro Pro Glu Arg Thr Pro
        35                  40                  45
Ile Ala Asn Trp Ile Asn Arg Val Leu Phe Phe Leu Leu Tyr Phe Asn
    50                  55                  60
Arg Leu Phe Ala Thr Leu Leu Ser Tyr Ala Ile Arg Ala Tyr Thr Trp
65                  70                  75                  80
His Tyr Tyr Arg Ala Tyr Val Asp Ile His Ala Leu Gln Ile Ser Leu
```

```
                85                  90                  95
Leu Gly Gly Arg Ile Phe Trp Lys Gly Ile Arg Tyr His Gly Val Asn
            100                 105                 110
Glu Thr Ile Phe Val His Gly Gly Phe Ile Thr Trp His Tyr Trp Lys
        115                 120                 125
Arg Thr Val Arg His Thr Asp Leu Ser Leu Leu Ser Ser Ser Asn Glu
    130                 135                 140
Arg Thr Pro Ala Gly Ser Gln Arg Pro Asp Thr Gln Ser Ser Asn Leu
145                 150                 155                 160
Ala Gly Arg Asp Asn Gly Glu Gly Glu Gln Gly Gly Leu Lys Glu Ala
                165                 170                 175
Asp Asn Phe Pro Cys Arg Ile Thr Ile Gln Phe Tyr Gly Leu Glu Trp
            180                 185                 190
Phe Ile Tyr Asn Arg Thr Pro Ala Tyr Asp Ser Met Ser Ser Pro Arg
        195                 200                 205
Gly Trp Lys Gly Pro Arg Thr
    210                 215

<210> 27953
<211> 76
<212> PRT
<213> A.fumigatus

<400> 27953
Val Pro Ser Ser Ala Asn Arg Val Tyr Ala Leu Ala Ala Ser Asn His
1               5                   10                  15
Tyr Ile Phe Gly Leu Ser Cys Ala Ser Ser Phe Ala Leu Pro Leu Gln
            20                  25                  30
Gly Phe Trp Asn Ser Leu Ile Tyr Ile Thr Val Ser Trp Lys Ala Ile
        35                  40                  45
Gly Thr Trp Phe Arg Gln Val Gly Ala Arg Ala Arg Arg Thr Ser Ser
    50                  55                  60
Ile Thr Phe Arg Pro Phe Gln His Pro Leu Arg Arg
65                  70                  75

<210> 27954
<211> 110
<212> PRT
<213> A.fumigatus

<400> 27954
Ala Met Thr Thr Leu Ser Ser Gly Tyr Gln Tyr Ser Thr Gln Leu Ser
1               5                   10                  15
Arg His Gln Gln Tyr Val Leu Ser Thr Ile Glu Arg Val Cys Ser Cys
            20                  25                  30
Val Ser Val Val Ala Ser Gly Val Val Ile Ala Thr Phe Ile Ser Ser
        35                  40                  45
Ser Ala Phe Gly Lys Pro Ile Asn Arg Leu Ile Phe Tyr Ala Ser Trp
    50                  55                  60
Gly Asn Leu Leu Ser Asn Ser Ala Thr Leu Ile Ala Asp Ser Ser Leu
65                  70                  75                  80
His Gly Arg Thr Gln Gly Ala Leu Cys Gln Phe Gln Gly Phe Met Ile
                85                  90                  95
Gln Trp Ser Val Asn Thr Arg Gly Asn Ala Ser Phe Val Tyr
            100                 105                 110
```

<210> 27955
<211> 84
<212> PRT
<213> A.fumigatus

<400> 27955
Ser Trp Ser Val Arg Phe Leu Pro Ala Asp Ser Leu Trp Ala Leu Ala
1 5 10 15
Met Ala Ser Asn Val Tyr Leu Ala Ile Phe Lys His Tyr Asp Thr Arg
20 25 30
Arg Leu Gly Met Leu Glu Trp Lys Tyr Leu Leu Phe Cys Tyr Gly Val
35 40 45
Pro Phe Ile Pro Ala Phe Val Tyr Leu Phe Leu Ser Ser Glu Ser Arg
50 55 60
Gly Lys Val Tyr Gly Glu Ser Val Val Ser Leu Val Ala Val Val Arg
65 70 75 80
Lys Gly Arg Tyr

<210> 27956
<211> 101
<212> PRT
<213> A.fumigatus

<400> 27956
Arg Ala Glu Val Asp Asp Pro Asn Glu Phe Arg Tyr Ile Tyr Asn Lys
1 5 10 15
Leu Arg Ile Phe Pro Ser Ala Ala Ile Asn Ser Thr Arg Asp Ser Leu
20 25 30
Ser Ser Arg Glu Tyr Gln Tyr Ile Gln Arg Arg Lys Ser Phe Gln Pro
35 40 45
Pro Leu Met Phe Val Ser Tyr Leu Leu Ala Asn Ala Asp His Asn Arg
50 55 60
Arg His Leu Val Ser Ser Gln Ser Asp Glu Lys Asn Arg Ile Gln Gln
65 70 75 80
Met Gln Pro Leu Pro Glu Ile Ala Cys Ser Val Leu Ala Ser Ser Met
85 90 95
Thr Ala Arg Val Met
100

<210> 27957
<211> 68
<212> PRT
<213> A.fumigatus

<400> 27957
Leu Ala Val Arg Arg Ser Val Ser His Leu Arg Ile Val Gln Ala Leu
1 5 10 15
Phe Leu Cys Val Ser Ile Cys Ser Leu His Lys Asn Arg Phe Leu Asn
20 25 30
Val Glu Ala Phe Phe Ser Thr Val Gly Ser Phe Thr Leu Ser Asp Phe
35 40 45
His Ile Ala Val Thr Pro Ile Gly Arg Asn Asn Ser Phe Leu Tyr Cys
50 55 60
Tyr Phe Arg Leu
65

<210> 27958
<211> 545
<212> PRT
<213> A.fumigatus

<400> 27958
Asp Leu His Leu His Lys Glu Thr Leu Gly His Ile Asp Asp Glu Ser
1 5 10 15
Ser Leu Ser Gly Glu Ser Ala Val Asp Asn Ser Ser Asp Arg Leu Ser
20 25 30
Asn Ser Asp Cys His Gly Ile Glu Ile Lys Ser Arg Gly Asp Glu Val
35 40 45
Glu Ala Arg Ser Glu Pro Glu Ile Ala Val Gln Glu Ala Val Val Pro
50 55 60
Ser Asp Arg Cys Asn Ser Asn Val Glu Val Gly Lys Gly Glu Gly Thr
65 70 75 80
His Gly Arg Glu Glu Cys Leu Asp Ile Gln Glu Ser Val Leu Val Gln
85 90 95
Gly Thr Asp Ala His Ala Glu Glu Gln Gly Leu His Asn Ala Gln Val
100 105 110
Arg Asp Thr Ser Thr Asp Gly Lys Leu Gln Lys Gln Leu Asn Thr Glu
115 120 125
Val Gln Asp Ile Gly Gln Asn Glu Ser His Leu Cys Asp Asp Ile Gly
130 135 140
Arg Ser Leu Gln Leu Ser Glu Pro Arg Pro Asn Arg Gly Asp Gln Gln
145 150 155 160
Leu Thr Thr Gln Ala Asp Glu Val Cys Pro Pro Leu Pro Ser Arg Ala
165 170 175
Asp Pro Glu Thr Ser Ser Ala Ser Arg Arg Thr Gln Arg Gln Ser Leu
180 185 190
Glu Ala Ser Lys Asp Leu Gln Thr Ser Ala Thr Ala Glu Thr Glu Asp
195 200 205
Cys Lys Asp Gly Gln Ser Ile Lys Glu Asn Thr Thr Ser Gly Ser Lys
210 215 220
Glu Gln Asn Val Gln Gly Pro Ala Glu His Thr Ser Leu Lys Thr Pro
225 230 235 240
Pro Gly Ile Gly Val Glu Ser Glu Gln Gln Arg Pro Ser Pro Ala Pro
245 250 255
Ser Lys Gly Lys Ser Gly Arg Lys Lys Glu Lys Pro Lys Leu Asp Thr
260 265 270
Lys Asn Val Lys His Leu Pro Glu Arg Thr Ser Arg Val Val Gln Thr
275 280 285
Tyr Arg Thr Asn Glu Trp Ala Lys His Leu Cys Asp Ala Glu Ile Pro
290 295 300
Glu Pro Glu Pro Ile Val Leu Ile Thr Lys Glu Gly Ala Glu Ser Arg
305 310 315 320
Val Glu Glu Glu Ala Pro Ala Pro Val Asn Val Glu Glu Leu Leu Gln
325 330 335
Thr Pro Leu Thr Val Gln Pro Pro Pro Thr Ala Asp Leu Arg Val Ser
340 345 350
Thr Gly Lys Glu His His Ser Pro Thr Asp Cys Gln Gln Ile Ser Thr
355 360 365
Asp Tyr Arg Leu Arg Thr Thr Ser Ser Thr Ser Pro Gln Arg Val Gly
370 375 380
Glu Ala Gln Pro Val Asp Arg Pro Ser Glu Glu Ser Ser Ala Ile Val

385 390 395 400
Leu Ser Ser Thr Ser Pro Phe Gln Ser Thr Val Leu Tyr Gly Ile Gly
405 410 415
His Asn Ala Ser Leu Gly Thr Ser Ser Pro Pro Ile Pro Thr Gly Gln
420 425 430
Ser Gln Gly Glu Leu Glu Leu Ser Lys Pro Arg Trp Lys Gly Pro Pro
435 440 445
Pro Leu Leu Ala Val Arg Glu Asp Met Val Arg Ser Arg Val Ser Ser
450 455 460
Thr Cys Leu Ser Leu Asp Pro Trp Ala Ser Arg Lys Ser Pro Arg Gln
465 470 475 480
Ser Ser Pro Ser Gln Ser Val Thr Leu Gly Ala Ser Ala Pro Asn Ser
485 490 495
Pro Met Thr Ser Phe Pro Glu Ser Gly Asp Asp Val Pro Leu Ser Arg
500 505 510
Arg Arg Ala Ile Leu His Gln Gln Lys Val Gln Ser Pro His Thr Ser
515 520 525
Met Ser Val Ser Gly Leu His His Glu Gly Arg Arg Arg Ile Arg Asn
530 535 540
Lys
545

<210> 27959
<211> 135
<212> PRT
<213> A.fumigatus

<400> 27959
Ser Cys Thr Ser Gly Pro Gly His Ser Gln Glu Ser Pro Arg Ile Arg
1 5 10 15
Thr Gln Ala Ser His Cys Cys Arg Gly Ile Gly His Pro Val Arg Tyr
20 25 30
Tyr Arg Arg Arg Arg Arg Leu Arg Arg Gly Ser Glu Ala Arg Arg Arg
35 40 45
Ser Arg Pro Leu Pro Pro Gly Arg Pro Ile Val Arg Pro Asp Gly Arg
50 55 60
Arg Arg His Arg Arg Gln Pro His Arg His Cys Cys Gly Lys His His
65 70 75 80
Gly Arg His Leu Arg Arg His Leu Leu Asp Leu Pro Glu Arg Ala Cys
85 90 95
Ala Arg Ser Pro Arg Ala Arg Pro Arg Asp Pro Asn Thr Arg Asn Gly
100 105 110
Arg Gly Leu Gly Gln Arg Ala Gln Val Leu His His Arg Ala Gly Gln
115 120 125
Val His Ser Gly Ala Ala Gly
130 135

<210> 27960
<211> 234
<212> PRT
<213> A.fumigatus

<400> 27960
Phe Arg Arg Asp Ala Val Leu Pro Ala Pro Gly Arg Ile Leu Cys Pro
1 5 10 15
Pro Thr Tyr Ser Ala Asp His Ala Pro Val Asp Pro Ala Ile Leu Lys

```
            20                  25                  30
Lys Ala Leu Gly Ser Ala Leu Lys Arg Val Ile Ala Ala Glu Ala Leu
        35                  40                  45
Val Thr Arg Tyr Asp Thr Ile Val Gly Asp Gly Asp Cys Gly Val Gly
    50                  55                  60
Leu Lys Arg Gly Ala Glu Ala Val Leu Ser Leu Leu Glu Asp Pro Ser
65                  70                  75                  80
Ser Gly Leu Thr Asp Asp Ala Val Thr Ala Val Asn Arg Ile Val Thr
                85                  90                  95
Val Val Glu Asn Thr Met Asp Gly Thr Ser Gly Ala Ile Tyr Ser Ile
            100                 105                 110
Phe Leu Asn Ala Leu Ala His Gly Leu Arg Ala Gln Asp Gln Gly Thr
        115                 120                 125
Pro Thr Pro Ala Thr Val Glu Val Trp Ala Asn Ala Leu Lys Tyr Ser
    130                 135                 140
Ile Thr Ala Leu Gly Lys Tyr Thr Pro Ala Gln Pro Gly Asp Arg Thr
145                 150                 155                 160
Leu Ile Asp Ala Leu Val Pro Phe Cys Asn Thr Leu Val Ala Ala Lys
                165                 170                 175
Asp Val His Ala Ala Ala Lys Ala Ala Gln Asp Gly Thr Glu Ala Thr
            180                 185                 190
Lys Ser Met Lys Ala Ser Leu Gly Arg Ser Val Tyr Val Gly Gly Glu
        195                 200                 205
Ala Glu Trp Val Gly Lys Val Pro Asp Pro Gly Ala Tyr Gly Leu Ser
    210                 215                 220
Glu Leu Leu Thr Gly Leu Ala Glu Ala Leu
225                 230
```

<210> 27961
<211> 71
<212> PRT
<213> A.fumigatus

<400> 27961

```
Pro Met Thr Thr Thr Leu Asn Leu Leu Ile Gly Ile Glu His Asp Gly
1               5                   10                  15
Lys Ser Ala Ser Phe Ala Ser Val Lys Ser Lys Glu Ser Asn Ile Ser
            20                  25                  30
Tyr Leu Ala Ser Val Tyr Ala Asp Cys Val Pro Pro Val Val Thr Ser
        35                  40                  45
Glu Glu Ile Gln Gly Lys Ser Pro Asn Ala Arg Ala Asp Asn Arg Asp
    50                  55                  60
Lys Arg Thr Thr Ala Leu Ser
65                  70
```

<210> 27962
<211> 691
<212> PRT
<213> A.fumigatus

<400> 27962

```
Leu Cys Ala Gly Pro Ala Cys Ser Val Ser Glu Asp Glu Val Ala His
1               5                   10                  15
Phe Ser Pro Asp Thr Pro Glu Thr Ala Ala Ala Ala Arg Gly Glu Val
            20                  25                  30
Thr Asn Trp Gln Glu Gly Asp Ala Asn Pro Phe Ala Asp Gly Asn Ser
```

```
        35                  40                  45
Met Asp Ala Asn Thr Thr Asp Glu Lys His Thr Asp Glu Met Met Phe
    50                  55                  60
Gln Gly Glu Ser Ile Gln Gly Ala Ala Ala Glu Tyr Tyr Gln Ala Cys
65                  70                  75                  80
Ala His Glu Leu Phe Ser Gly Arg Pro Tyr Phe Glu Cys Val Asn His
                85                  90                  95
Val Cys Ser Ile Thr Pro Lys Asp Arg Ile Pro Val Leu Leu Ala Ser
            100                 105                 110
Ser Ile Ala Glu Pro Glu Asn Asn Glu Lys His Leu Leu Ile Asp Val
        115                 120                 125
Asp Asp Asp Val Thr Gln Leu Ala Pro Val Asn Pro Phe Glu Ser Val
    130                 135                 140
Ser His Ser Gly Ala Arg Ser Ile Ser Gly Thr Thr Ala Val Asp Asp
145                 150                 155                 160
Gln Pro Ala Ser Pro Leu Ile Ser Asn Thr Gly Lys Lys Tyr Leu Glu
                165                 170                 175
Glu Asp Thr Pro Lys Glu Ser Arg Gly His Ser Pro Glu Pro Gly Pro
            180                 185                 190
Ile Glu Arg Glu Pro Pro Val Tyr Ala Gly Asp Arg Pro Glu Lys Gln
        195                 200                 205
Ala Ser His Leu Phe Phe Gln Pro Thr Asn Thr Ile Ser Pro Ala Ala
    210                 215                 220
Thr Asn Ile Asn Ile Gln Pro Pro Gly Ala Leu Pro Ser Ala Ser Gly
225                 230                 235                 240
Ala Pro Gln Glu Arg Ile Ile Pro Gln Tyr Ile Val Val Pro Pro Gln
                245                 250                 255
Asn Tyr Gly Gly Gly Gly His Pro Gln Pro Gln Thr Pro Asp Ala Thr
            260                 265                 270
Ser Pro Gly Leu Gln Gln Ala Thr Ala Arg Ser Gly Ser Ile Pro Leu
        275                 280                 285
Thr Glu Ile Ala Ser Gly Pro Ala Pro Ala Cys His Ala His Arg Ser
    290                 295                 300
Ala Ser His Thr Leu Pro Pro Arg Ile Asp Pro Ala Pro Ile Thr Gln
305                 310                 315                 320
Glu Gln Met Thr His Pro Trp Phe Glu Arg Glu Arg Ile Glu Thr Arg
                325                 330                 335
Arg Arg Arg Leu Glu Arg Glu Asp Ala Ile Gly Arg Lys Ala Gly Gly
            340                 345                 350
Leu Trp Arg Gly Arg Gly Cys Phe Ser Asn Lys Gly Cys Phe Gly Arg
        355                 360                 365
Pro Gly Arg Glu Gly Arg Leu Arg Arg Arg Trp Tyr Met Ala Ile Thr
    370                 375                 380
Thr Phe Phe Val Leu Ile Val Val Val Ala Val Val Leu Ala Val Met
385                 390                 395                 400
Leu Thr Arg Lys Gly Asp Gly Thr Pro Val Gln Ser Gln Trp Leu Asn
                405                 410                 415
Leu Thr Gly Tyr Pro Pro Met Pro Thr Gly Ile Ala Thr Ile Ala Gly
            420                 425                 430
Ser Glu Pro Gln Thr Gln Ser Ser Gly Cys Ile Thr Pro Ser Thr Leu
        435                 440                 445
Trp Ser Cys Ala Leu Pro Pro Glu Gln Gln Ser Asp Asn Lys Pro Tyr
    450                 455                 460
Ala Pro Asn Gln Pro Ser Phe Arg Val Glu Ile Arg Phe Arg Asn Gly
465                 470                 475                 480
Thr Tyr Ala Asn Ser Thr Thr Val Ala Ser Thr Ser Ser His Lys Thr
```

```
                485                 490                 495
Arg Asp Ile Asn Gly Ser Phe Asn Pro Ser Pro Ser Pro Pro Ser Leu
            500                 505                 510
Lys Asp Gln Ile Phe Leu Gly Asn Thr Thr Asp Gln Asn Ala Ile Pro
        515                 520                 525
Tyr Ala Gly Glu Asp Thr Pro Phe Phe Ile Thr Ile Leu Ser Thr Ala
    530                 535                 540
Ser Leu Arg Ser Ser Arg Leu Ser Arg Arg Ser Asn Ser Ser Phe Pro
545                 550                 555                 560
Asp Ile Glu Ser Leu Ile Pro Ser Pro Asp Leu Asn Ser Asp Gly Thr
                565                 570                 575
Ala Ala Ala Ala Thr Leu Tyr Pro Leu Pro Glu Ser Gln Pro Val Arg
            580                 585                 590
Leu Tyr Asn Arg Gly Leu Asp Thr Glu His Tyr Gly Phe Tyr Thr Tyr
        595                 600                 605
Phe Asp Arg Ser Ile Phe Leu Glu Thr Leu Ala Pro Leu Asn Gly Ser
    610                 615                 620
Thr Thr Asp Asn Ser Ala Ala Asp Ala Asn Arg Gly Arg Ser Glu Thr
625                 630                 635                 640
Asp Ala Arg Val Arg Cys Thr Trp Ala Gln Thr Arg Phe Leu Val Gln
                645                 650                 655
Ile Trp Thr Gln Pro Ile Arg Ala Arg Lys Asn Leu Leu Arg Ser Asn
            660                 665                 670
Pro Thr Ala Ala Ser Ala Pro Ile Thr His Pro Pro Cys Phe Pro Cys
        675                 680                 685
Tyr Leu Thr
    690
```

<210> 27963
<211> 190
<212> PRT
<213> A.fumigatus

<400> 27963

```
Met Asp His Ser Thr His Arg His Leu His Arg Val Ser Lys Thr Arg
1               5                   10                  15
Phe Phe Trp Ala Ile Arg Leu Thr Arg Thr Pro Ser Pro Thr Gln Ala
            20                  25                  30
Arg Ile Pro Pro Ser Ser Ser Pro Ser Ser Arg Pro Pro Pro Ser Val
        35                  40                  45
His Pro Asp Tyr Pro Ala Asp Pro Thr Ala Pro Phe Gln Thr Ser Ser
    50                  55                  60
Pro Ser Ser His Pro Pro Ile Ser Thr Pro Met Ala Gln Pro Gln Pro
65                  70                  75                  80
Leu Leu Ser Ile His Ser Leu Asn Pro Asn Pro Tyr Ala Phe Ile Thr
                85                  90                  95
Gly Ala Trp Thr Gln Asn Thr Thr Ala Ser Thr Arg Thr Ser Ile Gly
            100                 105                 110
Leu Ser Ser Ser Arg Pro Leu Leu Leu Ser Thr Ala Ala Gln Gln Thr
        115                 120                 125
Thr Pro Leu Gln Thr Pro Thr Val Gly Ala Val Arg Leu Thr Pro Ala
    130                 135                 140
Ser Val Ala His Gly Pro Arg Leu Ala Ser Ser Cys Arg Ser Gly Arg
145                 150                 155                 160
Ser Arg Phe Ala Arg Ala Arg Thr Ser Ser Ala Val Ile Pro Pro Gln
                165                 170                 175
```

```
His Gln Pro Leu Leu His Thr His His Val Phe Pro Val Ile
            180                 185                 190

<210> 27964
<211> 159
<212> PRT
<213> A.fumigatus

<400> 27964
Ala His Pro Ala Ser Pro Ser Pro Ala Ser Ala Trp Trp Ser Ser Thr
1               5                  10                  15
Arg Ser Ala Phe Pro Thr Arg Ser Arg Tyr Ser Met Phe Trp Ala Ala
            20                  25                  30
Leu Val Pro Met Val Gly Ser Val Leu Leu Phe Ser Gly Val Arg Asp
        35                  40                  45
Val Gln His Val Val Gly Leu Ile Arg Gly Ala Ala Thr Leu Gly Ala
    50                  55                  60
Arg Leu Phe Leu Arg Pro Pro Leu Ser Arg Thr Leu Gly Trp Met Ile
65                  70                  75                  80
His Thr Gly His Asp Phe Pro Glu Leu Met Thr Asp Arg Leu Arg Ser
                85                  90                  95
Trp Asp Ser Thr Leu Ile Val Lys Arg Glu Ala Asp Lys Pro Ser Thr
            100                 105                 110
Arg Gly Leu Leu Glu Tyr Glu Asp Thr Thr Phe Gly Arg Ala Ser Pro
        115                 120                 125
Phe Thr Ala Phe Val Arg Arg Thr Ala Ala Arg Thr Asn Gln Pro Ser
    130                 135                 140
Lys Thr Leu His Ile His His Leu His Pro Pro Gly Pro Arg Gln
145                 150                 155

<210> 27965
<211> 282
<212> PRT
<213> A.fumigatus

<400> 27965
Asn Gly Lys Gln Thr Ser Arg Gln Leu Gly Gly Tyr Trp Ser Met Arg
1               5                  10                  15
Ile Leu Arg Leu Asp Val Arg Val Pro Leu Gln Pro Leu Ser Gly Glu
            20                  25                  30
Gln Gln Gln Glu Leu Thr Asn Pro Ala Lys His Phe Ile Tyr Thr Thr
        35                  40                  45
Ser Ile Leu Pro Val His Asp Asn Asp Leu Arg Asn Thr Pro Leu Leu
    50                  55                  60
Ser Ala Lys Ala Tyr His Tyr Leu Glu Thr Pro Gln Asp Met Gln Thr
65                  70                  75                  80
Arg Leu Ser Ala Leu Leu Ser Leu Arg Asn Glu Ala Gly Glu Pro Asp
                85                  90                  95
Arg Pro Phe Ile Val Trp Glu Pro Ala Pro Tyr Val Cys Lys Pro Glu
            100                 105                 110
Asn Leu Gln Pro Cys Leu Ser Ala Ala Gln His Val Asp Val Leu Ser
        115                 120                 125
Pro Asn His Leu Glu Leu Ala Ala Leu Phe Gly Glu Ser Pro Ala Lys
    130                 135                 140
Ala His Asp Lys Ala Thr Ile Glu Ala Leu Ala Arg Arg Val Leu Asp
145                 150                 155                 160
```

```
Ser Gly Val Gly Ile Asp Gly Lys Gly Thr Val Val Val Arg Ala Gly
                165                 170                 175
Glu Asn Gly Ser Val Val Val Ser Arg Asp Leu Pro Pro Thr Trp Leu
            180                 185                 190
Pro Pro Phe Tyr Pro Ala Gly Ala Asp Gly Arg Gln His Ser Lys Val
        195                 200                 205
Val Asp Pro Thr Gly Ala Gly Asn Ala Phe Leu Gly Ala Tyr Val Val
    210                 215                 220
Gly Tyr Leu Gln Thr Gln Asn Ala Val Glu Ala Ala Cys Tyr Gly Thr
225                 230                 235                 240
Val Gly Gly Ser Phe Ala Leu Glu Gln Val Gly Met Pro Glu Leu Val
                245                 250                 255
Ser Gly Glu Asp Gly Glu Leu Trp Asn Gly Ala Asp Ala Phe Glu Arg
            260                 265                 270
Leu Arg Glu Tyr Arg Lys Val Val Gly Leu
        275                 280
```

<210> 27966
<211> 184
<212> PRT
<213> A.fumigatus

<400> 27966

```
Tyr Leu Gly Trp Leu Ala Glu Pro His Thr Ala Ala Ala Ile Ala Ala
1               5                   10                  15
Arg Thr Thr Arg Asn Ala Asn Ala Thr Ala Ser Lys Leu Arg Leu Arg
            20                  25                  30
Ala Gln Pro Pro Phe Tyr Thr His Ala Thr Ser Gln Lys Arg Pro His
        35                  40                  45
His Ser Thr Thr Pro His Pro His Arg Arg Pro Ala Pro Ala Ser Pro
    50                  55                  60
Pro Ala Pro Ala Gln Thr Thr Pro Gln Gln Ser His Ser Lys Pro Pro
65                  70                  75                  80
Pro Pro His Phe Ala Ser Gly Asp Thr Gln Pro His Thr Pro Pro Glu
                85                  90                  95
Thr His Ser Arg Pro Pro Ser Asp Gln Gln Pro Trp Asn Ala Ala Ser
            100                 105                 110
Arg Gln Leu Gln Pro Asp Arg Thr Ala Ala Ala Thr Trp Glu Ala Asp
        115                 120                 125
Arg Glu Ile Pro Arg His Ser Arg Ser Arg Leu Arg Gly Arg Arg Gln
    130                 135                 140
Cys Leu Ser His Leu Ser Arg Arg Arg Cys Leu Gly Leu Phe Ala Pro
145                 150                 155                 160
Arg Pro Arg Ser Trp Pro Cys Arg Glu Leu Leu Leu Gly Ile Arg Arg
                165                 170                 175
Arg Gly Arg Arg Val Arg Gly Gly
            180
```

<210> 27967
<211> 103
<212> PRT
<213> A.fumigatus

<400> 27967

```
Ala Leu Thr Trp Leu Phe Asp Ser Phe Gly Gly Gly Met Ser Tyr Thr
1               5                   10                  15
```

```
Ile Thr Leu Ser Glu Lys Ala Pro Glu Glu Gly Val Gln Pro Val Ser
            20                  25                  30
Ser Thr Leu Ser Asp Tyr Asp Ala Asp Leu Ser Ser Ser Gly Tyr Pro
        35                  40                  45
Glu Ser Pro Asp Leu Glu Asp Arg Glu Lys Tyr Ala Gly Ile Leu Ala
    50                  55                  60
Asp Thr Lys Lys Thr Asp Lys Ala Ala Pro Gly Leu Gly Phe Ile Val
65                  70                  75                  80
Trp Thr Ala Ile Asn Val Ala Ser Thr Val Ala Ile Val Cys Thr Trp
                85                  90                  95
Pro Pro Arg Gln Ile Pro Thr
            100
```

<210> 27968
<211> 67
<212> PRT
<213> A.fumigatus

<400> 27968

```
Arg Val Gln Ser Gly Leu Phe Ala Ser Leu Val Asn Leu Ser Gln Phe
1               5                   10                  15
Phe Ile Ile His Leu Ala Gly Pro Ile Ser Gly Thr Val Val Gly Gln
            20                  25                  30
Leu Lys Thr Cys Ile Ile Val Gly Leu Gly Trp Ala Phe Ser Thr His
        35                  40                  45
Pro Ile Ser Phe Gln Ser Ile Val Gly Ile Met Leu Ala Leu Ala Gly
    50                  55                  60
Met Ser Leu
65
```

<210> 27969
<211> 168
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (126)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27969

```
Phe Leu Gly Gly Leu Ile Glu Asp Ser Tyr Ser Val Thr Arg Val Ile
1               5                   10                  15
Asp Gly Val Pro Tyr Phe Leu Ser Ile Thr Asp Thr Ala Gly Gln Glu
            20                  25                  30
Glu Tyr Arg Gly Leu Phe Ala Leu Ser Asn Leu Arg Ser Asp Ala Phe
        35                  40                  45
Leu Leu Val Tyr Asp Ile Thr Asn Ala Ser Ser Leu Ser Ala Leu Asp
    50                  55                  60
Tyr Phe Met Asp Leu Ile Asp Ile Glu Ala Glu Gln Arg Ala Glu Asp
65                  70                  75                  80
Asn Ala Arg Leu Leu Lys Glu Leu Gly Asp Ser Val Arg Gly Val Glu
                85                  90                  95
Val Gly Met Pro Pro Pro Val Lys Ile Ile Ala Gly Asn Lys Cys Asp
            100                 105                 110
Leu Lys Asp Asn Arg Ala Ile Ser Ala Arg Glu Gly Leu Xaa Tyr Ala
```

```
        115                 120                 125
Arg Lys His Gly Cys Gly Phe Met Asp Thr Ser Ala Arg Asp Met Val
    130                 135                 140
Asn Ile Glu Glu Thr Phe Ala Arg Lys Tyr Leu Val Leu Trp His Tyr
145                 150                 155                 160
Gln Cys Trp Arg Val Glu Thr Ala
                165
```

<210> 27970
<211> 87
<212> PRT
<213> A.fumigatus

<400> 27970

```
Gly Phe Asp Ala Gln Pro Cys Thr Ser Ser Val Ser Val Ser Trp Asp
1               5                   10                  15
Ile Ser Ile Lys Cys Leu Gly Gln Asn Thr Gly Ala Asn Met Val His
            20                  25                  30
Thr Thr Pro Thr Thr Leu Leu Val Leu Thr Gly Leu Ala Ala Thr Ala
        35                  40                  45
Thr Ala Tyr Lys His Thr Trp Arg Asp His Met Lys Cys Ala Val Ser
    50                  55                  60
Ile Ala Cys Leu His Val Asp Leu Ser Lys Glu Ala Ser Phe Ser Asn
65                  70                  75                  80
Ile Ser Pro Val Arg Leu Leu
                85
```

<210> 27971
<211> 265
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (124),(125)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27971

```
Ala Gln Ser Gln Arg Pro Gly Ala Arg Gly Arg Thr Arg Gln Gly Ser
1               5                   10                  15
Pro Pro Leu Pro Pro Arg Ser Leu Ser Thr Ala His Ser Ser Pro Thr
            20                  25                  30
Pro Pro Pro Pro Leu Gly Glu Asp Ser Asp Phe Glu Asp Gly Glu Glu
        35                  40                  45
His Gly Val Arg Val Ile Thr Glu Phe Leu Thr His Thr Ser Cys Asp
    50                  55                  60
Cys Ser Ser Ser Thr Val Ala Ala Ala Ser Ser Arg Met Ser Ser Trp
65                  70                  75                  80
Pro Ala Tyr Val His Gln Ser Ala Val Pro Val Ser Ser Leu Ser Ala
                85                  90                  95
Gly His Thr Arg Val His Gln Thr Leu Val Pro Val Ser Ser Ser Ser
            100                 105                 110
Ser His Met Leu Val His Gln Thr Ala Ile Pro Xaa Xaa Phe Ser Ser
        115                 120                 125
Ser Arg Pro Ala Asn Leu Asp Gln Val Met Ala Pro Val Ala Ser Ser
    130                 135                 140
```

```
Ser Ser Ala His Ala Pro His Ser Ala Ile Pro Val Ala Thr Ser Ser
145                 150                 155                 160
Ser Ala Arg Ala His Val Tyr Gln Thr Ala Val Pro Ala Ser Ser Ser
                165                 170                 175
Ser Thr His Met His Leu His Gly Ser Ala Ile Pro Gln Pro Ala Ser
            180                 185                 190
Ser Ser Ala Arg Ala His Val Pro Gln Thr Val Val Pro Gly Ala Ser
        195                 200                 205
Val Ser Ser Gln Pro Ala His Leu His Gln Ala Ala Val Pro Ser Pro
    210                 215                 220
Ser Ser Ser Ser Val Ser Ala Ser Ser Thr Val Val Arg Ser His Ala
225                 230                 235                 240
Gly Val Tyr Ala Pro Ala Ser Leu Tyr Val Ser Val Pro Val Leu Leu
                245                 250                 255
His Arg Arg Asp Trp Lys Glu Thr Arg
            260                 265
```

<210> 27972
<211> 226
<212> PRT
<213> A.fumigatus

<400> 27972

```
His Leu Thr Arg Gln Ala Ala Val Ala Gln Asp Ala Asp Tyr Pro Thr
1               5                   10                  15
Cys Thr Ser Pro Ser Lys Phe Tyr Cys Phe Cys Ala Gln Pro Phe Glu
            20                  25                  30
Pro Ser Lys Ile Ser Ser Ala Ala Lys Asp Val Cys Glu Gly Phe Gly
        35                  40                  45
Ile Arg Thr Phe Lys Val Leu Phe Phe Thr Ser Arg Gln Arg Met Lys
    50                  55                  60
Thr Asp Ala Met Lys Gln Arg Ser Leu Tyr Thr Gly Ser Ser Ala Thr
65                  70                  75                  80
Thr Val Ala Leu Gly Val Met Thr Met Cys Met Ile Gly Thr Met Ala
                85                  90                  95
Thr Thr Val Thr Ala Thr Met Pro Ser Leu Thr Thr Met Thr Lys Thr
            100                 105                 110
Met Ala Thr Thr Met Thr Gly Thr Asp Met Asp Ile Ala Ser Pro Ile
        115                 120                 125
Pro Thr Ala Ser Ala Thr Pro Thr Cys Val Leu Pro Leu Arg Lys Val
    130                 135                 140
Arg Pro Gly Leu Gln Thr Gln Ile Ser Thr Val Pro Thr Ser Arg Ser
145                 150                 155                 160
Lys Arg Ala Tyr Ala Pro Gly Leu Ser Pro Ser Ala Ser Ser Val Ala
                165                 170                 175
Val Asn Arg Ala Leu Val Thr Asn Ala Pro Ser Ala Leu Gly Gly Gly
            180                 185                 190
Gln Arg Leu Arg Gly Arg Arg Gly Ala Arg Gly Gln Gly His His Gly
        195                 200                 205
Val Pro His Ala Tyr Ile Leu Arg Leu Phe Val Val Asp Cys Ser Gly
    210                 215                 220
Cys Lys
225
```

<210> 27973
<211> 72

<212> PRT
<213> A.fumigatus

<400> 27973
Phe Ala Phe Leu Ser Gly Val Glu Cys Leu Thr Phe Ala Ser Ala Thr
1 5 10 15
Tyr Cys Pro Pro Thr Tyr Thr Ala Arg Met Tyr Met His Met Tyr Ser
20 25 30
Cys Ser Asn Gly Met Ile Arg Arg Ser Val Trp Gln Val Leu Lys Leu
35 40 45
Gly Tyr Val Ala Glu Asp Gly Met Gln Thr Thr Ile Cys Tyr Ala Asn
50 55 60
Pro Cys Thr Asp Thr Cys Arg Glu
65 70

<210> 27974
<211> 373
<212> PRT
<213> A.fumigatus

<400> 27974
Ser Met Leu Asn Ala Ile Arg Asp Leu Asp Thr Thr Arg Ser Phe Asp
1 5 10 15
Ile Met Ser Ser Arg Thr Ile Leu Lys Ser Thr Tyr Pro Trp Thr Lys
20 25 30
Ser Pro Leu Leu Ala Ser Ala Pro Met Leu Asn Ile Ala Gly Pro Gln
35 40 45
Leu Ala Val Ser Val Ser Ser Ala Gly Gly Leu Gly Phe Leu Ala Ala
50 55 60
Gly Phe Asp Val Ser Ser Leu Asp His Asn Leu Glu Val Thr Ala Arg
65 70 75 80
Leu Met Lys Gln Ser Gly Gly Met Ala Gln Gln Val Tyr Glu Glu Thr
85 90 95
Gly Met Leu Pro Ile Gly Val Gly Phe Ile Asn Trp Gly Ala Asp Leu
100 105 110
Lys Val Ser Leu Ala Ala Ile Gln Lys Tyr Met Pro Cys Ala Val Trp
115 120 125
Leu Phe Gly Pro Arg Asp Gln Pro Asp Asp Leu Val Pro Trp Val Lys
130 135 140
Glu Val Arg Gly Val Thr Ser Gly Arg Thr Lys Ile Trp Val Gln Val
145 150 155 160
Gly Ala Val Asp Glu Ala Ile Val Val Ala Glu Val Leu Gln Pro Asp
165 170 175
Ala Leu Val Val Gln Gly Ser Asp Ala Gly Gly His Gly Leu Ala His
180 185 190
Ser Ala Ser Val Leu Thr Leu Ile Pro Glu Val Gln Asp Ala Leu Arg
195 200 205
Glu Arg Asp Leu Thr His Ile Ala Ile Ile Ala Ala Gly Gly Ile Val
210 215 220
Asp Gly Arg Gly Leu Ala Ala Ala Leu Ala Leu Gly Ala Val Gly Ala
225 230 235 240
Thr Met Gly Thr Arg Phe Leu Ala Ser Ala Glu Ala Asn Ile Ala His
245 250 255
Gly Tyr Gln Lys Glu Ile Leu Arg Ala Ser Asp Gly Gly Leu Asn Thr
260 265 270
Ile Arg Ser Thr Val Tyr Asp Arg Val Arg Gly Ile Gly Gly Trp Pro

```
        275                 280                 285
Asn Arg Tyr Asp Gly Arg Gly Ile Ile Asn Gln Thr Tyr Leu Asp Ala
    290                 295                 300
Val Gln Gln Gly Met Ser Asp Glu Glu Asn Lys Ser Leu Tyr Glu Glu
305                 310                 315                 320
Glu Leu Lys Lys Gly Asp Ala Gly Trp Gly Pro Lys Gly Arg Leu Thr
                325                 330                 335
Thr Tyr Ala Gly Thr Gly Val Gly Leu Val Arg Glu Ile Leu Pro Ala
            340                 345                 350
Ser Arg Ile Val Glu Asp Thr Leu Cys Glu Ala Gly Asp Ala Ile Arg
        355                 360                 365
Gly Ile Pro Leu Asp
    370
```

<210> 27975
<211> 72
<212> PRT
<213> A.fumigatus

<400> 27975

```
Pro Trp Gln Gly Ser Ser Asp His Tyr Lys Asn Pro Ser Ser Leu Leu
1               5                   10                  15
Gln Ile Ile Ser Ser Asp Asn Leu Arg Ala Trp Gln Lys Pro Tyr Phe
            20                  25                  30
Asp Arg Glu His Asn Leu Ala Met Tyr Pro Ser Thr Ser Leu Ala Val
        35                  40                  45
Trp Ala Tyr Ala Leu Leu Leu Leu Ala Ser Pro Ser Pro Ala Asp Ala
    50                  55                  60
Thr Ser Asn Ser Glu Arg Phe Glu
65                  70
```

<210> 27976
<211> 225
<212> PRT
<213> A.fumigatus

<400> 27976

```
Ser Val Ala Asp His Leu Ser Ala Arg Ile Lys Val His Arg Phe Cys
1               5                   10                  15
Ala Phe Leu Asp Val Pro Val Phe Arg Lys Arg His Cys Asp Leu Gln
            20                  25                  30
Ser Glu Cys Cys Gly Val Glu Ser Ala Gln Ser Ala Ile Pro Ser Pro
        35                  40                  45
Pro Glu Asp Ile Pro Leu Pro Ser Ile Met Lys Ser Asp Leu Pro Asp
    50                  55                  60
Leu Thr Phe Pro Phe Ser Ser His Thr Ser Ser Lys Ile Cys Leu Gln
65                  70                  75                  80
Ser Ala Leu Asn Ile Val Thr Val Val Asp Asn Leu Pro Tyr Pro Asn
                85                  90                  95
Pro Asp His Thr Ile Pro Leu Thr Leu Pro Pro Tyr Leu Ser His Ala
            100                 105                 110
Ser Arg Val Glu Ile Pro Arg Val Met Pro Thr Phe Ala Cys Cys Leu
        115                 120                 125
Met Gln Ala Ser Tyr Ala Met Leu Met Leu Tyr Leu Lys Ala Arg Ala
    130                 135                 140
Lys His Ala His Ser Pro Glu Asp Ser Gly Ser Val Lys Gly Leu Ser
```

```
145                 150                 155                 160
Leu Thr Glu Phe Leu Asn Glu Leu Gln Gln Asn Leu Arg Leu Val Ser
                165                 170                 175
Lys Ile Leu Ala Asn Tyr Ala Ile Ala Ala Glu Ala Leu Gln Gly Met
            180                 185                 190
Lys Gly Glu Phe Leu Phe Phe Asp Thr Ala Met Leu Phe Ala Asp Arg
        195                 200                 205
Val Arg Gly Asp Ile Val Leu Gly Phe Leu Gly Gly Leu Ile Gly Ser
    210                 215                 220
Val
225
```

<210> 27977
<211> 90
<212> PRT
<213> A.fumigatus

<400> 27977

```
Arg Val Pro Leu Arg Asp Thr Arg Gly Arg Pro Ser Ile Leu Lys Val
1               5                   10                  15
Pro Arg Leu Pro Ser Tyr Arg Arg Gln Arg Cys Pro Cys His Thr Pro
            20                  25                  30
Gly Ser Gln Arg Ala Trp Gly Tyr Pro Gly Trp His Asp Met Asn Gly
        35                  40                  45
Met Pro Thr Met Asn Val Val Gln Tyr Pro Met Asp Thr Ala Asp Pro
    50                  55                  60
Ala Gln Gln Ala Ala Phe Gly Ala Pro Pro Ala His Met Gly His Ser
65                  70                  75                  80
Gly Gln Gly Pro Val Val Asp Leu Met Ser
                85                  90
```

<210> 27978
<211> 184
<212> PRT
<213> A.fumigatus

<400> 27978

```
Thr Thr Asp Leu Leu Thr Glu Pro Arg Ile Glu Gly Ser Thr Asn Phe
1               5                   10                  15
Ala Ala Ala Pro Thr Leu Asp Pro Ser Val Pro Trp Asp Glu Tyr Thr
            20                  25                  30
Thr Ile Ser Asp Pro Gln Ile Leu Ser Ala Met Ala Ala Gly Lys His
        35                  40                  45
Gln Met Met Asn Val Pro Pro Asn Ala Trp Ser Pro Gly Pro Asn Asn
    50                  55                  60
Met Val Ala Met Pro Pro Asn Pro Ala Met Ala Ala Thr Pro Thr Val
65                  70                  75                  80
Pro Ser Gln Ser Gln Pro Ile Ser Pro Val Gln Thr Tyr Ala Met Gln
                85                  90                  95
Pro Asp Gly Ser Val Trp Pro Val Ala Gln Pro Thr Arg Ser Met Thr
            100                 105                 110
Phe Pro Ala Gln Pro Glu Met Ala Ser Tyr Pro Asn Pro Ser Gln Phe
        115                 120                 125
Ser Gln Gln Met His Thr Asp Leu Lys Arg Arg Met Thr Ser Pro Ala
    130                 135                 140
Gln Gly Tyr Pro Gly Thr Pro Ile Asn Pro Gln Ser Pro Pro Pro Ala
```

```
145                 150                 155                 160
Glu Leu Gln Thr Thr Thr Val Ser Met Ser Tyr Pro Gly Gln Pro Ala
                165                 170                 175
Gly Met Gly Leu Pro Arg Met Ala
            180
```

<210> 27979
<211> 65
<212> PRT
<213> A.fumigatus

<400> 27979

```
Pro Phe Ala Ala Pro Leu Asn Asp Pro Val Val Pro Ser Leu Lys Ser
1               5                   10                  15
Gln Tyr Gln Lys Asn Phe Gly Tyr Glu Gln Lys Lys Ser Glu Leu Ser
            20                  25                  30
Gly Met His Gly Val Pro Thr Gly Tyr Tyr Ser Lys Ser Lys Ile Ser
        35                  40                  45
Phe Phe Val Lys Ile Ser Val Phe Arg Val Arg Leu Val Lys Gln Pro
    50                  55                  60
Ser
65
```

<210> 27980
<211> 91
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (81),(84)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27980

```
Lys Asp Pro Gly Lys Gly Gly Asp His Thr Lys Gln Arg Asp Pro Cys
1               5                   10                  15
Phe Arg Gly Arg Asn His Glu Met Gly Trp Gly Asp Pro Gly Gly Ser
            20                  25                  30
Arg Arg Arg Gly Gln Gly Pro Ala Gly Lys Gly Gly Gly Leu Gly Lys
        35                  40                  45
Ala Gly Cys Ser Ser Pro Ala Asp Thr Leu Glu Cys Leu Arg Gly Leu
    50                  55                  60
Asp Tyr Thr Asp Phe Leu Asn Ala Pro Asn Ala Val Pro Gly Ile Leu
65                  70                  75                  80
Xaa Tyr His Xaa Val Pro Leu Ser Tyr Leu Leu
                85                  90
```

<210> 27981
<211> 229
<212> PRT
<213> A.fumigatus

<400> 27981

```
Pro Asn Gly Lys Ala Ile Thr Ala Ser Pro Asp Ile Leu Val Lys Thr
1               5                   10                  15
Gly Lys Tyr Ala Ala Val Pro Ile Ile Ile Gly Asp Gln Glu Asp Glu
```

```
            20                  25                  30
Gly Thr Leu Phe Ala Leu Phe Gln Ser Asn Ile Thr Thr Thr Lys Gln
        35                  40                  45
Val Val Asp Tyr Leu Ala Lys Tyr Tyr Phe Phe Gly Ala Thr Arg Asp
    50                  55                  60
Gln Leu Glu Glu Leu Val Ala Thr Tyr Pro Asp Val Thr Thr Asp Gly
65                  70                  75                  80
Ser Pro Phe Arg Thr Gly Ile Phe Asn Asn Trp Tyr Pro Gln Phe Lys
                85                  90                  95
Arg Leu Ala Ala Leu Leu Gly Asp Leu Thr Phe Thr Leu Thr Arg Arg
            100                 105                 110
Ala Tyr Leu Lys Tyr Val Thr Glu Leu His Pro Ser Leu Pro Cys Trp
        115                 120                 125
Ser Tyr Leu Ser Ser Tyr Asp Tyr Gly Thr Pro Ile Met Gly Thr Phe
    130                 135                 140
His Gly Ser Asp Ile Leu Gln Val Phe Tyr Gly Ile Leu Pro Asn Tyr
145                 150                 155                 160
Ala Ser Arg Ala Phe His Thr Tyr Tyr Phe Ser Phe Val Tyr Asp Leu
                165                 170                 175
Asp Pro Asn Ser Arg Arg Gly Ser Leu Met Glu Trp Pro Arg Trp Asn
            180                 185                 190
Asp Asp Gln Gln Leu Met Gln Val Phe Asn Asn Arg Gly Ala Leu Leu
        195                 200                 205
Ala Asp Asp Phe Arg Asn Asp Thr Tyr Asn Phe Ile Leu Glu Asn Val
    210                 215                 220
Asp Ser Phe His Ile
225
```

<210> 27982
<211> 101
<212> PRT
<213> A.fumigatus

<400> 27982

```
Thr Met Arg Val Pro Asp Val Ile Ala Leu Ala Gly Leu Leu Ala Val
1               5                   10                  15
Ser Gly Ala Thr Ser Ser Gly Gln Glu Thr Leu Leu Met Pro Arg Lys
            20                  25                  30
Gln Ala Thr Gln Pro Asn Val Leu Phe Ile Met Ser Asp Asp Gln Asp
        35                  40                  45
Leu Glu Leu Asn Ser Pro Ala Phe Thr Pro Tyr Ile Gln Lys His Ile
    50                  55                  60
Arg Asp Lys Gly Val Glu Phe Thr Asn His Phe Val Thr Thr Ser Leu
65                  70                  75                  80
Cys Cys Pro Ser Arg Val Ser Leu Trp Thr Gly Arg Gln Ala His Asp
                85                  90                  95
Thr Asn Val Ser Ile
            100
```

<210> 27983
<211> 233
<212> PRT
<213> A.fumigatus

<400> 27983

```
Ser Pro Thr Ser Arg Glu Ile Ala Glu Leu Thr Gly Val Pro Ser Glu
```

```
1               5                   10                  15
Met Ala Asp Val Glu Ser Asn Val Ala Asp Glu Ser Phe Ala Gln Ser
            20                  25                  30
Glu Thr Gln Asp Glu Gln Pro Ser His Ser Thr Val Ser Ala Thr Val
        35                  40                  45
Gly Ile Arg Arg Gln Ala Asn Gly Thr Ile Gly Ser Val Tyr Ser Gly
    50                  55                  60
Asn Lys Ile Arg His Leu Lys Lys Glu Asp Gly Met Pro Leu Trp Arg
65                  70                  75                  80
Lys Asp Ile Gln Tyr Gln Phe Leu Lys Leu Val Phe Glu Asp Lys Thr
                85                  90                  95
Pro Val Phe Thr Arg Trp Ser Asp Gly Lys Lys Gly Leu Asp Phe Ala
            100                 105                 110
Asp Ile Tyr Ile Asp Ala Met Ala Arg Ser Ser Lys Thr Ser Lys Ile
        115                 120                 125
Leu Lys Asp Lys Leu Gln Ser Asp Lys Gln Ala Ala Ile Asn Met Ala
    130                 135                 140
Met Val Cys Leu Leu Val Asn Phe Gly Arg Met Asn Thr Thr Leu Asn
145                 150                 155                 160
Cys Met Val Leu Pro Phe Phe Leu Ser Leu His Ser Ala Leu Phe Ala
                165                 170                 175
Ile Ser Phe Leu Ser Lys Ser Ser Leu Lys Leu Val Pro Leu Asp Leu
            180                 185                 190
Glu Thr Asp Leu Glu Thr Asn Ser Val Phe Pro Glu Met Arg Ala Gln
        195                 200                 205
Leu Arg Thr Tyr His Ser Ile Pro Ser Leu Gln Ala His Gln Glu Pro
    210                 215                 220
Asn Ala Tyr Lys Pro Leu Pro Asp Ala
225                 230
```

<210> 27984
<211> 94
<212> PRT
<213> A.fumigatus

<400> 27984

```
Arg Lys Lys Val Phe Arg Ala Val Asn Thr Leu Cys Met Lys Tyr Tyr
1               5                   10                  15
Asn Gln Ser Gln Ser Ser Arg Ala Leu Glu Met Ile Val Gln Ala Tyr
            20                  25                  30
Trp Ile Glu Cys Tyr Glu Ala Arg Ile Ala Val Ile Arg Leu Glu Asn
        35                  40                  45
Pro His Leu Ser Ser Thr Glu Ala Arg Val Thr Ala Leu Lys Glu Ala
    50                  55                  60
Cys Ala Val Leu Ser Trp Lys Glu Lys Asp Leu Arg Asn Arg Met Tyr
65                  70                  75                  80
Leu Ser Pro Pro Phe Ser Phe Ser Lys Pro Ser Leu Thr Gly
                85                  90
```

<210> 27985
<211> 364
<212> PRT
<213> A.fumigatus

<400> 27985

```
Val Arg Glu Lys Phe Gly Tyr Tyr Thr His Leu Leu Leu Gly Val Phe
```

```
1               5                   10                  15
Ala Asn Gln Gly Ile Ile Gly Leu Ser Lys Ala Gln Phe Glu Pro Ile
            20                  25                  30
Ala Tyr Ala Ser Gln Glu Ala Trp Leu Phe Arg Asp Ser Ile Lys Asp
        35                  40                  45
His Ile Val Phe Gly Thr Ala Tyr Asp Gln Lys Arg Tyr Glu Arg Val
    50                  55                  60
Ile Arg Asp Cys Ala Leu Glu Lys Asp Leu Ala Ala Phe Lys Asp Gly
65                  70                  75                  80
Asp Leu Lys Glu Val Gly Glu Gly Gly Arg Ser Leu Ser Gly Gly Gln
                85                  90                  95
Arg Gln Arg Val Ser Leu Ala Arg Ala Met Tyr Thr Asn Ala Asn Val
            100                 105                 110
Val Ile Leu Asp Asp Ile Leu Ser Gly Leu Asp Pro Ser Thr Phe Glu
        115                 120                 125
Trp Val Val Thr Lys Cys Ile Ser Arg Ser Glu Gln Gln Asn Arg Thr
    130                 135                 140
Met Ile Met Val Thr Asn Ser Gln Arg Ile Leu Gln Met Ala Asp Leu
145                 150                 155                 160
Val Ile Gln Met Glu Asn Gly Arg Ile Ala Gln Ile Lys Lys Asn Leu
                165                 170                 175
Ser Thr Glu Ser Thr Gln Asp Val Pro Asp Lys Asp Tyr Val Gly His
            180                 185                 190
Leu Phe His Asp Thr Pro Glu Ile Pro Glu Val Val Ser Ala Thr Pro
        195                 200                 205
Glu Ser Thr Gly Gly Arg Asp Glu Met Ser Pro Val Ser Ala Glu Ala
    210                 215                 220
Pro Asn Glu Gly Ala Asp Phe Gln Arg Val Ser Ser Leu Arg Tyr Gly
225                 230                 235                 240
Lys Ser Ser Ser Ile Val His Phe Gln Val Leu Thr Pro Pro Gly Phe
                245                 250                 255
Lys Tyr Ile Arg Ser Phe Gly Ser Arg Pro Phe Val Thr Leu Ala Val
            260                 265                 270
Ile Ser Thr Val Gly Ala Gln Ala Leu Glu Ile Gly Leu Pro Ala Trp
        275                 280                 285
Leu Ser Met Trp Ser Ala Ile Ser Val Arg Asn Glu Gly Glu Gly Arg
    290                 295                 300
Asp Gly Phe Tyr Leu Gly Phe Tyr Ala Gly Ile Ser Ser Pro Ser Asp
305                 310                 315                 320
Arg Val Arg Arg Gln Met Leu Thr Ala Arg Ala Gly Leu Gly Ser Ala
                325                 330                 335
Gln Ile Ala Ile Leu Ala Val Ser Leu Leu Leu Pro Tyr Ser Gly Trp
            340                 345                 350
Leu Gly Ala Pro Ile Arg Gly Gln Ala Tyr Gly Asn
        355                 360
```

<210> 27986
<211> 100
<212> PRT
<213> A.fumigatus

<400> 27986

```
Phe Ala Asn Tyr Thr His Met Tyr Gly His Phe Leu Thr His Leu Gln
1               5                   10                  15
Tyr Phe Arg Glu Pro Gln Met Lys Pro Asn Glu Pro Asp Glu Pro Gly
            20                  25                  30
```

```
Ser Ala Asp Tyr Asn Glu Arg Leu Trp Arg Arg Gly Arg Asn Glu Lys
        35                  40                  45
Ile Ile Thr Glu Thr Gln Pro Leu Lys Gly Lys Ala Gly Ser Ser Arg
    50                  55                  60
Trp Asp Asn Ser Leu Ala Leu Leu Thr Asn Thr Ser Gln Pro Leu Lys
65                  70                  75                  80
Met Cys Phe His Gln Phe Glu Asp His Leu Ala Val Ala Asp Asp Arg
                85                  90                  95
Asp Thr Ile Ala
            100
```

<210> 27987
<211> 420
<212> PRT
<213> A.fumigatus

<400> 27987

```
Trp Phe Arg Met Ile Phe Val Arg Asn Ile Leu Gln Gly Thr Glu Met
1               5                   10                  15
Cys Ala Phe Phe Gly Gly Phe Leu Arg Phe Cys Ser Glu His Ser Gly
            20                  25                  30
Leu Met Trp Glu Ile Pro Leu Leu Arg Gln Trp Ser Val Leu Cys Ile
        35                  40                  45
Ser Met Leu Trp Ser Asp Phe Pro Glu Ala Lys Trp Met Gly Phe Arg
    50                  55                  60
Cys Gly Ala Pro Pro Gly Leu Trp Glu Leu Asn Phe Asp Pro Val Pro
65                  70                  75                  80
Glu Val Arg Ala Ala Met Leu His Ala Ala Thr Thr Phe Leu Gly Ile
                85                  90                  95
Pro Asp Trp Thr Asp Gln Val Ala Gln Ile Glu Glu Ser Leu Ala Leu
            100                 105                 110
Ala Val Leu Pro Met Ala Ser Asp Gly Ser Val Leu Val Arg Lys Glu
        115                 120                 125
Leu Leu Val Phe Phe Ser Thr Phe Val Lys Arg Tyr Gln Asn Lys Phe
    130                 135                 140
Leu Val Ala Ala Tyr Glu Glu Phe Gln Asp Glu Lys Gln Thr Phe Leu
145                 150                 155                 160
Leu Arg Leu Glu His Asp Gly Ser Arg Gly Phe Thr Met Glu Asp Val
                165                 170                 175
Gln Asn Gly Thr Ala Asn Ser Arg Asn Lys Ser Gln Lys Leu Ser Gln
            180                 185                 190
Asn Thr Ala Phe Gly Thr Ile Trp Lys Gln Leu Leu Ile Leu Ser Val
        195                 200                 205
Asp Pro His Pro Asp Ile Ala Gln Asp Ala Ser Thr Ile Ile Asp Tyr
    210                 215                 220
Ile His Leu Thr Leu Leu Ala Ser Pro Met Ala Ser Leu Thr Asp Lys
225                 230                 235                 240
Ala Arg Lys Glu Ile Met Glu Leu Thr Ser Arg Leu Ser Gln Lys Leu
                245                 250                 255
Gln Val Arg Glu Arg Ala Glu Ser Lys Lys Ala Ala Pro Pro Pro Ala
            260                 265                 270
Pro Pro Ser Gln Thr Ala Ala Pro Lys Gln Glu Gly Tyr Leu Ser Leu
        275                 280                 285
Ser Ile Lys Arg Thr Ala Ser Val Ala Ala Ser Leu Lys Asn Leu Ala
    290                 295                 300
Phe Gly Gly Pro Pro Gln Asn Glu Gln Gln Ser Ser Gln Asn Val Thr
```

```
305                 310                 315                 320
Ser Pro Thr Lys Ser Arg Thr Pro Val Thr Pro Arg Gly Arg Ala Pro
                325                 330                 335
Pro Glu Trp Thr Arg Pro Pro Glu Val Asn Asp Gln Val Ala Ser Ala
            340                 345                 350
Ala Ala Tyr His Gln Ala Pro Ile Pro Pro Ser Arg Gly Phe Glu Pro
        355                 360                 365
Arg Asp Pro Ser Leu Ala Pro Met Ile Pro Leu Leu Ser Arg Phe Leu
    370                 375                 380
Asp Trp Ser Thr Glu Val Ser Pro Ser Leu Ser Pro Phe Asp Ser Arg
385                 390                 395                 400
Thr Thr Pro Thr Cys Met Asp Ile Phe Leu Pro Ile Phe Ser Ile Ser
                405                 410                 415
Val Ser Pro Arg
            420
```

<210> 27988
<211> 126
<212> PRT
<213> A.fumigatus

<400> 27988

```
Cys Leu Asp Ala Asn Phe Leu Tyr Leu Val Arg Ile Trp Asp Trp Gln
1               5                   10                  15
Arg His Lys Arg Leu Asn Arg Phe Ser Asn Gly Asn Pro Pro Gly Ser
            20                  25                  30
Arg Ile Asn Glu Val Arg Tyr Ile Asn Glu Asp Asp Gln Ala Leu Leu
        35                  40                  45
Met Thr Gly Ser Ser Asp Gly Val Leu Lys Val Phe Arg Asn Tyr Glu
    50                  55                  60
Ser Pro Lys Glu Val Glu Ile Val Thr Ala Phe Arg Ala Leu Pro Glu
65                  70                  75                  80
Leu Ile Pro Ser Asn Arg Asn Ala Gly Leu Val Phe Asp Trp Gln Gln
                85                  90                  95
Gly Gln Gly Lys Ala Leu Val Ala Gly Asp Val Lys Leu Ile Arg Val
            100                 105                 110
Trp Asn Ala Ala Thr Glu Val Cys Thr Asn Val Cys Ser Ser
        115                 120                 125
```

<210> 27989
<211> 67
<212> PRT
<213> A.fumigatus

<400> 27989

```
Leu His Ile Val Lys Ser Ser Val Ser Gln Asn Lys Ala Phe His Pro
1               5                   10                  15
Phe Tyr Met Phe Gln Ile Ala Ser Leu Val Leu Trp Ser Leu Asp Glu
            20                  25                  30
Tyr Tyr Tyr Tyr Ala Val Cys Ile Phe Leu Ile Ser Val Phe Ser Ile
        35                  40                  45
Cys Ala Thr Ile Phe Glu Thr Arg Thr Val Cys Gly Gly Arg Leu Leu
    50                  55                  60
Thr Thr Asp
65
```

<210> 27990
<211> 97
<212> PRT
<213> A.fumigatus

<400> 27990
Ser Met Gly Glu Ala Ser Glu Ala Asp Glu Ser Ile Ile Ser Ser Arg
1 5 10 15
Arg Ser Lys Arg Leu Tyr Tyr Ser Arg Pro Ser Ala Glu Asp Pro Leu
20 25 30
Phe Pro Arg Arg Pro Ser Ser Ala Phe Cys Thr Gly Glu Arg Thr Ile
35 40 45
Asp Ser Arg Leu Thr Gln Lys Val Tyr Ile Val Ser Glu Asp Leu Thr
50 55 60
Ile Val Ile Ala Gly Phe Ser Thr Ser Ser Thr Gly Leu Ala Leu Tyr
65 70 75 80
Ser Leu Leu Cys Val Ile Thr Leu Gly Phe Ala Tyr Ile Leu Leu Arg
85 90 95
Trp

<210> 27991
<211> 191
<212> PRT
<213> A.fumigatus

<400> 27991
Pro Arg Trp Arg Val Arg Leu Ile Gly Lys Pro Thr Pro Leu Arg Leu
1 5 10 15
Cys Gln Trp Val Ala Val Glu Val Gly Phe Pro Arg Leu Ser Pro Cys
20 25 30
Lys Val Phe Ala Glu Tyr Val Gln Asp Gln Trp Asn Gln Phe Asn Val
35 40 45
Cys Glu Val Leu Ser Ile Pro Tyr Gly Arg Ala Leu Ser Thr Val Phe
50 55 60
Ala Glu Ser Glu Ser Cys Thr Gln Asp Glu Asp Asn Asp Pro Thr Val
65 70 75 80
Ser Tyr Leu Arg Tyr Ile Asp Tyr Arg Cys Leu Arg Phe Phe Tyr His
85 90 95
Pro Phe Glu Asp Lys Phe Ser Leu Ile Ser Gly Trp Lys Asp Pro Leu
100 105 110
Trp Thr Asn Ile Lys Arg Met Arg Val Gly Leu Asp Ala Asp Asp His
115 120 125
Asp Ser Arg Ala Gln Ile Phe Gly Ala Asn Val Ile Asp Ile Gln Gln
130 135 140
Lys Ser Val Phe Gln Leu Leu Ile Asp Glu Val Arg Ala Met Leu Leu
145 150 155 160
Ile Thr Tyr Arg Glu Val Gln Cys Leu Thr Lys Gln Gly Val Ser Pro
165 170 175
Val Leu His Val Pro Asn Cys Glu Ser Cys Pro Met Val Thr Gly
180 185 190

<210> 27992
<211> 93
<212> PRT
<213> A.fumigatus

<400> 27992
Leu Ser Ser Met Gln Thr Met Lys Arg Leu Arg Glu Ile Ser Leu Phe
1 5 10 15
Glu Cys Asp Thr Arg Val Leu Arg Asn Gly Phe Cys Lys Tyr Ser Ser
20 25 30
Val Cys Ile Arg Asn Trp Asn Ala Lys Leu Ile Ser Gly Leu Ala Gly
35 40 45
Arg Thr Val Pro Ser Arg Glu Leu Val Pro Gly Asp Val Phe Glu Phe
50 55 60
Ser Asp Pro Ser Leu Asn Gln Val Pro Cys Asp Cys Ile Leu Leu Ser
65 70 75 80
Gly Asp Cys Ile Val Asn Glu Ser Met Leu Thr Gly Leu
85 90

<210> 27993
<211> 93
<212> PRT
<213> A.fumigatus

<400> 27993
Asn Ala Leu Phe Cys Glu Thr Leu Asp Phe Thr Ile Cys Asn Gln Lys
1 5 10 15
His Gly Ser Tyr Phe Ile Asp Gln Lys Leu Lys Asn Gly Leu Leu Leu
20 25 30
Tyr Ile Asn Asp Ile Arg Ser Glu Asn Leu Arg Thr Ala Ile Val Ile
35 40 45
Ile Arg Val Gln Pro Asp Pro His Ser Phe Asp Ile Arg Pro Gln Trp
50 55 60
Ile Phe Pro Ala Thr Asp Gln Ala Lys Phe Val Leu Glu Arg Val Val
65 70 75 80
Glu Glu Ala Glu Thr Thr Ile Ile Asn Val Ser Gln Val
85 90

<210> 27994
<211> 75
<212> PRT
<213> A.fumigatus

<400> 27994
Phe Lys Asp Gly Ser Glu Asn Ser Lys Thr Ser Pro Gly Thr Asn Ser
1 5 10 15
Arg Glu Gly Thr Val Leu Pro Ala Ser Pro Glu Ile Asn Phe Ala Phe
20 25 30
Gln Phe Leu Met Gln Thr Asp Glu Tyr Leu Gln Lys Pro Phe Leu Ser
35 40 45
Thr Arg Val Ser His Ser Lys Ser Glu Ile Ser Leu Asn Leu Phe Ile
50 55 60
Val Cys Ile Glu Leu Ser Tyr Leu Ala Ser Pro
65 70 75

<210> 27995
<211> 101
<212> PRT
<213> A.fumigatus

<400> 27995
Lys Pro Gly Arg Phe Leu Ser Ala Val Ala Ser Gln Ala Leu Ala Asn
1 5 10 15
Arg Thr Thr Ser Tyr Thr His Asn Leu Arg Thr Ile Arg Thr Gln Leu
20 25 30
Gln Gly Ala Arg Leu Ala Met Gly Ser Thr Val Glu Tyr Ser Thr Ile
35 40 45
Arg Gln Ala Thr Ser Thr Asp Leu Ser Thr Gln Asn Phe Gly Leu Pro
50 55 60
Ser Arg Thr Ile Thr Gln Leu Asp Pro Ser Leu Asn Ala Arg Ile Gly
65 70 75 80
Ile Val Ile Ser His Tyr Lys Asn Ser Ser Ser Pro Arg Gly Trp Lys
85 90 95
Asp Gln Arg Ser Gln
100

<210> 27996
<211> 435
<212> PRT
<213> A.fumigatus

<400> 27996
Phe Ser Leu Asp Arg Leu Ser His Gly Ile Ile Pro Leu Gly Arg Lys
1 5 10 15
Phe Leu Arg Asn Gly Gly Arg Gly Ser Glu Ile Trp Ala Asn Val Tyr
20 25 30
Phe Leu Glu Pro Gln Glu Gly Asn Arg Phe Leu Asn Ser Leu Ile Ser
35 40 45
Phe Gly Lys Arg Gln Val Asn Gln Arg Pro His Leu Gly Ile Gly Phe
50 55 60
Asn Tyr Gln Thr Pro Val Ser Gln Arg Ser Gly Ala Gly Met Arg Ile
65 70 75 80
Arg Asn Arg Phe Cys Gly Met Ser Gln Trp Lys Lys His Ser Arg Asp
85 90 95
Lys Ser Arg Gln Arg Lys Val Ala Ser Leu Asn Glu Leu Asp Asn Ile
100 105 110
Gln Arg Ile Pro Lys Trp Pro Gly Ser Lys Arg Ser Pro Val Arg Pro
115 120 125
Ala Phe Pro Arg Phe Pro Pro Pro Tyr Arg Ser Pro Thr Pro Pro Gly
130 135 140
Leu Pro Ser Phe Gly Ser Pro Glu Ala Ile Ser Tyr Ser Thr Gln Phe
145 150 155 160
Phe Val Arg Ser Leu Val Arg Glu Gly His Ile Gln Gln Arg Pro Pro
165 170 175
Pro Ala Thr Gly Pro Pro Thr Ser Asn Gly Gly Gly Val Ala Ser Tyr
180 185 190
Gly Glu Ser Leu Arg Arg Phe Phe Gly Phe Ser Ser Pro Ala Pro Pro
195 200 205
Arg Pro Thr Gly Gln Ser Ile Pro Val Ala Arg Ala Gly Asp Gly Thr
210 215 220
Ala Val Leu Gly Arg Phe Pro Tyr Arg His Ser Ala His Gly Thr Ser
225 230 235 240
Leu Val Arg Pro Leu Asp Asp His Pro Phe His Arg Arg Ala Leu Pro
245 250 255
Ala Ala Asp Cys Glu Thr Val Glu Glu Glu Ser Asp Ser Asn Arg Pro
260 265 270

```
Asn Glu Tyr Ser Thr Arg Leu Val Lys Tyr Thr Asn Leu Ala Gln Val
        275                 280                 285
Glu Ala Ser Val Pro Thr Pro Arg Pro Ala Glu Glu Asn Arg Arg Phe
    290                 295                 300
Asp Ser Ser Ser Val Thr Pro Ala Ile Pro Lys Gln Thr Val Thr Gly
305                 310                 315                 320
Arg Ser Arg Asn Thr Gly Ser Ala Thr Val Ser Leu Ala Lys Asn Pro
                325                 330                 335
Ile His Arg Gln Thr Ser Ile Ser Gln Thr Leu His Gly Arg Thr Ser
            340                 345                 350
Leu Ser Gly Asn Glu Pro Gln Gln Gln Ser Ser Asp Arg Ile Gly Glu
        355                 360                 365
Pro Arg Leu Ser Val Glu Met Thr Gly Thr Val Pro Gly Ser Ala Asp
    370                 375                 380
Thr Leu Leu Gln Phe Leu Lys Ala Arg Ala Leu Pro Leu Cys Cys Cys
385                 390                 395                 400
Leu Pro Gly Phe Gly Glu Gln Asp Asp Ile Ile Tyr Ala Gln Ser Ser
                405                 410                 415
Asn Asp Thr Tyr Thr Thr Ala Arg Ser Ser Pro Gly Asn Gly Ile Asp
            420                 425                 430
Ser Arg Val
        435
```

<210> 27997
<211> 210
<212> PRT
<213> A.fumigatus

<400> 27997

```
Asp Pro Ala Ile Ser Ala Val Ser Ser Ser Ser Thr Thr Ala Ser Leu
1               5                   10                  15
His Arg Ile Met Asn Arg Pro Gln Ser Pro Ser Tyr Val Gly Pro Thr
            20                  25                  30
Ser Ala Glu Phe Gly Leu Thr Thr Arg Gln Arg Gln Pro Glu Asp Phe
        35                  40                  45
Asp Ser Gly Asp Asp Leu Val Ser Thr Ala Val Gln Ser Pro Ala Pro
    50                  55                  60
Ala Leu Gly Gly Asp Ile Ser Ser Glu Asp Pro Leu Gly Cys Leu Gly
65                  70                  75                  80
Ser Ala Glu Ala Leu Arg Leu Val Asp Val Tyr Glu Asn Thr Val Gly
                85                  90                  95
Leu Met Tyr Pro Cys Val Asp Leu Ala Ser Val Arg Val Tyr Ile Ala
            100                 105                 110
Glu Tyr Phe Arg Asp Lys Asp Gly Met Glu Pro Ile Ser Pro Pro Thr
        115                 120                 125
Leu Asp Gln Glu Trp Phe Phe Ala Arg Asp Ile Glu Val Leu Lys Ile
    130                 135                 140
Leu Leu Ala Thr Ala Leu Leu Ala Glu Thr His Gly Arg Ser Glu Lys
145                 150                 155                 160
Ala Ala Leu Leu Ala Asp Ser Val Glu Asp Arg Phe Ala Thr Arg Leu
                165                 170                 175
Lys Val Pro Glu Val Asp Met Lys Glu Leu Leu Ile Leu Thr Leu Leu
            180                 185                 190
Val Phe Pro Ser Phe Leu Arg Asp Val Ser Phe Phe Glu Trp Leu Leu
        195                 200                 205
Met Arg
```

210

<210> 27998
<211> 343
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (144)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 27998
Ser Ile Phe His Ser Tyr Arg Asp Asp Glu Val Ile Ser Trp Arg Leu
1 5 10 15
Ile Gly Met Ala Val Arg Gly Ala Met Gln Leu Gly Leu His Cys Gln
20 25 30
Glu Thr Trp Gln Lys Thr Gly Gly Val Phe Pro Gly Glu Leu Gln Cys
35 40 45
Glu Tyr Ala Ser Arg Leu Phe Trp Cys Ile Tyr Val Leu Asp Arg Lys
50 55 60
Trp Ser Phe Gly Thr Gly Leu Pro Phe Ala Ile Gln Asp Ser Asp Met
65 70 75 80
Asp Thr Asn Val Pro Glu Pro Gly Thr Ser Thr Pro Tyr Leu Thr Cys
85 90 95
Met Ile Lys Tyr Ala Arg Leu Ser Thr Lys Ile Trp Gly Leu Val Val
100 105 110
Gly Trp Arg Asn Arg Ser Arg Ala Ala Thr Ala Asp Tyr Cys Ser Tyr
115 120 125
Leu Asp Phe Gln Val Gln Gln Trp Ile Gln Ser Ile Pro Pro Glu Xaa
130 135 140
Arg Phe Asn Pro Ala Arg Ser Pro Met Leu Ser Glu Arg Ala Gly Cys
145 150 155 160
Ser Ala Thr Val Thr Ala Thr Pro Gln Pro His Ser Gln Tyr His Thr
165 170 175
Gln Thr Asp Ser Met Met Met Leu Gln Val Leu Phe Ala Val Gln Ala
180 185 190
Asn Gln Leu Arg Ile Leu Val Tyr Arg Gln Asn Ile Leu Cys Ser Glu
195 200 205
Ser Ile Glu Ala Asp Val Ser Gly Ala Ser Thr Ala Val Glu Thr Ala
210 215 220
Lys Ser Thr Val His Met Leu Asp Ser Phe Ser Arg Val Ser Pro Leu
225 230 235 240
Tyr Phe Gln Arg Pro Glu Pro Phe Asn Tyr Phe Leu Ile Ser Ala Leu
245 250 255
Ala Ala Leu Phe Leu Ala Val Leu His Ala Pro Ala Arg Phe Ser Gln
260 265 270
Val Cys Arg Pro Glu Phe Tyr Thr Ala Val Asp Met Val Arg Arg Ser
275 280 285
Ser Thr Arg Ala Arg Thr Ser Arg Arg Leu Gln Lys Ile Ile Lys Ser
290 295 300
Leu Lys Thr Ile Trp Met Asn Leu Gly Thr Gln Arg Pro Arg Glu Pro
305 310 315 320
Val Gln Lys Asn Gly Pro Asn His Arg Thr Pro Arg Gly Leu Asp Asp
325 330 335
Thr Gly Ala Pro Arg Arg Phe

340

<210> 27999
<211> 262
<212> PRT
<213> A.fumigatus

<400> 27999
Val Gln Glu Leu Tyr Ile Asp Pro Ser Arg Ala Ser Arg Arg Arg Asn
1 5 10 15
Gly Lys Pro Ala Ser Cys Glu Pro Cys Arg Lys Asp Lys Val Arg Cys
20 25 30
Asp His Gly His Pro Ala Cys Ser Arg Cys Leu Arg Arg Gly Ser Thr
35 40 45
Ser Gln Cys Phe Tyr His Pro Ala Pro Leu Thr Arg Ala Thr Arg Arg
50 55 60
Ser Arg Gly Phe Ile Val Gly Gln His Ala Ser Thr Thr Ser Pro Ala
65 70 75 80
Glu Leu Arg Gly Ser Pro Glu Ala Leu Ser Ser Ser Gly Ser Arg Ser
85 90 95
Asp His Leu Leu Ser Ala Gly Tyr Leu Gly Pro Thr Ser Phe Val Ser
100 105 110
Val Leu Gly Glu Gly Asp Gly Ala Asn Glu Leu Val Thr Ala Ala Asp
115 120 125
Glu Ser Ser Ala Ala Ser Ser Val Pro Ala Trp Trp Ala Lys Arg Ala
130 135 140
Ser Glu Val Val Gly His Leu Val Val Phe Pro Ala Leu Lys Gln Leu
145 150 155 160
Ile Leu Glu Phe Tyr Gly Val Ser Gln Ala Ala Val Ile Ala Ala Pro
165 170 175
Phe Ile Leu Asn Ala Leu Ser Gln Met Gln Asp Thr Tyr His Ala Tyr
180 185 190
Leu Leu Asp Gln Gly Glu Ala Glu Ile Pro Ala Leu Val Glu Thr Val
195 200 205
Leu Asp Asn Thr Gly Gln Lys Phe Asn Ala Pro Pro Thr Val Gly Arg
210 215 220
Thr Ala Leu Pro Gln Ala Leu His Lys Val His Gly Leu Arg Phe Gly
225 230 235 240
Arg Tyr Leu Ala Val Val Leu Cys Ser Trp Gln Gly Gln Thr Lys Ser
245 250 255
Ile Pro Asp Trp Gly Gly
260

<210> 28000
<211> 92
<212> PRT
<213> A.fumigatus

<400> 28000
Arg Gln Ala Ile Ala Leu Met Asp Pro Glu His Cys Thr Leu Asp Thr
1 5 10 15
Cys Pro Ile Gln Asn Ala Tyr Ile His Tyr Gln Pro Thr Ile Ala Gly
20 25 30
Asn Ser Val Tyr Leu Ala Leu Phe Gly Ile Phe Leu Phe Thr Gln Leu
35 40 45
Ile Gln Ser Met Phe Phe Arg Met Trp Gly Phe Ala Gly Ala Met Ala

```
    50                  55                  60
Ala Gly Leu Val Leu Glu Val Ala Gly Tyr Thr Gly Arg Ile Leu Gln
65                  70                  75                  80
His Gly Asn Pro Phe Ser Phe Asp Tyr Phe Leu Leu
                85                  90
```

<210> 28001
<211> 156
<212> PRT
<213> A.fumigatus

<400> 28001

```
Ile Ile Ile Ile Tyr His Gly Glu Glu Ile Ser Arg Leu Lys Pro Arg
1               5                   10                  15
Asn Tyr Ala Ile Phe Phe Val Ser Cys Asp Val Ile Ala Leu Ile Leu
            20                  25                  30
Gln Ser Ala Gly Gly Ala Leu Thr Ser Ala Ala Glu Asp Ala Asp Gly
        35                  40                  45
Arg Gln Met Gly Leu Asn Val Met Ile Ala Gly Leu Val Phe Gln Val
    50                  55                  60
Ala Ala Leu Thr Leu Phe Ile Ala Leu Ala Ser Glu Phe Ala Ile Cys
65                  70                  75                  80
Leu Arg Arg Arg His Leu Lys Gly Glu Tyr Gln Val Ser His Ser Ala
                85                  90                  95
Ser Leu Arg Lys Asp Asp Tyr Ala Ala Ile Arg Arg Lys Lys Thr Trp
            100                 105                 110
Thr Leu Phe Leu Phe Leu Thr Pro Pro Ala Leu Cys Leu Thr Asn Glu
        115                 120                 125
Ala Asn Asn Gly Ser Pro Cys Ser Cys Asp Tyr His Gly Leu Tyr Ser
    130                 135                 140
Val His Phe Leu Ser Gly Gly Ala Glu Arg Arg Leu
145                 150                 155
```

<210> 28002
<211> 148
<212> PRT
<213> A.fumigatus

<400> 28002

```
Asn Leu His Phe Gln Pro Ser Ser Pro Ser Tyr Ile Ala Tyr Tyr Phe
1               5                   10                  15
Ile Leu Ile Ile Asp Phe Trp Ser Ala Ala Thr Leu Pro Ser Ser Leu
            20                  25                  30
Val His Lys Ser Tyr Gly Ser Ser Ala Ala Leu Ala His Phe Ile Arg
        35                  40                  45
Leu Val Ser Gln Leu Leu Ser Ala Ser Gln Asn Glu Leu His Ile Phe
    50                  55                  60
Ser Thr Thr Ile His Tyr His Lys Ile Gln Met Arg Leu Met Ser Gly
65                  70                  75                  80
Ile Val Lys Arg Leu Pro Gln His Pro Pro Gln Pro Glu Met Ser Pro
                85                  90                  95
Glu Leu Thr Arg Ala Cys Leu Val Gly Gly Asn Ala Ile Ser Ala Phe
            100                 105                 110
Leu Ser Trp Arg Leu Gln Ala Thr Thr Ser Cys Asp Val Thr Leu Val
        115                 120                 125
Trp Lys Ser Gly Phe Glu Ser Val Ser Gln Tyr Gly Val Ser Phe Lys
```

```
    130                 135                 140
Tyr Ala Ser Ser
145

<210> 28003
<211> 222
<212> PRT
<213> A.fumigatus

<400> 28003
Pro Leu Ser Gly Asn Arg Asp Ser Asn Gln Tyr Leu Ser Met Glu Tyr
1               5                  10                  15
His Ser Ser Thr Leu Pro Leu Asp Ser Ser Ser Phe Leu Ser Lys Pro
            20                  25                  30
Phe Phe Leu Ile Ala Ala Lys His Thr Gly Arg Lys His Met Ala Met
        35                  40                  45
Asn Ala Ser Ser Pro Val Met Val Arg Ser Leu Ile Met Ala Tyr Val
    50                  55                  60
Ser Leu Ala Val Asn Leu Leu Thr Tyr Ala Phe Arg Phe Val Val Val
65                  70                  75                  80
Arg Ala Pro Glu Glu Ala Ala Ser Arg Glu Asn Ala Tyr Asp Tyr Val
                85                  90                  95
Ile Leu Cys Val Lys Ala Leu Pro Asp Val Tyr Asp Leu Ala Ser Val
            100                 105                 110
Ile Glu Ser Val Val Thr Pro Gln His Thr Cys Ile Leu Val Asn Thr
        115                 120                 125
Thr Asn Thr Leu Gly Val Glu Ser Gln Leu Glu Gln Arg Phe Pro Thr
    130                 135                 140
Asn Val Val Leu Ser Leu Val Ser Gly Val Glu Ile Ser Gln Thr Gly
145                 150                 155                 160
Ala Ser Glu Phe Glu His Leu Asp Ser Ser Asp Ile Trp Val Gly Ala
                165                 170                 175
Thr Ser Asn Asn Ser Ser Ile Pro Ala Ser Ile Gln Asn Asp Met Ala
            180                 185                 190
Ser Ala Leu Ala Met Thr Leu Ser Ser Gly Gln Val Asn Cys Arg Val
        195                 200                 205
Ser Glu Asn Ile Arg Gln Glu Gln Phe Glu Arg Met Ile Gly
    210                 215                 220

<210> 28004
<211> 87
<212> PRT
<213> A.fumigatus

<400> 28004
Leu Tyr Arg Val Leu Gly Thr Lys Ala Asn Leu Ile Ser Met Leu Thr
1               5                  10                  15
Gly Val Pro His Glu Lys Leu Gln Val Phe His His Trp Ala Ser Tyr
            20                  25                  30
Ala Met Phe Val Leu Ala Ser Ile His Thr Phe Pro Phe Ile Ile Val
        35                  40                  45
His Ile Asp Lys Gly Asp Met Val Thr Leu Trp Lys Arg Glu Val Thr
    50                  55                  60
Tyr Trp Thr Gly Val Ala Ala Leu Ile Pro Gln Ala Tyr Leu Thr Phe
65                  70                  75                  80
Met Ser Leu Pro Ala Ile Arg
```

85

<210> 28005
<211> 179
<212> PRT
<213> A.fumigatus

<400> 28005
Pro Pro Ile Pro Ser Pro Ser Pro Pro Ser Pro Thr Thr Gln Leu Pro
1 5 10 15
Cys Pro Ser Thr Thr Asn Ser Ser Ser Thr Ser Asn Pro Ala Glu Gly
20 25 30
Ser Pro Pro Asp Ser Pro Ala Ser Pro Arg Ser Ala Pro Ala Pro Ser
35 40 45
Lys Pro Ser Ser Ser Lys Val Pro Thr Ala Ala Ser Leu His Pro Gln
50 55 60
Ala Lys Thr Ser Arg Ala Ser Thr Trp Phe Leu Ser Ser Arg Val Ala
65 70 75 80
Gln Ala Ala Ala Ser Arg Trp Glu Leu Trp Thr Pro Cys Leu Pro His
85 90 95
Pro Arg Thr His Pro Pro Gln His Gln Leu Tyr Arg Pro Ser Ser Gln
100 105 110
Arg Ala Thr Ser Gln Trp Gln Ser Gly Met Leu Lys Lys Ser Lys Ala
115 120 125
Ala Ser Gln Arg Pro Met Ser Leu Pro Glu Ala Gly Thr Phe Pro Pro
130 135 140
Arg Phe Ser Leu Pro Val Asn Arg Asn Ser Ser Ile Gly Arg Gln Met
145 150 155 160
Thr Arg Val Asn Ser Pro Pro Gln Asn Leu Ser Pro Ala Ala Cys Arg
165 170 175
Arg Ser Ala

<210> 28006
<211> 201
<212> PRT
<213> A.fumigatus

<400> 28006
Thr Ala Lys Leu Thr Trp Gln Gly Leu Leu His Arg Arg Gly Arg Pro
1 5 10 15
Leu Pro Leu Gln Ser Leu Arg Ser Ile Tyr Pro His His Pro Pro Pro
20 25 30
Arg Pro Pro Gln Ser His Pro Arg Arg Pro Pro Leu Trp Leu Gly Pro
35 40 45
His Gln Asn Pro Asn Leu His Asn Leu Val Pro Arg Pro Thr Arg Leu
50 55 60
Pro Pro Leu Phe Glu Arg Leu Pro Ala Arg Pro Ala Leu Ser Asn Arg
65 70 75 80
Pro Ser Leu His His His Leu His Arg Pro Arg Arg Ser Phe Pro Val
85 90 95
Gln Ala Gln Arg Thr Arg Leu Leu His Pro Thr Pro Arg Arg Asp His
100 105 110
Arg Pro Thr Arg Gln Pro Arg Arg Ala Ala Pro Arg His Arg Ala Asn
115 120 125
Arg Pro Pro Arg Arg Ser Leu Arg Arg Pro Arg Cys Ile Arg Arg Gln

```
    130                 135                 140
Arg Pro Arg Ala Leu Arg Leu Gly Ser Cys His Leu Gly Trp Leu Arg
145                 150                 155                 160
Gln Arg Leu Leu Ala Gly Asn Cys Gly Arg Arg Ala Cys Leu Ile Leu
                165                 170                 175
Ala Leu Ile Leu Leu Asn Thr Ser Ser Thr Asp His Leu Arg Asn Ala
            180                 185                 190
Gln Pro Val Asn Gly Arg Val Val Cys
        195                 200
```

<210> 28007
<211> 321
<212> PRT
<213> A.fumigatus

<400> 28007

```
Arg Gly Arg Asp Tyr Phe Ile Ala Gly Gly Ala Leu Tyr Leu Phe Ser
1               5                   10                  15
Leu Cys Ala Ala Tyr Ile Arg Thr Thr Leu Leu His Gly Arg His Lys
            20                  25                  30
Ala Thr Leu Asp Val Leu Pro Cys Gly Leu Val Arg Ile Lys Ile Pro
        35                  40                  45
Thr Phe Ile Thr Trp Ser Pro Gly Gln His Val Phe Leu Arg Phe Leu
    50                  55                  60
Asn Ala Ser Gln Leu Gly Leu His Ser Leu Thr Ala His Pro Phe Thr
65                  70                  75                  80
Ile Thr Ser Ile Ala His Asp Ala Ala Ser Leu Ser Lys His Asn Glu
                85                  90                  95
Leu Val Phe Tyr Ile Gln Pro Arg Gly Gly Ile Thr Ala Arg Leu Ala
            100                 105                 110
Ser Leu Ala Ala Gln Arg Pro Gly Thr Glu Gln Thr Val Leu Leu Glu
        115                 120                 125
Gly Pro Tyr Gly Gly Leu Ala Ala Ser Ala Gly Lys Asp Leu Ala Arg
    130                 135                 140
Phe Asp Leu Val Leu Val Ile Ser Gly Gly Ser Gly Ser Gly Phe Ser
145                 150                 155                 160
Leu Gly Ile Val Asp Ala Val Leu Ala Ser Ser Ser His Ser Ser Ser
                165                 170                 175
Ser Thr Pro Ala Leu Gln Thr Ile Phe Ala Thr Arg Asn Gln Ser Met
            180                 185                 190
Ala Glu Trp Tyr Val Glu Glu Ile Glu Ser Arg Ile Ser Thr Ser Asn
        195                 200                 205
Val Ser Thr Arg Gly Gly Asp Val Ser Ala Ser Val Phe Val Thr Arg
    210                 215                 220
Gln Gln Glu Gln Gln His Arg Gln Thr Asp Asp Glu Ser Lys Leu Pro
225                 230                 235                 240
Ser Thr Lys Pro Leu Ala Arg Ser Met Ser Gln Ile Gly Ile Thr His
                245                 250                 255
Gly Pro Arg Pro Asp Leu Pro Ala Phe Ile Ala Gly Cys Thr Ser Pro
            260                 265                 270
Ser Ser Ala Arg Gly Lys Arg Leu Gly Ile Phe Val Cys Gly Pro Ala
        275                 280                 285
Ser Met Leu His Asp Val Arg Asn Ala Ala Ala Arg Ala Gln Arg Asp
    290                 295                 300
Val Leu Glu Asn Gly Pro Glu Glu Val Tyr Leu His Leu Glu Pro Phe
305                 310                 315                 320
```

Ser

<210> 28008
<211> 70
<212> PRT
<213> A.fumigatus

<400> 28008
His Gln Leu Tyr Lys Ser Ile Ser Asn Gln Lys Lys Ser Thr Pro Pro
1 5 10 15
Thr Pro Thr Gln Arg Gln Thr Pro Thr Ser Cys Gln Arg Ala Asn Ile
20 25 30
Asn Tyr Glu Ala Asp Lys Arg Leu Ile Asn Pro Ser Leu Ile Arg Thr
35 40 45
Phe Thr Thr Pro Pro Thr Pro Tyr Ala Gly Thr Ile Phe Pro Ile Leu
50 55 60
Ala Lys Gln Leu Ala Thr
65 70

<210> 28009
<211> 529
<212> PRT
<213> A.fumigatus

<400> 28009
Lys Arg Arg Arg Ser Met Arg Thr Lys Asn Asp Asp Asn Gly Glu Asp
1 5 10 15
Gly Ala Ser Arg Asp Asp Arg Asn Arg Ser Arg Gln Leu Ser Val Val
20 25 30
Pro Gly Ser Met Met Pro Lys Asp Gln Leu Ala Gly Val Tyr Arg Glu
35 40 45
Leu Gln Ala Ile Arg Gln Gln Gln Gln Ile Ile Ser Asn Thr Ile Asn
50 55 60
Lys Leu Arg Arg Glu His Glu Gln Leu Tyr Ala Gln Ala Ala Asn Phe
65 70 75 80
Gln Glu Gln His Asn Arg His Glu Asn Ser Ile Asn Ala Ile Leu Thr
85 90 95
Phe Leu Ala Thr Val Tyr Asn Arg Ser Leu Gln Gly Gln Asp Gly Pro
100 105 110
Gln Asn Leu Ala Asn Ser Phe Ala Gly Val Ile Ser Gln Asp Gln Gly
115 120 125
Asn Val Val Asp Val Gly Asp Asp Phe Pro Leu Ser Ala Leu Gly Ala
130 135 140
Ala Asn Leu Asn Ser Pro Asn Ala Gln Arg Ser Met Lys Lys Gln Pro
145 150 155 160
Leu Leu Leu Lys Ala Pro Pro Thr Thr Asp Arg Gln Asn Gly Arg Ala
165 170 175
Thr Thr Leu Ser Pro Ala Gly Ser Thr Tyr Asn Arg Ser Gln Ser Arg
180 185 190
Ser His Ser Arg Gln Pro Ser Val Thr Gln Ala Gly His Val Glu Glu
195 200 205
Val Phe Glu Thr Ser Pro Thr Gln Lys Asp Ala Thr Asn Ser Gln Asn
210 215 220
Arg Ser Ile Pro Gln Ser Asp Ile Met Ser Val Ile Gln Asn Thr Asn
225 230 235 240

```
Ala Arg Asn Gly Ile Pro Thr Thr Phe Ala Glu Phe Pro Asn Val Leu
                245                 250                 255
Ser Ser Leu Glu Thr Ser Gly Gly Asn Ser Pro Leu Thr Pro Asn Gln
            260                 265                 270
Arg Ala Asp Met Leu Arg Leu Met Ala Asn Glu Ser His Thr Asp Pro
        275                 280                 285
Asn Ile Pro Val Pro Ser Asp Asn Ala Leu Ile Thr Pro Thr Pro Pro
    290                 295                 300
Pro Met Pro His Asn Tyr Asn Gly Arg Leu Ala Ser Thr Arg Ala Glu
305                 310                 315                 320
Ile Asp Asn Leu Met Lys Met Gln Ala Glu Gln Asp Arg Ser Val Gln
                325                 330                 335
Asn Leu Thr Asn Leu Leu Gln Pro Leu Ser Pro Thr Gly Thr Ile Pro
            340                 345                 350
Gly Leu Ala Gly Gly Glu Asn Gly Ser Val Pro Pro Pro Ala Leu Asp
        355                 360                 365
Leu Asp Gln Ile Phe Asn Asn Asp Tyr Phe Thr Asp Ile Gly Asp Leu
    370                 375                 380
Glu His Asn Lys Ser Asn Met Asp Leu Gly Asp Thr Thr Ser Ser Val
385                 390                 395                 400
Pro Ala Pro Ala Pro Ala Asp Ala Pro Val Thr Thr Gly Ala Glu Asp
                405                 410                 415
Val Lys Asp Gly Ser Asp Leu Phe Asp Phe Asp Gln Ile Pro Pro Glu
            420                 425                 430
Gly Asp Leu Phe Asp Thr Ser Thr Ala Ala Gln Gln Gln Ser Pro Thr
        435                 440                 445
Phe Phe Asn Gly Tyr Asp Gly Ala Gly Tyr Pro Gly Gly Ser Gly Thr
    450                 455                 460
Asn Gly His Thr Pro Ile Gly His Lys Asn Pro Asn Gly Asp Ser Gly
465                 470                 475                 480
Arg Ile Val Glu Thr Leu Thr Asp Ser Glu Ser Thr Ser Pro Ser Thr
                485                 490                 495
Asn Val Asp Glu Val Pro Gln Tyr Ser Gly Pro Ala Gly Leu Asn Glu
            500                 505                 510
Ser His Gly Gly Lys Gly Asn Gly Gly Gly Ala Lys Arg Arg Arg Lys
        515                 520                 525
Ala
```

<210> 28010
<211> 356
<212> PRT
<213> A.fumigatus

<400> 28010

```
Ile Lys Ala Tyr Thr Gly Gly Asp Thr Ser Ala Ile Val Asp Ala Ser
1               5                   10                  15
Ala Asp Leu Ile Ser Thr Ile Asn Asp Gly Thr Ser Thr Val Ala Ala
            20                  25                  30
Gln Pro Ala Leu Ser Gln Val Asp Ala Leu Asn Leu Val Asn Pro Ile
        35                  40                  45
Leu Ala Leu Thr Asn Lys Val Lys Thr Thr Ile Asp Asp Leu Ile Ser
    50                  55                  60
Lys Lys Ser Leu Ile Val Glu Ala Gly Ala Gly Pro Thr Thr Tyr Ser
65                  70                  75                  80
Gln Leu Leu Asp Gln Tyr Thr Ala Ser Ser Asn Leu Ala Thr Thr Leu
```

```
                85                  90                  95
Ser Gly Lys Val Pro Glu Ala Leu Lys Gln Val Ala Glu Glu Leu Ser
            100                 105                 110
Ser Gly Ile Thr Ser Ala Ile Gln Lys Gly Ile Asp Ala Tyr Lys Asp
        115                 120                 125
Val Ser Thr Pro Pro Thr Thr Thr Thr Ser Ser Thr Ser Thr Pro Pro
    130                 135                 140
Thr Thr Ser Pro Thr Thr Thr Pro Thr Glu Thr Ser Thr Pro Cys Glu
145                 150                 155                 160
Thr Thr Thr Thr Thr Thr Glu Thr Ser Thr Pro Cys Glu Thr Thr Thr
                165                 170                 175
Thr Thr Thr Pro Pro Pro Glu Thr Ser Thr Pro Cys Glu Thr Thr Thr
            180                 185                 190
Thr Thr Thr Glu Thr Ser Thr Pro Cys Glu Thr Thr Thr Thr Pro Thr
        195                 200                 205
Glu Thr Ser Thr Pro Cys Glu Thr Thr Thr Thr Pro Thr Glu Thr Ser
    210                 215                 220
Thr Pro Cys Glu Thr Thr Thr Thr Pro Thr Glu Thr Ser Thr Pro Cys
225                 230                 235                 240
Glu Thr Thr Thr Thr Pro Thr Glu Thr Ser Thr Pro Cys Glu Thr Thr
                245                 250                 255
Thr Thr Thr Thr Pro Pro Pro Glu Thr Ser Thr Pro Cys Glu Thr Thr
            260                 265                 270
Thr Thr Pro Thr Glu Thr Ser Thr Pro Cys Glu Thr Thr Thr Thr Pro
        275                 280                 285
Thr Glu Thr Ser Thr Pro Cys Glu Thr Thr Thr Thr Pro Pro Glu Thr
    290                 295                 300
Ser Thr Pro Cys Glu Thr Thr Thr Thr Thr Thr Pro Pro Thr Glu Thr
305                 310                 315                 320
Thr Thr Thr Pro Thr Thr Pro Pro Ala Glu Thr Thr Thr Thr Thr Asn
                325                 330                 335
Val Pro Val Pro Pro Val Thr Ser Thr Thr Thr Ala Thr Glu Thr Thr
            340                 345                 350
Pro Cys His Glu
        355
```

<210> 28011
<211> 212
<212> PRT
<213> A.fumigatus

<400> 28011

```
Ala Leu Pro Arg Pro Leu Leu Leu Arg Arg Leu Pro Arg Leu Leu Arg
1               5                   10                  15
Leu Arg Leu Leu Pro Leu Leu Pro Arg Pro Pro Leu Arg Ala Arg Leu
            20                  25                  30
Leu Pro Leu Leu Pro Arg Pro Leu Pro Pro Val Arg Leu Leu Leu Arg
        35                  40                  45
Leu Leu Leu Leu Leu Arg Pro Pro Leu Arg Ala Arg Leu Leu Pro Leu
    50                  55                  60
Leu Pro Arg Pro Leu Pro Pro Val Arg Leu Leu Leu Pro Leu Pro Arg
65                  70                  75                  80
Pro Leu Leu Arg Val Arg Leu Pro Pro Leu Leu Pro Arg Pro Leu Leu
                85                  90                  95
Arg Val Arg Pro Leu Pro Leu Leu Pro Arg Pro Leu Leu His Ala Arg
            100                 105                 110
```

```
Leu Pro Pro Leu Leu Pro Lys Pro Leu Pro Pro Val Arg Leu Leu Leu
        115                 120                 125
Arg Leu Leu Leu Leu Leu Arg Pro Pro Leu Arg Ala Arg Pro Leu Pro
    130                 135                 140
Leu Leu Pro Arg Pro Leu Pro Pro Val Arg Leu Leu Leu Pro Leu Pro
145                 150                 155                 160
Arg Pro Leu Leu Arg Val Arg Leu Leu Leu Leu Leu Leu Lys Pro Pro
                165                 170                 175
Leu His Val Arg Leu Pro Pro Leu Leu His Leu Leu Arg Lys Pro Pro
            180                 185                 190
Pro His Pro Leu His Leu Leu Leu Lys Leu Pro Leu Pro Pro Met Ser
        195                 200                 205
Leu Phe Pro Gln
    210
```

<210> 28012
<211> 230
<212> PRT
<213> A.fumigatus

<400> 28012

```
Ser Trp His Gly Val Val Ser Val Ala Val Val Val Glu Val Thr Gly
1               5                   10                  15
Gly Thr Gly Thr Leu Val Val Val Val Val Ser Ala Gly Gly Val Val
            20                  25                  30
Gly Val Val Val Val Ser Val Gly Gly Val Val Val Val Val Val Ser
        35                  40                  45
His Gly Val Glu Val Ser Gly Gly Val Val Val Val Ser His Gly Val
    50                  55                  60
Glu Val Ser Val Gly Val Val Val Val Ser Gln Gly Val Glu Val Ser
65                  70                  75                  80
Val Gly Val Val Val Val Ser His Gly Val Glu Val Ser Gly Gly Gly
                85                  90                  95
Val Val Val Val Val Val Ser Gln Gly Val Glu Val Ser Val Gly Val
            100                 105                 110
Val Val Val Ser His Gly Val Glu Val Ser Val Gly Val Val Val Val
        115                 120                 125
Ser His Gly Val Glu Val Ser Val Gly Val Val Val Val Ser His Gly
    130                 135                 140
Val Glu Val Ser Val Gly Val Val Val Val Ser Gln Gly Val Glu Val
145                 150                 155                 160
Ser Val Val Val Val Val Val Ser His Gly Val Glu Val Ser Gly Gly
                165                 170                 175
Gly Val Val Val Val Val Val Ser Gln Gly Val Glu Val Ser Val Val
            180                 185                 190
Val Val Val Val Ser His Gly Val Glu Val Ser Val Gly Val Val Val
        195                 200                 205
Gly Glu Val Val Gly Gly Val Glu Val Asp Glu Val Val Val Val Gly
    210                 215                 220
Gly Val Leu Thr Ser Leu
225                 230
```

<210> 28013
<211> 356
<212> PRT
<213> A.fumigatus

<400> 28013
Leu Met Ala Trp Gly Gly Leu Gly Ser Gly Gly Ser Gly Gly His Trp
1 5 10 15
Gly Asn Arg Asp Ile Gly Gly Ser Gly Ser Phe Ser Arg Arg Cys Ser
20 25 30
Gly Cys Gly Gly Gly Phe Arg Arg Arg Cys Ser Ser Gly Gly Ser Leu
35 40 45
Thr Trp Ser Gly Gly Phe Arg Arg Ser Ser Ser Ser Leu Thr Arg Ser
50 55 60
Arg Gly Leu Gly Arg Gly Ser Ser Ser Leu Thr Gly Gly Arg Gly Leu
65 70 75 80
Gly Arg Ser Gly Ser Gly Leu Ala Arg Ser Gly Gly Leu Arg Arg Arg
85 90 95
Ser Ser Arg Ser Ser Ser Leu Thr Gly Gly Arg Gly Phe Gly Arg Ser
100 105 110
Gly Gly Ser Leu Ala Trp Ser Arg Gly Leu Gly Arg Ser Gly Ser Gly
115 120 125
Leu Thr Arg Ser Arg Gly Leu Gly Arg Ser Gly Gly Ser Leu Thr Arg
130 135 140
Ser Arg Gly Leu Gly Arg Gly Ser Ser Ser Leu Thr Gly Gly Arg Gly
145 150 155 160
Leu Gly Ser Ser Gly Ser Ser Leu Ala Arg Ser Gly Gly Leu Arg Arg
165 170 175
Arg Ser Ser Arg Ser Ser Ser Leu Thr Gly Gly Arg Gly Leu Gly Ser
180 185 190
Ser Gly Ser Ser Leu Ala Arg Ser Gly Gly Leu Gly Arg Ser Gly Ser
195 200 205
Arg Arg Ser Arg Arg Arg Arg Gly Ser Arg Arg Ser Ser Ser Gly Arg
210 215 220
Gly Ser Ala His Ile Leu Ile Ser Ile Asp Thr Leu Leu Asp Gly Arg
225 230 235 240
Gly Asp Ser Arg Gly Gln Leu Phe Ser Asp Leu Leu Glu Ser Leu Arg
245 250 255
His Leu Ala Arg Gln Gly Arg Ser Gln Val Arg Gly Gly Arg Val Leu
260 265 270
Val Gln Gln Leu Ala Ile Gly Gly Arg Thr Arg Ala Gly Leu Asp Asp
275 280 285
Gln Thr Leu Leu Gly Asp Glu Val Val Asp Gly Gly Leu Asp Leu Val
290 295 300
Gly Gln Gly Gln Asp Gly Ile His Gln Ile Gln Ser Val His Leu Ala
305 310 315 320
Gln Ser Trp Leu Gly Arg His Gly Gly Cys Ala Ile Val Asp Gly Gly
325 330 335
Asp Glu Val Cys Arg Ser Ile His Asp Ser Gly Arg Ile Ala Ser Ser
340 345 350
Val Gly Leu Asp
355

<210> 28014
<211> 61
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE

<222> (32),(58)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28014
Cys Arg Leu Ser Arg Tyr Asn Thr Phe Ile Leu Arg Asp Asn Ser Asn
1 5 10 15
Leu Gly His Leu Asp Val Val Ala Met Ser Thr Thr Asn Ile Gln Xaa
20 25 30
Tyr Thr Gln Thr Ile Asn Met Arg Gln Ser Ser Gln Gln Thr Asn Val
35 40 45
Tyr Thr Leu Phe Leu Ser Thr Pro Lys Xaa Ser Asn Leu
50 55 60

<210> 28015
<211> 64
<212> PRT
<213> A.fumigatus

<400> 28015
Leu Glu Arg Phe Asp Arg His Gln Pro Ser Asp Lys Leu Thr Asn Arg
1 5 10 15
Pro Pro Tyr Thr Gln His Gly Gln Glu Ile Ser Gly Ser Lys Arg Gln
20 25 30
Glu Phe Gln Glu Lys Ser Ala Ile Asn Arg Gln Ile Thr Ala Asn Thr
35 40 45
Glu Ala Gln Ala Gly Glu Gln Ser Thr Asp Thr Arg Phe Glu Val Tyr
50 55 60

<210> 28016
<211> 135
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (12),(43)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28016
Gly Thr Gly Phe Arg Pro Arg Thr Arg Thr Met Xaa Cys Ser Arg Thr
1 5 10 15
Ser Pro Ile Val Pro Ile Val Ala Ser Pro Asp Leu Thr Thr Ile Met
20 25 30
Pro Phe Phe Asn Pro Phe Arg Lys His Asp Xaa Thr Thr Phe His Gly
35 40 45
Val Val Ile Pro Leu Ser Ser Ala Pro Ser His Ala Arg Pro Glu Ser
50 55 60
Pro Ala Leu Glu Lys Lys Gly Ser Pro Lys Glu Lys Pro Asp Asp Ser
65 70 75 80
Ser Leu Asp Lys Ala Pro Ser Gln Glu Asn Gly Ser Ala Ala Ser Ile
85 90 95
Pro Glu Arg Ser His Leu Thr Ile Glu Ser Leu Arg Ala Glu Ile Glu
100 105 110
Ser Asp Val Ala Ala Ser Gly His Asp Thr Ala Tyr Asp Arg Met Phe
115 120 125
Leu Cys Val Val Cys Asp Tyr

130 135

<210> 28017
<211> 159
<212> PRT
<213> A.fumigatus

<400> 28017
Pro Ser Leu Phe Val Gly Pro Leu Val Trp Pro Pro Leu Val Val Pro
1 5 10 15
His Gly Leu Gly Met Ser Ile Arg Tyr Phe Leu Ser Ala Val Gly Ala
20 25 30
Gly Ala Cys Ala Leu Ile Tyr Leu Lys Ser Ser Val Cys Ala Leu Phe
35 40 45
Ala Cys Leu Gly Leu Gly Val Gly Gly Asn Leu Pro Val Asp Gly Ala
50 55 60
Leu Phe Leu Glu Phe Leu Pro Phe Ala Ser Gly Asn Leu Leu Thr Met
65 70 75 80
Leu Ser Val Trp Trp Pro Val Gly Gln Leu Ile Ala Arg Leu Val Pro
85 90 95
Ile Glu Pro Phe Glu Leu Cys Glu Phe Lys Ser Ser Asn Asn Ser Leu
100 105 110
Val Leu Leu His Gly Ala Ser Ser Pro Val Ile Ala Ala Pro Met Thr
115 120 125
Cys Pro Pro Ala Lys Gln Ser Val Thr Glu Ser Pro Ala Ala Glu Arg
130 135 140
Thr Thr Thr Trp Ala Gly Asp Thr Ser Cys Ser Leu Trp Ala Pro
145 150 155

<210> 28018
<211> 103
<212> PRT
<213> A.fumigatus

<400> 28018
Asn Leu Asp Thr Asn Gln Asn Gln Gly Val Ala Leu Thr Leu Thr Pro
1 5 10 15
Val Ala Ser Glu Phe Gly Ile Ser Ser Thr Arg Val Arg Phe Thr Thr
20 25 30
Cys Ala Leu Phe Val Gly Leu Cys Leu Gly Ala Ser Phe Trp Gly Val
35 40 45
Ala Ser Asp Ile Val Gly Arg Arg Pro Ala Phe Asn Leu Thr Leu Phe
50 55 60
Ile Cys Gly Ala Phe Gly Leu Ala Ala Ala Gly Gly Pro Thr Trp Ile
65 70 75 80
Gly Tyr Val His Ser Ile Phe Pro Val Arg Ser Trp Gly Arg Ser Leu
85 90 95
Arg Ala Asn Ile Pro Gln Ile
100

<210> 28019
<211> 123
<212> PRT
<213> A.fumigatus

<400> 28019

```
Gln Leu Ala Ser Leu Ile Ala Trp Gly Leu Ile Pro Ser Tyr Ser Cys
1               5                  10                  15
Ala Asp Asp Leu Pro Ser Cys Lys Ala Val Gly Asp Gly Val Ala Cys
            20                  25                  30
Cys Gly Lys Asp Asn Asn Met Gly Trp Arg Tyr Phe Val Leu Thr Met
        35                  40                  45
Gly Ser Leu Thr Ile Val Met Phe Ile Cys Arg Phe Phe Leu Phe His
    50                  55                  60
Leu Tyr Glu Ser Pro Lys Phe Leu Leu Ala Arg Gly Arg Gln Asp Glu
65                  70                  75                  80
Ala Val Ala Ala Val His Gly Ile Ala Tyr Lys Asn Lys Thr Lys Thr
                85                  90                  95
Trp Leu Thr Val Asp Ile Leu Asn Glu Ile Gly Gly Tyr Pro Glu Glu
            100                 105                 110
Asn Ala Pro Gln Thr Leu Ser Thr Lys Glu Ile
        115                 120
```

<210> 28020
<211> 341
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (7)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28020

```
Pro Arg Arg Thr Tyr Ala Xaa Ala His Ala Tyr His Ile Asn Ser Ile
1               5                  10                  15
Ser Val Asn Ser Asp Gly Glu Thr Phe Ile Ser Ser Asp Asp Leu Arg
            20                  25                  30
Ile Asn Leu Trp Asn Leu Asn Ile Gln Asp Gln Ser Phe Asn Ile Val
        35                  40                  45
Asp Ile Lys Pro Ala Asn Met Glu Glu Leu Thr Glu Val Ile Thr Ala
    50                  55                  60
Ala Glu Phe His Pro Ile Ser Cys Asn Trp Phe Met Tyr Ala Ser Ser
65                  70                  75                  80
Lys Gly Thr Ile Lys Leu Ala Asp Met Arg Gln Arg Ala Leu Cys Asp
                85                  90                  95
Glu His Ser Lys Arg Met Ser Cys Met Leu Asp Met Asn Ser Val Lys
            100                 105                 110
Pro Pro Trp Leu Thr Tyr Phe Pro Leu Val Phe Glu Gln Glu Glu Asp
        115                 120                 125
Ala Ser Ser Arg Ser Phe Phe Ser Glu Ile Ile Ser Ser Ile Ser Asp
    130                 135                 140
Val Arg Phe Ser His Asp Gly Arg Tyr Ile Val Ser Arg Asp Tyr Leu
145                 150                 155                 160
Thr Val Lys Ile Trp Asp Val Asn Met Glu Arg Gln Pro Val Lys Thr
                165                 170                 175
Ile Pro Ile His Glu His Leu Arg Pro Arg Leu Cys Asp Thr Tyr Glu
            180                 185                 190
Asn Asp Ser Ile Phe Asp Lys Phe Glu Val Val Phe Ser Gly Asp Ala
        195                 200                 205
Glu Asn Val Met Thr Gly Ser Tyr Asn Asn Asn Phe Met Ile Tyr Pro
    210                 215                 220
```

```
Thr Asp Pro Ser Lys Glu Thr Glu Ile Val Leu Gln Ala Asp Lys Ser
225                 230                 235                 240
Ala Phe Lys Ala Lys Lys Val Gly Val Pro Thr Pro Met Asn Lys Asn
                245                 250                 255
Gly Lys Lys Asn Gly Ser Arg Ala Gly Ser Pro Ala Gly Pro Gly Ser
            260                 265                 270
Arg Met Lys Lys Glu Thr Asp Ala Asp Gln Ile Asp Phe Asn Lys Lys
        275                 280                 285
Ile Leu His Met Ser Trp His Pro Tyr Glu Asp Ser Ile Ala Ile Ala
    290                 295                 300
Ala Thr Asn Asn Val Ser Ile Leu Ala Leu His Phe Pro Ser Cys Tyr
305                 310                 315                 320
His Ser Cys Asp Phe Ala Lys Val Leu Ile Gln Ser Glu Gln Leu Phe
                325                 330                 335
Val Phe Ser Ala Leu
            340
```

<210> 28021
<211> 164
<212> PRT
<213> A.fumigatus

```
<400> 28021
Thr Val Leu Thr Lys Val Pro Gly Arg Pro Gly Arg Thr Ala Leu Gly
1               5                   10                  15
Val Ser Pro Ile Thr Ser Tyr Glu Ile Gly Pro Gly Ala His Gly Gly
            20                  25                  30
Thr Ile Asn Ser Ile Val Trp Asn Gln Asp Thr Asn Ile Phe Thr Thr
        35                  40                  45
Ala Ala Glu Asp Arg Lys Val Arg Trp Trp Asp Leu Arg Ser Arg His
    50                  55                  60
Pro Val Ile Glu Tyr Ala Val Glu Gly Thr Ile Gly Ser Cys Glu Leu
65                  70                  75                  80
Asn Thr Leu Ala Thr Arg Pro Asn Asp Pro Gly Ile Leu Thr Val Ala
                85                  90                  95
Ala Gly Lys Ser Val Tyr Leu Phe Asp Gly Val Thr Pro Gly Arg Leu
            100                 105                 110
Leu Lys Lys Met Asp Phe Arg Tyr Glu Val Ala Ser Ala Ala Val Asn
        115                 120                 125
Asn Asp Thr Gly Arg Leu Val Thr Gly Ser Ala Asp Asp Thr Trp Ala
    130                 135                 140
Arg Val Tyr Asp Leu Arg Thr Glu Glu Glu Leu Gly Thr Cys Ile Arg
145                 150                 155                 160
Asn Phe Tyr Phe
```

<210> 28022
<211> 71
<212> PRT
<213> A.fumigatus

```
<400> 28022
Ala His Arg Leu Leu Gln Leu Trp Asn Ser Phe Pro Ala Tyr Ser Glu
1               5                   10                  15
Pro Tyr Ser His Glu Thr Arg Ser Val Phe Asn Thr Asp Tyr Arg Ser
            20                  25                  30
```

```
Thr His Leu Gly Leu Ala Thr Pro Met Leu Ala Thr Cys Pro Val Tyr
        35                  40                  45
Asn Gln His Ile Thr Gly Thr Ala Arg Thr Ser Thr Phe Cys Asn Ala
    50                  55                  60
Val Leu Ser Arg Leu Ser Arg
65                  70
```

<210> 28023
<211> 184
<212> PRT
<213> A.fumigatus

<400> 28023

```
Gly His Ser Val Ser Ser Leu His His Leu Leu Leu Thr Ile Leu Val
1               5                   10                  15
Gln Glu Ile Arg Arg Lys Ser Thr Lys Glu Ser Gln Asp Ile Lys Glu
            20                  25                  30
Glu Leu Gln Arg Lys Gln Met Met Lys Glu Ala Ala Lys Lys Lys Gln
        35                  40                  45
Glu Lys Leu Glu Glu Leu Glu Ala Lys Arg Arg Ile Lys Ala Arg Ile
    50                  55                  60
Glu Ala Asp Lys Glu Glu Arg Arg Leu Arg Ala Glu Arg Glu Lys Ala
65                  70                  75                  80
Glu Arg Ala Gly Met Ala Pro Pro Ala Gln Gln Ala Ala Pro Ala Pro
                85                  90                  95
Thr Thr Ser Gly Pro Val Ala Ser Lys Pro Ala Ala Ala Tyr Thr Glu
            100                 105                 110
Thr Arg Leu Arg Phe Gln Thr Pro Lys Gly Asn Ile Met Lys Thr Met
        115                 120                 125
Pro Val Thr Thr Thr Leu Phe Glu Val Ala Ala Ala Leu Lys Gln Glu
    130                 135                 140
Asp Gly Ile Asp Val Gln Ser Phe Val Gln Asn Phe Pro Arg Lys Val
145                 150                 155                 160
Tyr Asn Ala Glu Phe Phe Gly Glu Ser Leu Lys Asp Leu Gly Leu Ile
                165                 170                 175
Pro Ser Ala Ser Leu Ile Val Gln
            180
```

<210> 28024
<211> 64
<212> PRT
<213> A.fumigatus

<400> 28024

```
Cys Thr Tyr Val Tyr Leu Lys Tyr His Gly Gly Gly Phe Ser Asn Ser
1               5                   10                  15
Leu Pro Met Val Ile Val Phe Arg Phe Leu Ala Gly Ser Ser Ile Pro
            20                  25                  30
Ser Ile Phe Leu Asn Pro Ala Ile Ala Phe Asp Val Phe Ile Val Ile
        35                  40                  45
Ile Ile His Gly Gly Arg Tyr Met Phe Gly Ala Lys Ala Pro Arg Gly
    50                  55                  60
```

<210> 28025
<211> 69
<212> PRT

<213> A.fumigatus

<400> 28025
Leu Ala Ala Arg Ala Asn Ala Leu Tyr Ile Tyr Val Tyr Thr Tyr Met
1 5 10 15
Phe Gly His Leu Gly Val Thr Ser Leu Ala Asn Asn Ile Leu His Phe
20 25 30
Pro Val Ser Ile Pro Gln Ser Phe Gln Asp Pro Ser Phe Thr Glu Tyr
35 40 45
Ile Cys Pro Thr Gly Arg Phe Arg Cys Tyr Leu Ser Arg Met Ser Ala
50 55 60
Gly Asn Phe Thr Lys
65

<210> 28026
<211> 441
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5),(35)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28026
Ile Phe Ile Arg Xaa Cys Leu Ala Glu Arg Lys Ser Leu Thr Cys Ile
1 5 10 15
Gly Ser Arg Thr Leu Arg His Asp Gly Ser Asp Val Asp Leu Phe Leu
20 25 30
Ser Thr Xaa Val Thr Gln Ala Phe Thr Leu Glu Ala Val Asp Leu Phe
35 40 45
Gly Ile Gln Gly Arg Leu Val Pro Gly Leu Leu Gln Gln Tyr Leu Gly
50 55 60
His Phe Gly Lys Leu Arg Lys Leu Asp Leu Ser Arg Val Ser Arg Thr
65 70 75 80
Ser Gly Pro Glu Ala Leu Ile Ser Pro Glu Thr Leu Phe Arg Trp Arg
85 90 95
Leu Gln Glu Leu Ser Leu Ser Gly Thr Ala Val Asn Arg Glu Thr Val
100 105 110
Asp Ala Ile Ala Thr Tyr Leu Ala Ser Asp Gln Ser Arg Asp Leu Arg
115 120 125
Ile Leu Arg Leu Asp Gln Cys Gly Leu Thr Gly Gln Asp Val Ala Ile
130 135 140
Phe Leu His Ser Ile Ala Val Val Gly Ala Pro Arg Asp Leu His Leu
145 150 155 160
Tyr Val Ser Glu Asn Arg Leu Asp Leu Gly Cys Ser Tyr Leu Phe Asp
165 170 175
Ala Ile Ala Gln Asn Lys Thr Pro Ser His Leu Ser Met Arg Met Ile
180 185 190
Asp Phe Lys Arg Glu Glu Gln Phe Gln Asp Leu Val Glu Ala Leu Arg
195 200 205
Ile Asn Arg Thr Leu Lys Tyr Leu Asp Ile Ser Lys Ala Ser Leu Pro
210 215 220
Tyr Asp Ala Gly Pro Glu Thr Cys Arg Ser Leu Gln Leu Met Phe Glu
225 230 235 240
Glu Asn Ser Thr Leu Glu Ser Leu Asp Ile Ser Gly Glu Ser Ala His

```
                245                 250                 255
Leu Asp Val Ala Arg Phe Gly Ile Gly Leu Asn Leu Ala Leu Thr Gly
            260                 265                 270
Leu Lys Lys Asn Lys Ser Leu Lys Val Leu Lys Ile Glu His Gln Lys
        275                 280                 285
Leu Gly Phe Gln Gly Ala Ser Thr Leu Ala Ser Val Leu Glu Glu Asn
    290                 295                 300
Thr Cys Leu Arg Glu Val Tyr Cys Glu Asn Asn Asp Ile Asn Leu Gln
305                 310                 315                 320
Ser Phe Thr Val Leu Val Asn Gly Leu Gln Arg Asn Arg Thr Ile Leu
                325                 330                 335
Asn Leu Ser Ser Met Asp Gln Asp Arg Val Gln Ser Leu Asp Lys Phe
            340                 345                 350
Arg Arg Glu Ile Glu Asn Val Lys Arg Asp Leu Ser His Ala Gln Ser
        355                 360                 365
Ser Thr Thr Ser Ser Ile Arg Arg Ser Ile His Ala Ala Ile His Val
    370                 375                 380
Lys Asn Ala Thr Val Gly Asn Lys Leu Ser Lys His Ser Ser Ala Ala
385                 390                 395                 400
Asn Pro Thr Arg Ser Met Thr Ser Pro Ser Leu Ser Ser Ala Ser Thr
                405                 410                 415
Thr Ala Val Ala Ala Ser His Val Met Asp His Asp Val Glu Ile Ile
            420                 425                 430
Leu Gln Ser Leu Asn Glu Lys Trp Asp
        435                 440
```

<210> 28027
<211> 232
<212> PRT
<213> A.fumigatus

<400> 28027

```
Gly Val Ala Arg Leu Arg Arg Tyr Leu Phe Gly Asn Tyr Phe Val Ala
1               5                   10                  15
Asn Gly Ile Asp Asp Gly Tyr Asp Asp Ala Ala Ser Asp Gly Arg Pro
            20                  25                  30
Thr Thr Ala Ala Ser Leu Gly Thr Met Leu Glu Asn Leu Lys Leu Asn
        35                  40                  45
Gly Pro Glu Phe Ser Glu Glu Glu Pro Thr Leu Ser Gln Thr Ser Leu
    50                  55                  60
Gln Ala Thr Pro Gln Ser Asp Glu Lys Ala Asp Ser Pro Thr Pro Ser
65                  70                  75                  80
Thr Ala Ser Thr Glu Ser Lys Ser Ser His Leu Asp Ile Phe Lys Ser
                85                  90                  95
Leu Asp Ala Asp Ser Gly Phe Arg Ala Glu Leu Gly Asp Arg Pro Gln
            100                 105                 110
Thr Ala Gly Asp Val Leu Thr His Gly Ser Ala Gly Leu Pro Arg Glu
        115                 120                 125
Tyr Ser Thr Ser Asn Ala Pro Ser Ala Arg Leu Ala Val Pro Val Pro
    130                 135                 140
Ala Met Pro Ser Ile Thr Val Lys Pro Asn Ser Val Arg Ser Ala Arg
145                 150                 155                 160
Ser Ser Ser Ser Met Ser Thr Ser Ala Gly Thr Thr Met Ser Ser Arg
                165                 170                 175
Ser Thr Tyr Gly Thr Ala Ser Ser Thr Leu Arg Gly Phe Leu Ser Lys
            180                 185                 190
```

```
Gly Val Ser Lys Asp Arg Arg Gly Leu Asp Lys Leu Lys Pro Gly Pro
        195                 200                 205
Leu Cys Val Ser Ser Asp Ala Pro Pro Gln Leu Asp Trp Thr Pro Pro
    210                 215                 220
Gln Leu Glu Leu Arg Gly Phe Arg
225                 230
```

<210> 28028
<211> 445
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (204),(236),(239)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28028

```
Ala Pro Trp Ile Phe His Gly Trp Cys Arg Arg Cys Pro Pro Glu Thr
1               5                   10                  15
Ala Asn Lys Ser Leu Ser Leu Ser Leu Thr Pro Gly Ala Thr Thr Asp
            20                  25                  30
Asp Glu Lys Ile Phe Lys Pro Tyr Val Ser Arg Ser Ala Gly Glu Ile
        35                  40                  45
Pro Gln Ala Asp Asp Pro Asn Gly Pro Gly Leu Ser Glu Pro Arg Thr
    50                  55                  60
Ile Ser Trp Gly Gln Ser Arg Lys Phe Asn Gln Pro Gln Ser Thr Ala
65                  70                  75                  80
Gln Val His Pro Glu Pro Ser Ile Leu Arg Ala Ser Gly Ala Gly Asp
                85                  90                  95
Asp Leu Asn Gly Gln Phe Cys Asp Ser Val Leu Glu Thr Pro Asp Ser
            100                 105                 110
Glu Glu Asp His Gly Ser Pro Arg Ala Leu Leu Ser Val Asp Asp Trp
        115                 120                 125
Val Val Lys Ala Ala Glu Gln Gly Asn Gly Gly Leu Arg Asn Ala Val
    130                 135                 140
Tyr Ala Ala Ala Glu Thr Gly Ile Leu Thr Asn Lys Met Trp Val Gly
145                 150                 155                 160
Thr Leu Gly Met Pro Thr Asp Leu Leu Lys Asp Ala Thr Arg Ala Ser
                165                 170                 175
Ile Ser Glu Thr Leu Glu Asp Glu Tyr Glu Ser Leu Thr Val Phe Val
            180                 185                 190
Arg Asp Ser Glu Phe Asp Gly His Tyr Thr His Xaa Cys Arg Ser Val
        195                 200                 205
Leu Leu Ala Ala Phe His Tyr Gln Met Pro Glu Lys Pro Arg His Thr
    210                 215                 220
Glu Tyr Asp Asp Tyr Ser Trp Arg Gln Tyr Val Xaa Val Asn Xaa Ala
225                 230                 235                 240
Phe Ala Tyr Thr Ile Ala Ala Arg Trp Arg Pro Gly Asp Ser Ile Trp
                245                 250                 255
Ile His Asp Tyr His Leu Leu Leu Leu Pro Gln Met Leu Arg Gln Arg
            260                 265                 270
Leu Pro Gln Ala Glu Ile Gly Phe Phe Met His Ala Ala Phe Pro Ser
        275                 280                 285
Ser Glu Val Phe Arg Cys Leu Asn Ser Arg Asp Ala Leu Leu Asn Gly
    290                 295                 300
```

```
Leu Leu Gly Ser Asp Phe Val Gly Phe Gln Thr Glu Glu Tyr Cys His
305                 310                 315                 320
His Phe Leu Gln Thr Cys Ser Arg Leu Leu Ser Leu Glu Val Thr Val
                325                 330                 335
Gly Gly Val Gln Leu Lys Asp Arg Phe Val Arg Val Lys Ser Ile Pro
            340                 345                 350
Met Gly Ile Asp Ala Asn Ala Leu Asp His Leu Arg Gln Thr Asn Glu
        355                 360                 365
Val Lys Asp Trp Ile Ala Asn Ile Ser Ser Arg Tyr Ser Gly Lys His
    370                 375                 380
Leu Ile Val Ala Arg Asp Arg Leu Asp Val Pro Gly Gly Ile Lys Gln
385                 390                 395                 400
Lys Leu Leu Ala Tyr Glu Leu Phe Leu Lys Lys Tyr Pro Lys Trp Arg
                405                 410                 415
Glu Asn Val Ser Val His Ile Leu Tyr Asp Leu Arg Val Asp Val Leu
            420                 425                 430
Ile Asp Thr Gly Cys Ser His Pro Asp Ser Val Ser Ile
        435                 440                 445
```

<210> 28029
<211> 272
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (220)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28029

```
Thr Gln Val Val Leu Ile Gln Ile Ala Ser Ala Ser Glu Met Pro Glu
1               5                   10                  15
Leu Glu Ser Gln Ile Ser Lys Ile Ala Thr Arg Ile Asn Ser Lys Tyr
            20                  25                  30
Ser Thr Leu Thr His Gln Pro Leu Val Leu Leu Ser Gln Asp Ile Ser
        35                  40                  45
Tyr Ser Gln Phe Leu Ala Leu Met Ser Val Ala Glu Ile Phe Met Val
    50                  55                  60
Thr Ser Leu Arg Glu Gly Met Asn Leu Thr Ser Gln Asp Tyr Ile His
65                  70                  75                  80
Cys Gln Asp Gly Lys Val Thr Pro Gln Tyr His Gly Ser Leu Ile Leu
                85                  90                  95
Ser Glu Phe Thr Gly Ser Ala Ser Ile Phe His Gly His Glu Phe Leu
            100                 105                 110
Val Asn Pro Trp Asp Tyr Arg Glu Val Ala Asp Ala Ile Asn Lys Ala
        115                 120                 125
Leu Gly Met Ser Pro Glu Gln Lys Gln His Asn Trp Glu Phe Leu Leu
    130                 135                 140
Lys Lys Lys Gly Ala Ser His Ser Arg Ser Val Val Gln Phe Val Tyr
145                 150                 155                 160
Leu Ser Pro Cys Arg Ser Ser Gln Arg Ala Ile Val Pro Arg Thr Gln
                165                 170                 175
Pro Cys Arg Asp Thr Leu Cys Thr Arg Thr Glu Gly Val Ile Arg Glu
            180                 185                 190
Arg Gln Pro Ser Asp Ser Ser Ser Leu Lys Ala Lys Glu Pro Ser Leu
        195                 200                 205
```

```
Leu Thr Ala His Arg Arg Cys Leu Lys Asn Phe Xaa Ala Ile Gln Lys
    210                 215                 220
Thr Ser Ser Thr Ser Pro Ala Thr Lys Ala Arg Ser Arg Ser Asn Pro
225                 230                 235                 240
Asn Leu Gln Ala Ser Pro Ile Glu Ile Asp Thr Ser Ala Arg Thr Gly
                245                 250                 255
Ala Ser Ser Gly Lys Met Gly Gln Leu Asn Gly Lys His Ser Trp Thr
            260                 265                 270
```

<210> 28030
<211> 107
<212> PRT
<213> A.fumigatus

<400> 28030

```
Ala Arg Phe Glu His Leu Cys Lys Gly Gln Leu Phe Leu Ala Ser Gln
1               5                   10                  15
Ser Gln Leu Ile Val His Phe His Glu Lys Val Ile Gln Glu Ala Asp
            20                  25                  30
Gly Asn Gly Thr Pro Phe Asn Tyr His Ile Ile Ile Gly Arg Glu Lys
        35                  40                  45
Arg Asp Tyr Leu His Val Trp Leu Ala Leu Asp Leu Ser Val Leu Phe
    50                  55                  60
Val Cys Cys Asp Ala Ala Leu Glu Val Gly Ile Phe Glu Ser Gln Gln
65                  70                  75                  80
Pro His Ile Asn Glu Glu Ala Ala Ile Ser Ile Phe Arg Lys Ser Ser
                85                  90                  95
Glu Glu Val Ala Ala Ser Asp Val Asp Val Gln
            100                 105
```

<210> 28031
<211> 206
<212> PRT
<213> A.fumigatus

<400> 28031

```
Arg Cys Val Arg Leu Asp Tyr Leu Leu Ser His Pro Ser Thr Leu Ala
1               5                   10                  15
Ser Ser Val Pro Ile Val Pro Ile Thr Thr Leu Trp Thr Val Leu Met
            20                  25                  30
Asp Gly Phe Ala Ser Ile Trp Pro Pro Ser Arg Thr Gln Val Asp Gly
        35                  40                  45
Val Ser Ile Gly Asp Ala Trp Val Cys Ser Ser Met Pro Gln Ser Pro
    50                  55                  60
Pro Ala Gln Pro Trp Glu Ser Ile Val Pro Phe His Lys Leu Thr Gln
65                  70                  75                  80
Trp Leu Cys Tyr Ser Ile Met Val Pro Met Ala Lys Leu Leu Asn Ile
                85                  90                  95
His Ile Ala Gly Ser Asp Leu Leu Thr Gly Leu Pro Glu Tyr Arg Asn
            100                 105                 110
Gly Gly Leu Leu Ile Asp Met Gly Leu Leu Ala Leu Lys Asp Ala Asp
        115                 120                 125
Leu Gln Arg Gly Ile Ala Ala Tyr Lys Gln Asn Ala Gln Ile Lys Gly
    130                 135                 140
Gln Pro Asn Val Glu Val Val Pro Leu Phe Ala Ala Asp Asp Asp Val
145                 150                 155                 160
```

```
Val Val Glu Trp Arg Ala Val Thr Val Gly Phe Leu Asp Asp Leu Leu
                165                 170                 175
Met Glu Val Asn Asn Gln Leu Gly Leu Arg Gly Glu Glu Gln Leu Thr
            180                 185                 190
Leu Ala Gln Met Leu Glu Ala Gly Ser Trp Lys Val Arg Thr
        195                 200                 205
```

<210> 28032
<211> 78
<212> PRT
<213> A.fumigatus

<400> 28032

```
Leu Pro Leu Gln Val Tyr Ser Phe Val Pro Ile Pro Gly Ala Gln Gln
1               5                   10                  15
His Lys Arg Pro Arg Arg Arg Tyr Glu Glu Ile Glu Arg Met Tyr Lys
            20                  25                  30
Cys Gly Trp Asn Gly Cys Glu Lys Ala Tyr Gly Thr Leu Asn His Leu
        35                  40                  45
Asn Ala His Val Thr Met Gln Ser His Gly Ala Lys Arg Thr Pro Glu
    50                  55                  60
Arg Met Ser Leu Ile Tyr Ser Ser Ala Phe Ser Leu Arg Ser
65                  70                  75
```

<210> 28033
<211> 123
<212> PRT
<213> A.fumigatus

<400> 28033

```
Leu Ile Leu Pro Phe Ala Thr Glu Phe Lys Glu Ile Arg Lys Glu Trp
1               5                   10                  15
Lys Ala Arg Lys Lys Glu Glu Glu Ala Gln Arg Lys Ala Ala Glu Glu
            20                  25                  30
Arg Glu Arg Ala Ala Ala Ala Gln Ala Ala Gln Ala Asn Gln Val Asp
        35                  40                  45
Ala Pro Gly Pro Thr Asp Pro Ala Gln Ala Gln Pro Pro Ala Tyr Ala
    50                  55                  60
Gly Gly Val Arg Pro Gln Leu Pro Pro Ile Gly Tyr Gln Pro Ala Asp
65                  70                  75                  80
Gly Gln Val Pro Gly Gln Tyr Gly Gly Ala Ser Gly Met Val Tyr Gln
                85                  90                  95
Gly Asn Gly Gln Met Ala Tyr Pro Pro Asn Tyr Pro His Ser Pro Tyr
            100                 105                 110
Gly Gln Ser Gly Gln Val Tyr Gln Gln Arg Lys
        115                 120
```

<210> 28034
<211> 454
<212> PRT
<213> A.fumigatus

<400> 28034

```
Cys Ala Arg Leu Gln Asn Lys Pro Ser Leu Ser Ser Val Leu Gly Trp
1               5                   10                  15
Gln Ala Trp Trp Arg Arg Ser Phe Ser Thr Ala Thr Ala Lys Gly Asp
```

```
            20                  25                  30
Thr Gly Trp Lys Cys Leu Lys Arg Tyr Asp Tyr Asn Leu Pro Asp Val
        35                  40                  45
Val Phe Glu Asp Gly Cys Val Ala Ser Asn Ser Asn Gln Gln Asp Gln
    50                  55                  60
Leu Ser Leu Asp Ser Ala Ser Tyr Thr Leu Glu Ala Ala Thr Asp Glu
65                  70                  75                  80
Leu Pro His Arg Val Asp Ile Pro Met Arg Ala Phe Asp Asp Asn Tyr
                85                  90                  95
His Ile Asn Leu Lys Arg Met Tyr Asp Phe Leu Gly Ile Asp Tyr Val
            100                 105                 110
Ser Pro Lys Phe Leu Tyr Ser Leu Ser Arg Ile Cys Pro Ser Ser Gly
        115                 120                 125
Lys Arg Glu Pro Pro Tyr Phe Ile His Ser Ser Ser Asn His Gln Val
    130                 135                 140
Pro Pro Ile Arg Pro Arg Ser Arg Ser Arg Met Asp Trp Ile Ala Glu
145                 150                 155                 160
Thr Leu Tyr Leu Thr Val Cys Tyr Phe Trp Phe Ile Val Cys Cys Phe
                165                 170                 175
Val Ile Gly Pro Lys Gly Lys Ser Val Ser Cys Gly Asp Glu Ser Phe
            180                 185                 190
Arg Arg Tyr Leu Glu Arg Ile Arg Leu Pro Gln Tyr Phe Ser Arg Arg
        195                 200                 205
Tyr Leu Leu Pro Leu Leu Ser Ser Met Thr Thr Cys Ser His Ala Glu
    210                 215                 220
Leu Leu Asp Phe Pro Ala Ile Asp Val Val Asp Tyr Ala Thr Arg Thr
225                 230                 235                 240
Tyr Arg Gln Pro His Tyr Thr Val Val Gly Gly Val His Arg Val Gln
                245                 250                 255
Ala Arg Ile Ser Asp Gly Leu Ala Ile Arg Leu His Ser Thr Val Thr
            260                 265                 270
Ala Val Glu Ala Ala Gly Thr Arg Cys Arg Ile Thr Trp Ile Asp Ser
        275                 280                 285
Gln Asn Asp Lys Val Ser Ser Ala Glu Tyr Asp His Val Ile Met Ala
    290                 295                 300
Val Thr Pro Asp Val Val Ala Ala Ile Phe Lys Pro Leu Glu Lys Pro
305                 310                 315                 320
Leu Arg Ser Ile Pro Thr Val Lys Gly Asp Cys Ile Val His Cys Asp
                325                 330                 335
Thr Ser Ile Leu Pro Asp Gly Gly Leu Leu Cys Thr Glu Ala Lys Lys
            340                 345                 350
Ala Leu Glu Pro Pro Glu Ile Met Tyr Met Val Ser Asp Asn Asn Ser
        355                 360                 365
Thr Glu Ser Val His Ile His Arg Ser Ser Val Met Val Thr Asn Phe
    370                 375                 380
Pro Ile Glu Pro Ile Asn Ser Asn Lys Ile Ile His Arg Ala Arg Leu
385                 390                 395                 400
Thr Arg Val Leu Arg Thr Val Arg Ser Arg Glu Val Val Asn Arg Ile
                405                 410                 415
Phe Ser Arg Glu Pro Val Pro Lys His Pro Leu Gly Glu Arg Pro Ile
            420                 425                 430
Val Ala Gln Trp Gly Trp Glu Arg Val Ala Cys Trp Arg Met Val Leu
        435                 440                 445
Gly Trp His Gly Ala Ser
    450
```

<210> 28035
<211> 69
<212> PRT
<213> A.fumigatus

<400> 28035
Gly Leu Ser Val Ser Gln Leu Arg Ser Leu Ile Ile Asp Pro Ala Val
1 5 10 15
Ser Tyr Glu Ser Lys Ala Asp Thr Glu Arg Asn Pro Met Leu Val Val
20 25 30
Lys Asn Cys Gln Val Gln Ala Thr Tyr Thr His Leu His Ser Pro Phe
35 40 45
Arg Leu Asn Cys Cys Arg Ser Ser Ser Ala Asn Gln Cys Phe Asp Gln
50 55 60
Cys Arg Ser Ile Arg
65

<210> 28036
<211> 76
<212> PRT
<213> A.fumigatus

<400> 28036
Asp Ala Gly Gly Leu Thr Thr Thr Glu Tyr Tyr Gln Ile Phe Leu Ser
1 5 10 15
Phe Ser Val Leu Gly Gly Ile Ser Ser Cys Cys Leu Phe Thr Pro Ala
20 25 30
Ile Thr Ala Val Gly His Trp Phe Asn Val Arg Arg Gly Leu Ala Thr
35 40 45
Gly Ile Ala Cys Thr Ala Gly Gly Leu Gly Gly Val Phe Phe Pro Leu
50 55 60
Ile Ile Leu Tyr Leu Gly Pro Thr Ile Gly Phe Thr
65 70 75

<210> 28037
<211> 283
<212> PRT
<213> A.fumigatus

<400> 28037
Leu Phe Ala Thr Leu Asn Gly Leu His Ile Pro Thr Ala Gly Ser Thr
1 5 10 15
Leu Gly Pro Phe Asn Thr Asp Ser Val Asp Thr Leu Asp Val Thr Val
20 25 30
Thr Val Val Asp Lys Phe Ser Arg His Asp Thr Val Leu Ala Gly Val
35 40 45
Leu Ala His Val Gly Leu Asp Leu Gly Val Ala Val Val Asp Thr Val
50 55 60
Asp Thr Gly Pro Leu Arg Pro Trp Val Ile Thr Gly Thr Phe Trp Arg
65 70 75 80
Arg Leu Arg Gln Gln Leu Glu Val Asn Asn Arg Leu Gly Thr Met Ala
85 90 95
Asp Arg Gly Thr Asn Ala Val Val Thr Ser Val Thr Thr Thr Asn Asp
100 105 110
Asn Asn Met Leu Val Leu Ser Arg Asp Val Leu Ser Ile Arg Glu Thr
115 120 125

```
Arg Val Glu Lys Arg Leu Gly Val Ala Val Gln Glu Leu His Gly Lys
    130                 135                 140
Met Tyr Ala Val Gln Leu Thr Thr Arg Asp Leu Gln Ile Ala Gly Asn
145                 150                 155                 160
Gly Gly Thr Ser Gly Asp Asp Asp Gly Val Ile Ala Leu Ala Gln Arg
                165                 170                 175
Val Gln Gly His Leu Ile Val Arg Ala Asn Ser Ser Val Gly Asp Glu
            180                 185                 190
Phe Asp Thr Leu Gly Gly His Lys Ile Asp Thr Ala Leu Asp Asp Leu
        195                 200                 205
Leu Ile Lys Leu His Val Gly Asn Thr Val His Gln Gln Thr Ala Asn
    210                 215                 220
Thr Val Ser Thr Leu Val Asn Ser Asp Ala Val Pro Gly Thr Val Lys
225                 230                 235                 240
Leu Ile Cys Ser Gly Glu Thr Ser Gly Ser Gly Ser Asn Asn Ser Asp
                245                 250                 255
Arg Leu Ala Gly Ala Arg Leu Arg Trp Thr Arg Asn His Pro Ala His
            260                 265                 270
Leu Lys Ala Thr Val Asp Asp Gly Thr Leu Asp
        275                 280
```

<210> 28038
<211> 424
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (1)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28038

```
Xaa Ser Ala Arg Cys Met Asp Cys Gly Val Pro Phe Cys Gln Ser Asp
1               5                   10                  15
Thr Gly Cys Pro Ile Ser Asn Ile Ile Pro Lys Trp Asn Glu Leu Val
            20                  25                  30
Phe Ala Asn Gln Trp Gln Asp Ala Leu Asn Arg Leu Leu Met Thr Asn
        35                  40                  45
Asn Phe Pro Glu Phe Thr Gly Arg Val Cys Pro Ala Pro Cys Glu Gly
    50                  55                  60
Ala Cys Val Leu Gly Ile Asn Glu Asp Pro Val Gly Ile Lys Ser Ile
65                  70                  75                  80
Glu Cys Ala Ile Ile Asp Arg Gly Phe Glu Met Gly Trp Met Val Pro
                85                  90                  95
Arg Pro Pro Lys Thr Arg Thr Gly Lys Thr Val Ala Ile Ile Gly Ser
            100                 105                 110
Gly Pro Ala Gly Leu Ala Ala Ala Asp Gln Leu Asn Arg Ala Gly His
        115                 120                 125
Ser Val Thr Val Tyr Glu Arg Ala Asp Arg Ile Gly Gly Leu Leu Met
    130                 135                 140
Tyr Gly Ile Pro Asn Met Lys Leu Asp Lys Lys Ile Val Gln Arg Arg
145                 150                 155                 160
Val Asp Leu Met Ala Ala Glu Gly Ile Lys Phe Val Thr Asn Thr Ala
                165                 170                 175
Val Gly Pro Asp Asn Glu Val Ser Leu Asn Ser Leu Arg Gln Ser Asn
            180                 185                 190
```

```
Asp Ala Val Ile Ile Ala Thr Gly Ala Thr Val Ala Arg Asp Leu Lys
        195                 200                 205
Val Pro Gly Arg Glu Leu Asp Gly Val His Phe Ala Met Gln Phe Leu
    210                 215                 220
His Arg Asn Thr Lys Ser Leu Leu Asp Ser Gly Leu Ser Asp Gly Glu
225                 230                 235                 240
Tyr Ile Ser Ala Lys Asp Lys His Val Val Val Ile Gly Gly Gly Asp
                245                 250                 255
Thr Gly Asn Asp Cys Ile Gly Thr Ser Val Arg His Gly Ala Lys Ser
            260                 265                 270
Val Val Asn Phe Glu Leu Leu Pro Gln Pro Pro Pro Glu Arg Ala Arg
        275                 280                 285
Asp Asn Pro Trp Pro Gln Trp Pro Arg Ile Tyr Arg Val Asp Tyr Gly
    290                 295                 300
His Ser Glu Val Lys Thr His Met Gly Lys Asp Pro Arg Glu Tyr Cys
305                 310                 315                 320
Val Met Ser Thr Glu Phe Val Asp Asp Gly Asn Gly His Val Lys Gly
                325                 330                 335
Ile Asn Thr Val Arg Val Glu Trp Thr Lys Ser Ala Ser Gly Gly Trp
            340                 345                 350
Asp Met Lys Thr Ile Glu Gly Ser Glu Gln Leu Phe Pro Ala Asp Leu
        355                 360                 365
Val Leu Leu Ser Met Gly Phe Leu Gly Pro Glu Asp Arg Leu Leu Gly
    370                 375                 380
Asn Glu Ile Glu Arg Asp Ala Arg Lys Asn Val Lys Thr Pro Pro Gly
385                 390                 395                 400
His Tyr Ser Thr Ser Val Ser Gly Val Phe Ala Ala Gly Asp Cys Arg
                405                 410                 415
Arg Gly Gln Ser Leu Ile Val Trp
            420
```

<210> 28039
<211> 146
<212> PRT
<213> A.fumigatus

<400> 28039

```
Arg Ser Leu Val Val Ser Trp Thr Ala Tyr Ile Leu Pro Cys Ser Ser
1               5                   10                  15
Cys Thr Ala Thr Pro Ser Leu Phe Ser Thr Arg Val Ser Leu Met Glu
            20                  25                  30
Ser Thr Ser Leu Leu Arg Thr Ser Met Leu Leu Ser Leu Val Val Val
        35                  40                  45
Thr Leu Val Thr Thr Ala Leu Val Pro Leu Ser Ala Met Val Pro Ser
    50                  55                  60
Leu Leu Leu Thr Ser Ser Cys Cys Leu Ser Leu Leu Gln Asn Val Pro
65                  70                  75                  80
Val Ile Thr His Gly Arg Ser Gly Pro Val Ser Thr Val Ser Thr Thr
                85                  90                  95
Ala Thr Pro Arg Ser Arg Pro Thr Trp Ala Arg Thr Pro Ala Ser Thr
            100                 105                 110
Val Ser Cys Leu Leu Asn Leu Ser Thr Thr Val Thr Val Thr Ser Arg
        115                 120                 125
Val Ser Thr Leu Ser Val Leu Asn Gly Pro Arg Val Leu Pro Ala Val
    130                 135                 140
Gly Ile
```

145

<210> 28040
<211> 94
<212> PRT
<213> A.fumigatus

<400> 28040
Ala Met Ala Thr Val Ser Ala Pro Thr Pro Lys Leu Asp Arg Tyr Ile
1 5 10 15
Val Ile His Val Ala Thr Thr Cys Asp Glu His Gly Val Tyr Val Thr
20 25 30
Lys Asp Ser Ala Glu Val Ile Glu Leu Gly Trp Ile Leu Leu Asp Thr
35 40 45
Lys Thr Cys Glu Glu Val Gly Ser Thr Leu Val Asn Arg Gln His Ser
50 55 60
Ala Phe Phe Pro Leu Pro Ser Leu Arg Leu Thr Pro Leu Phe Pro Ser
65 70 75 80
Lys Cys Leu Gly His His His Arg Cys Ser Ser Ala Cys Arg
85 90

<210> 28041
<211> 253
<212> PRT
<213> A.fumigatus

<400> 28041
Gln Cys Leu Thr Ala Ser Leu Thr Thr Leu Thr Trp Glu His Val Arg
1 5 10 15
Ser Ala Gly Thr Phe Arg Asp Ala Ile Asn Arg Phe Asp Ala Phe Ala
20 25 30
Gln Glu His Leu Ile Ser Lys Asn Leu Glu Phe Ala Phe Val Thr Leu
35 40 45
Asp Ser Trp Asp Leu Arg Val Gln Leu Pro Arg Glu Ala Arg Asp Lys
50 55 60
Ala Val Val Leu Pro Pro Tyr Leu Gln His Ser Arg Thr Phe Asp Leu
65 70 75 80
Arg Thr Glu Tyr Gln Arg Trp Gln Thr His His Pro Glu Ser Leu Pro
85 90 95
Phe Gly Pro Ser Ser Leu Ser Asn Ile Cys Ala Ala Leu Glu Val Glu
100 105 110
Pro Val Gln Ser Ser Ala Pro Ile Lys His Asn Leu Pro Phe His Leu
115 120 125
Gln Ala Leu Ala Pro Ala Ser Pro Arg Arg Ala Met Glu Glu Ala Ile
130 135 140
Thr Leu Ala Arg Val Leu Arg Gly Leu Ile Arg Lys Ser Gln Pro Pro
145 150 155 160
His Glu His Pro Glu Ile Leu Thr Arg Pro Met Asp Ala Arg Ala Asp
165 170 175
Val Arg Ala Phe Leu Thr Glu Arg Ser Lys Val Leu His Leu Ser Gly
180 185 190
Leu Pro His Asp Thr Thr Gln Ser Glu Leu Glu Ser Trp Phe Thr Gln
195 200 205
Cys Gly Gly Arg Pro Ile Ala Phe Trp Thr Leu Arg Thr Pro Asp Glu
210 215 220
His Lys Pro Thr Gly Thr Gly Phe Ala Val Phe Ser Ser His Asp Glu

225 230 235 240
Val Cys Thr Leu Ser Leu Leu Pro Leu Phe Ser Thr Gly
245 250

<210> 28042
<211> 264
<212> PRT
<213> A.fumigatus

<400> 28042
Tyr Ser Tyr Phe Leu Thr Phe Leu Leu Arg His Arg Lys Thr Gly Gly
1 5 10 15
Ser Gly Val Ser Ala Gly Gly Thr Ile Ala Val Ala Val Val Val Pro
20 25 30
Val Val Ser Val Ala Leu Ile Ile Leu Ala Ala Leu Tyr Phe Trp Arg
35 40 45
Lys Trp Lys Ala Lys Lys Ala Ala Glu Glu Glu Arg Arg Lys Glu Val
50 55 60
Glu Glu Tyr Gly Phe Asn Pro Asn Asn Asp Pro Thr Leu Pro Pro Ile
65 70 75 80
Met Gly Ala Gly Ala Ala Tyr Glu Pro Lys Glu Asp Thr Ser Gly Tyr
85 90 95
Arg Gly Trp Gly Thr Thr Ser Ala Gly Arg Lys Ala Ser Thr Asn Leu
100 105 110
Ser Ser Gly Ala Gly Pro Gly Leu Ala Ile Ser Glu Ala Gly Ser Ala
115 120 125
Pro Gly Tyr His His Ala Ala Thr Pro Ser Asp Gly Thr Ile Gln Phe
130 135 140
Ser Glu Gly Gln Met Gln Glu Thr Glu Pro Ile Gly Val Leu Gly Ala
145 150 155 160
Ala Pro Thr Ser Ser Asn Asn Arg Thr Thr Asp Ile His Arg Gly Pro
165 170 175
Ser Asn Ala Ser Ser Ala Tyr Ser Ala Ala Asn Arg Ser Glu Ala Ser
180 185 190
Glu Glu Ser His Met Ser Gly Thr His Pro Ala Ala Ala Phe Tyr Glu
195 200 205
Asp Asn Pro Tyr Tyr Ser Asp Met Gln Gly Gln Tyr Gly Ala Tyr Gly
210 215 220
Asp Gly Pro Tyr Val Pro Asn Gln Pro Val Ile Arg Asp Val Gln Ala
225 230 235 240
Arg Arg Asn Thr Arg Ile Glu Asn Pro Ala Val Phe Pro Arg Gln Gly
245 250 255
Asn Ala Gly Ile Ala Gln Asn Phe
260

<210> 28043
<211> 409
<212> PRT
<213> A.fumigatus

<400> 28043
Ser Ser Phe Tyr Asp Ser Pro Thr Val Glu Leu Thr Asn Arg Leu Val
1 5 10 15
Gln Tyr Asp Glu Ile Pro Ile Pro Gln His Ile Lys Lys Pro Val Leu
20 25 30
Thr Met Leu Arg Glu Thr Lys Thr Thr Pro Ser Leu Met Ser Gln Leu

```
        35                  40                  45
Asn Val Gln Leu Gly Asn Met Phe Gly Glu Thr Val Lys Leu Phe Cys
    50                  55                  60
Lys Lys His Asn Val Pro Ile Asn Ser Ile Asp Leu Ile Gly Ser His
65                  70                  75                  80
Gly Gln Thr Ile Trp Leu Leu Ser Met Pro Glu Glu Gly Glu Ile Arg
                85                  90                  95
Ser Ala Leu Cys Leu Gly Glu Gly Thr Val Ile Ser Gly Leu Thr Gly
            100                 105                 110
Ile Thr Thr Val Thr Asp Phe Arg Met Ala Glu Gln Ala Val Gly Arg
        115                 120                 125
Gln Gly Ala Pro Leu Val Ala Leu Ile Asp Gly Leu Leu Leu His His
    130                 135                 140
Pro Thr Glu Trp Arg Ile Cys Gln Asn Ile Gly Gly Ile Ala Asn Leu
145                 150                 155                 160
Cys Val Ile Pro Pro Asp Ser Glu Gly Gly Val Asp Ala Met Val Asp
                165                 170                 175
Trp Asp Cys Gly Pro Gly Asn Met Phe Ile Asp Ala Ala Met Arg Tyr
            180                 185                 190
Phe Thr Asn Gly Glu Met Glu Tyr Asp Arg Asp Gly Glu Trp Gly Ala
        195                 200                 205
Gln Gly Thr Val Asn Gln Ala Val Val Asp Asn Phe Leu Asn Asn Asn
    210                 215                 220
Lys Tyr Cys Asn Gln Leu Pro Pro Lys Thr Thr Gly Arg Glu Thr Phe
225                 230                 235                 240
Gly Asp Asn Glu Ala Gln Glu Ile Ile Asp Glu Cys Leu Ala Leu Gly
                245                 250                 255
Met Ser Lys Tyr Asp Thr Val Ala Thr Ile Thr Arg Ile Thr Ala Gln
            260                 265                 270
Asn Ile Ile Lys Gln Tyr Arg Thr Phe Phe Pro Lys Phe Asn Val Asp
        275                 280                 285
Ile Asn Lys Ile Ala Ala Val Tyr Met Cys Gly Gly Gly Ala His Asn
    290                 295                 300
Pro Asn Ile Ile Asn Tyr Leu Lys Glu Gln Leu Pro Ser Val Ala Ile
305                 310                 315                 320
Leu Lys Leu Asp Glu Thr Gly Val Pro Ser Asp Ala Lys Glu Ala Val
                325                 330                 335
Ser Phe Ala Gln Gln Ala Leu Glu Ala Ile Leu Gly Arg Ala Ala Leu
            340                 345                 350
Val Pro Ile Asn Ser Asp Thr Leu Thr Pro Asn Thr Ile Ser Gly Lys
        355                 360                 365
Ile Ala Pro Gly Leu Arg Trp Arg Glu Val Met Ala Met Ala Val Glu
    370                 375                 380
Phe Gly Lys Gly Arg Thr Arg Leu Pro Thr Val Lys Glu Met Val Val
385                 390                 395                 400
Asp Arg Pro Tyr Thr Tyr Gly Lys Pro
                405
```

<210> 28044
<211> 116
<212> PRT
<213> A.fumigatus

<400> 28044

```
Ser Met Val Ser Ser Phe Thr Thr Pro Pro Asn Gly Ala Ser Ala Arg
1               5                   10                  15
```

```
Ile Leu Ala Gly Ser Leu Thr Ser Ala Ser Ser His Pro Thr Ala Arg
            20                  25                  30
Val Ala Ser Thr Pro Trp Ser Thr Gly Thr Ala Ala Gln Ala Thr Cys
        35                  40                  45
Ser Ser Thr Pro Arg Cys Ala Thr Ser Pro Thr Val Arg Trp Ser Met
    50                  55                  60
Ile Ala Met Ala Ser Gly Glu Arg Arg Gly Leu Ser Thr Arg Pro Ser
65                  70                  75                  80
Leu Thr Thr Ser Ser Thr Thr Thr Ser Thr Val Ile Asn Cys Leu Pro
                85                  90                  95
Arg Arg Pro Val Val Arg Pro Leu Ala Thr Thr Arg Pro Arg Arg Ser
            100                 105                 110
Ser Met Ser Ala
        115
```

<210> 28045
<211> 122
<212> PRT
<213> A.fumigatus

<400> 28045

```
Arg Leu Ser Arg Leu Leu Ser Gly Leu Leu Arg Val Leu Phe Pro Cys
1               5                   10                  15
Gly Pro Arg Ser Ile Tyr Leu Asp Thr Asn Gly Leu Ile Leu Asp Val
            20                  25                  30
Glu Tyr Lys Arg Thr Thr Leu Ile Glu Val Val Gln Ser Leu Gly Glu
        35                  40                  45
Tyr Ile Asn Asp Glu Asp Pro Ile Leu Arg Gly Lys Ala Val Ser Tyr
    50                  55                  60
Leu Thr Ala Val Ile Arg Ala Leu Pro Pro Lys Tyr Leu Ser Arg Gln
65                  70                  75                  80
Gln Ile Gln Val Leu Thr Thr Phe Phe Cys Asp Arg Ile Glu Asp Gly
                85                  90                  95
Gly Ala Val Thr Gly Leu Asp Thr Leu Gln Lys Leu Asp Arg Phe Asn
            100                 105                 110
Asp Thr Leu Ala Glu Glu Val Ala Gln Ala
        115                 120
```

<210> 28046
<211> 85
<212> PRT
<213> A.fumigatus

<400> 28046

```
Arg Leu Lys Thr Leu Phe Glu Ala Val Tyr Asn Tyr Phe Pro Ile Thr
1               5                   10                  15
Phe Arg Pro Pro Pro Asn Asp Pro Tyr Gly Ile Thr Ala Gln Asp Leu
            20                  25                  30
Lys Asp Arg Leu Gln Asp Cys Ile Ser Ser Thr Ser Leu Phe Ala Pro
        35                  40                  45
Tyr Ala Val Pro Ala Leu Leu Asp Lys Met Asp Ser Thr Ser Pro Asn
    50                  55                  60
Val Lys Val Cys Phe Phe Thr Thr Tyr Met Ser Pro Leu Ala Arg Ile
65                  70                  75                  80
Gly Leu Arg Ser Pro
                85
```

<210> 28047
<211> 486
<212> PRT
<213> A.fumigatus

<400> 28047
Arg Lys Glu Phe Leu Leu Thr Leu Phe Ser Ser Gln Met Arg Ser Gly
1 5 10 15
Ser Gln Ala Pro Leu Gly Pro Gly Ser Gln Ser Thr His Leu Arg Arg
20 25 30
Glu Ser Ser Gln Ser Thr His Ser Asp Met Ser Ser His Met Gly Ser
35 40 45
Gly Pro Gly Arg Gly Ser Tyr Pro His Gln Gly Gly Arg Gly Arg Gly
50 55 60
Tyr Ser Gln Ser Gly Tyr Gln Gly Gln Met Pro Tyr Ser Pro Gly Pro
65 70 75 80
Ser Phe Arg Ser Pro Asn Gln Pro Arg Gly Gly Pro Asn Met Gly Pro
85 90 95
Gln Phe His Ala Pro Asn Gln Gly Arg Pro Leu Ala Pro Phe Pro Asn
100 105 110
Ser Pro His Gln Arg Ser Pro Ala Leu Ala Thr Ala His Pro Ala Thr
115 120 125
Pro Gln Met Asn Gln Val Pro Met Ala His Pro Gln Met Pro Pro Gln
130 135 140
Pro Tyr Ala Ala Tyr Gly Gln His Met Ala Pro Gln Thr Val Arg His
145 150 155 160
His Pro Ser Val Tyr Lys Pro Pro Arg Arg Gly Pro Phe Pro Lys Arg
165 170 175
Arg Gln Gly Ser Cys Arg Phe Ser Ser Ser Ser Ser Ser Ser Leu Pro
180 185 190
Leu Ala His Thr Ser Pro Pro Pro Leu His Leu Pro Pro Pro Asn Leu
195 200 205
Ala Pro Glu Ser Gly Gln Phe Glu His Tyr Leu Thr Leu Met Lys Asn
210 215 220
Pro Gln Ala Tyr Pro Tyr Asp Pro Asn Tyr Ala Tyr Tyr Asn Pro Ala
225 230 235 240
Tyr Gly Met Gln Gln Met Gln Tyr Met Thr Pro Pro Ser Pro Gln Pro
245 250 255
Arg Pro Gly Met Pro Tyr Asn Pro Gln Ala Pro Tyr Met Gln Asn Gln
260 265 270
Tyr Pro Val Gln Pro Pro Pro Gln Thr Ala Pro Leu Ser Arg Thr Pro
275 280 285
Ser Gln Val Ser Asn Asp Arg Pro Gly Ser Ser Leu Gly Gln Gly Gln
290 295 300
Pro Pro Ala Gly Ala Pro Ala Ala Ser His Thr His Thr Thr Ser Arg
305 310 315 320
Ser Ser Asn Ser Pro Ala Pro Pro Lys Pro Gln Phe Val Ile Pro Pro
325 330 335
Thr Lys Arg Ser Pro Ile Val Ile Lys Asp Pro Gly Ser Gly Val Val
340 345 350
Lys Thr Phe Glu Lys Ala Pro Ala Ser Pro Ala Arg Ala Thr Pro Ser
355 360 365
Pro Val Lys Ile Ser Thr Pro Thr Ala Thr Pro Pro Pro Arg Thr Gly
370 375 380
Ser Gly Ala Asp His Asn Arg Thr Glu Ser Arg Ala Lys Thr Asp Glu

```
385                 390                 395                 400
Glu Lys Lys Lys Glu Leu Arg Glu Ala Val Arg Gln Lys Ile Glu Gln
                405                 410                 415
Asp Glu Ala Glu Gln Arg Arg Lys Glu Glu Glu Glu Ala Ala Ala Gln
            420                 425                 430
Lys Lys Lys Gln Glu Glu Glu Glu Glu Ala Ala Arg Lys Lys Lys Glu
        435                 440                 445
Glu Glu Glu Gln Ala Ala Ala Gln Lys Lys Lys Gln Glu Glu Glu Glu
    450                 455                 460
Glu Ala Ala Lys Lys Lys Ala Ala Asp Glu Glu Ala Ser Ser Pro Pro
465                 470                 475                 480
Gly Trp Lys Ile Ser Val
                485
```

<210> 28048
<211> 163
<212> PRT
<213> A.fumigatus

<400> 28048

```
Arg Ser Cys Leu Arg His Val Leu Ser Ala Ile Leu Gly Leu Val Ser
1               5                   10                  15
Asp Ile Val Phe Pro Arg Leu Ile Asn Ser Glu Lys Glu Arg Arg Pro
            20                  25                  30
Ser Ser Pro Arg Asp Gly Gln Pro His Tyr Leu Thr Ile Leu Leu Ser
        35                  40                  45
Arg Pro Phe Thr Ser Ala Gln Thr Ile Thr Met Ala Asp Phe Leu Ala
    50                  55                  60
Leu Pro Ser Phe Leu Val Glu Asn Ser Ala Ala Val Ala Leu Lys Asp
65                  70                  75                  80
Ala Tyr Asn Ser Phe Ser Glu Arg Arg Ala Ala Leu Gly Leu Ser Asn
                85                  90                  95
Pro Gly Thr Val Asp Asn Ile Ala Arg Glu Val Gln Lys Glu Val Leu
            100                 105                 110
Leu Ser Asn Phe Met Phe Ser Gly Leu Arg Ala Asp Leu Thr Lys Val
        115                 120                 125
Phe Gly Met Ser Pro Leu Phe Arg Val Ser His Ala Phe Ser Met Gly
    130                 135                 140
Gly Ser Gly Asn Leu Pro Pro Tyr Ala Phe Ser Ala Met Tyr Gly Thr
145                 150                 155                 160
Pro Lys Val
```

<210> 28049
<211> 244
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (13),(69)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28049

```
Glu Arg Ala Pro Arg Leu Pro Pro Ser Thr Ala Pro Xaa Thr Ser Asp
1               5                   10                  15
```

```
Thr Asp His Arg Pro Ser Leu Thr Pro Gly Lys Ala Lys Ser Thr Val
            20                  25                  30
Lys Ser Thr Ser Pro Asp Ile Ser Phe Pro Gln Ser Thr Ile Ala Ala
        35                  40                  45
Gln Arg Gln Ser Ser Pro Asp Trp Thr His Ile Pro His Ser Ser Gly
    50                  55                  60
Gly Ala Leu Phe Xaa Thr Pro Leu Pro Gln Pro Ser Leu Tyr Pro Gln
65                  70                  75                  80
Ser Thr Pro Glu Phe Ser Arg Met Thr Asp Ser Gln Arg Arg Ser Ser
                85                  90                  95
Val Met Ala Ala Pro Ile Asn Leu Ser Leu Leu Asp Asp Asp Thr Thr
            100                 105                 110
Gly Glu Gly Val Asn Leu Val Asp Ser Ala Arg Pro Gly Ser Ser Tyr
        115                 120                 125
Ala Asn Asp Val Ser His Lys Ser His Asp Met Gly Ser Ser Ala Pro
    130                 135                 140
Pro Thr Lys Met Arg Lys Leu Ser His Ser Val Ser Gln Ala Pro Ser
145                 150                 155                 160
Arg Ser Thr Ser Thr Ser Leu Pro Leu Leu Asn Thr Ala Gly Leu Gln
                165                 170                 175
Gln Pro Phe Ala Ser Ser Leu Pro Phe Pro Asn Glu Ser Ala Asp Leu
            180                 185                 190
Leu Tyr Glu Tyr Phe Pro Leu Gly Leu Asp Asp Trp Gln Ala Pro Val
        195                 200                 205
Asp Ala Val Tyr Arg Pro His Val Val His His Thr Asn Met Pro Glu
    210                 215                 220
Met Lys Phe Val Ala Gly Arg Gly Arg Ser Lys Arg Tyr Phe Ala Ala
225                 230                 235                 240
Glu Asp Val Phe
```

<210> 28050
<211> 71
<212> PRT
<213> A.fumigatus

<400> 28050

```
Asn Leu Leu Leu Glu Glu Gly Glu Ala Ser Gly Ile Leu Leu Gln Lys
1               5                   10                  15
Met Ser Phe Lys Asn Ser Leu Val Trp Glu Phe Gly Arg Val Ser Phe
            20                  25                  30
His Tyr Ser Ala Glu Ile Leu Cys Lys Asn Ser Ile His Asp Ser Tyr
        35                  40                  45
Leu Asp Gln Pro Ala Ile His Tyr Pro Glu Arg Leu Cys Ile Arg Pro
    50                  55                  60
Pro Arg Pro Ser Pro Tyr Pro
65                  70
```

<210> 28051
<211> 106
<212> PRT
<213> A.fumigatus

<400> 28051

```
Tyr Cys Ser Ile Met Ala Ala Arg Gln Leu Arg Arg Leu Ser Leu Pro
1               5                   10                  15
```

```
Thr His Leu Pro Leu Pro Ile Arg Pro His Val Arg His Leu Gly Thr
            20                  25                  30
Ala Gln Thr Asn Cys His Arg Phe Asp His Glu Thr Asp Ile Leu Ile
        35                  40                  45
Val Gly Ser Gly Ala Ala Gly Leu Thr Ala Ala Leu Arg Ser His Phe
    50                  55                  60
His Arg Leu Ser Ser Leu Val Ile Glu Lys Asp Ala Gln Ile Gly Gly
65                  70                  75                  80
Thr Ser Ala Tyr Ser Gly Gly Gly Leu Trp Ile Pro Asn Asn Pro Leu
                85                  90                  95
Ala Val Asp Ala Gly Ile Ile Asp Thr Pro
            100                 105
```

<210> 28052
<211> 396
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (250),(396)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28052

```
Gln Ala Met Thr Leu Leu Ile Ser Val Ile Asp Ala Asp Thr Ala Glu
1               5                   10                  15
Asp Thr Asp Val Gly Arg Ala Ser Ser Pro Pro Arg Lys Arg Ala Phe
            20                  25                  30
Leu Asn His Gly Pro His Met Val Ser Phe Leu Arg Asp Arg Gly Phe
        35                  40                  45
Ala Phe Arg Leu Ser Pro Gly Cys Pro Asp Tyr Tyr Pro Gln Ala His
    50                  55                  60
Gly Ala Leu Pro Thr Gly Gly Arg Ser Ile Glu Pro Asp Val Phe Asp
65                  70                  75                  80
Ala Arg Leu Leu Gly Leu Gly Glu Lys Trp Thr Glu Ala Ile Arg Gln
                85                  90                  95
Arg Pro Gly Arg Ser Leu Pro Leu Phe Thr Tyr Glu Ala Ser Ser Val
            100                 105                 110
Thr Arg Met Gly Ala Ser Trp Arg Asp Val Gly Thr Val Leu Arg Val
        115                 120                 125
Leu Leu Arg Gly Ile Tyr Leu Ser Arg Val Arg Gly Gln Ile Pro Val
    130                 135                 140
Thr Met Gly Lys Ser Leu Val Ala Gln Leu Leu Trp Leu His Met Gln
145                 150                 155                 160
Leu Asp Gln Ser Pro Val Leu Thr Asp Thr Ala Leu Arg Gln Leu Ile
                165                 170                 175
Ala Thr Pro Glu Gly Val Ile Leu Gly Ala Arg Val Ala Thr Pro Asp
            180                 185                 190
Gly Glu Arg Ser Ile Arg Ala Arg Cys Gly Val Leu Leu Cys Ala Gly
        195                 200                 205
Gly Phe Ala His Asn Gln Gly Leu Arg Glu Arg Tyr Gly Pro Val Pro
    210                 215                 220
Ala Asn Ala Glu Trp Thr Ser Ala Ala Arg Gly Asp Asn Gly Asp Ala
225                 230                 235                 240
Ile Val Ala Gly Val Arg Val Gly Ala Xaa Thr Ala Leu Met Asp Glu
                245                 250                 255
```

```
Ala Trp Trp Gly Pro Thr Leu Arg Asp Pro Val Arg Gly Met Tyr Tyr
            260                 265                 270
Phe Ala Leu Gln Glu Arg Ala Arg Pro Phe Gly Val Ile Val Asp Ser
        275                 280                 285
Ser Gly Lys Arg Phe Met Asn Glu Ala Glu Pro Tyr Thr Asp Ala Gly
    290                 295                 300
His His Gln Tyr Ala Gln Lys Ala Val Pro Ala Trp Phe Val Phe Asp
305                 310                 315                 320
Trp Asn His Arg Lys Arg Tyr Ala Val Gly Ser Leu Met Pro Arg Gln
                325                 330                 335
Gln Pro Pro Ala Gln Ala Leu Asp Ala Gly Tyr Ile His Arg Ala Asp
            340                 345                 350
Thr Ile Ala Glu Leu Ala Arg Gln Ile Gly Val Asn Glu Lys Gly Leu
        355                 360                 365
Glu Gly Thr Leu Ala Lys Phe Asn Glu Met Ala Asp Cys Gly Val Asp
    370                 375                 380
Asn Glu Phe Ala Arg Gly Glu Ser Ala Phe Asp Xaa
385                 390                 395
```

<210> 28053
<211> 183
<212> PRT
<213> A.fumigatus

<400> 28053

```
Ala Arg Gly Lys Ala Thr Arg Ala Thr Thr Arg Val Ala Ala Met Thr
1               5                   10                  15
Cys Lys Lys Arg Leu Arg Ser Ser Arg Asp Ser Asp Asp His Arg Asp
            20                  25                  30
Pro Lys Val Ser Ile Pro Asp Ala Ile Arg Gln Arg Leu Lys Lys Lys
        35                  40                  45
Ser Lys Pro Thr Ala Lys Ser Phe His His Ser Leu Gly Gly Ser Asn
    50                  55                  60
Pro Val Pro Cys Asp Tyr Ser Arg Ala Val His Glu Val Arg Gly Arg
65                  70                  75                  80
Ala Ile Leu Thr Val Glu Ser Ser Gly Gln Lys Pro Ala Tyr Tyr Phe
                85                  90                  95
Thr Phe Val Pro Asp Val Gln Pro Leu Leu Ser Gln Lys Pro Ala Ala
            100                 105                 110
Glu Ile Ser Gly Lys Gln Gly Pro Tyr Thr Ser Asp Glu Asn Ala Leu
        115                 120                 125
Leu Val Arg Leu Lys Glu Arg Glu Gly Met Pro Trp Ala Glu Ile Ala
    130                 135                 140
Ala His Phe Pro Lys Arg Ser Thr Ser Ser Leu Gln Val His Tyr Ser
145                 150                 155                 160
Thr Lys Leu Arg Lys Lys Ala Thr Thr Arg Ala Glu Ser Tyr Lys Asp
                165                 170                 175
Val Asp Glu Arg His Gln Thr
            180
```

<210> 28054
<211> 275
<212> PRT
<213> A.fumigatus

<400> 28054

```
Leu Asp Arg Leu Thr Asp Ser Ser Ala Glu Pro Pro Tyr Pro Gln Tyr
1               5                  10                  15
Gly Ala Pro Gln Gly Phe Ser Gln Pro Pro Tyr Pro Gln Pro Ser Gly
            20                  25                  30
Tyr Gly Gly Phe Pro Leu Pro Gln Gly His Tyr Asn Arg Pro Pro Pro
        35                  40                  45
Pro Ala Pro Ser Pro Gly Gly Tyr Pro Pro Ala Pro Gly Pro Gly Tyr
    50                  55                  60
Pro His Ser Pro Pro Pro Gln Pro Pro Tyr Gly Ala Pro Ser Gln His
65                  70                  75                  80
Pro Tyr Pro Pro Gln Gly Gly Pro Gly Tyr Pro Pro Pro Ala Gly Gly
                85                  90                  95
Tyr Pro Gln Pro Gly Pro Tyr Gly Ala Pro Pro Val Gly Gly Ser Gly
            100                 105                 110
Tyr Pro Thr Pro Pro Pro Gln Gln Phe Gln Gly Pro Pro Ala Met Pro
        115                 120                 125
Ser Leu Gly Tyr Val Pro Gly Gln Met Ala Pro Gly Asp Phe Arg Arg
    130                 135                 140
Glu Ala Asp Leu Leu Arg Lys Ala Met Lys Gly Phe Gly Thr Asp Glu
145                 150                 155                 160
Lys Met Leu Ile Gln Val Leu Ser Lys Leu Asp Pro Leu Gln Met Ala
                165                 170                 175
Ala Val Arg Ser Thr Tyr Thr Asn His His His Arg Asp Leu Tyr Lys
            180                 185                 190
Asp Val Lys Ser Glu Thr Ser Ser Tyr Phe Arg Gln Gly Leu Leu Ala
        195                 200                 205
Ile Ile Asp Gly Pro Leu Leu His Asp Val Gln Ser Leu Arg Glu Ala
    210                 215                 220
Val Gln Gly Leu Gly Thr Lys Glu Trp Leu Leu Asn Asp Val Val Leu
225                 230                 235                 240
Gly Arg Ser Asn Ala Asp Leu Asn Ala Ile Lys Ala Ala Tyr Glu His
                245                 250                 255
Thr Cys Gln Ser Ser Pro Gly Ser Glu Ser Pro Ser Gly Lys Thr Thr
            260                 265                 270
Arg Ala Pro
        275
```

<210> 28055
<211> 84
<212> PRT
<213> A.fumigatus

<400> 28055

```
Leu Pro Ala His His Ser Gln Thr Ser Leu Val Val Phe Leu Met Asp
1               5                  10                  15
Ser Asp Phe Tyr Leu Leu Tyr Ala Gln Thr Asn Ile Ser Gln Asp Phe
            20                  25                  30
Val Lys Arg Gln Tyr Lys Ala Asp Ser Glu Ile Ala Pro Val Trp Pro
        35                  40                  45
Trp Ser Thr Ala Gly Ala Trp Lys Glu Arg Thr Val Leu Pro Ala Ser
    50                  55                  60
His Val Leu Gly Asp Trp Gly Val Asp His Arg Lys Gln Met Thr Ser
65                  70                  75                  80
Cys Ser Ser Glu
```

<210> 28056
<211> 278
<212> PRT
<213> A.fumigatus

<400> 28056
Ser Asn Arg His Pro Val Gly Ser Phe Gln Pro Arg Gly Glu Asp Lys
1 5 10 15
Glu Ser Lys Leu Asp Thr Lys Lys Lys Thr Ala Gly Tyr Asn Leu Leu
20 25 30
Leu Asn Ser Leu Ala Asp Leu His Ser Cys Asn Val Ile Phe Phe Leu
35 40 45
Glu Ala Arg Lys Arg Gly Gln Asp Leu Tyr Leu Trp Leu Ala Arg Pro
50 55 60
Pro Asn Gly Pro Thr Ile Lys Phe His Val Thr Asn Leu His Thr Met
65 70 75 80
Gly Glu Leu Asn Thr Gly Phe Ser Gly Asn Cys Leu Lys Gly Gly Arg
85 90 95
Gly Ile Val Val Phe Asp Arg Ser Phe Asp Glu Gln Gly Pro Val Met
100 105 110
Ser Ser Pro Gly Asn Glu Tyr Arg Gly Leu Ile Arg Glu Met Leu Arg
115 120 125
Gly Val Phe Cys Val Pro Lys Arg Gly Val Lys Gly Met Lys Pro Phe
130 135 140
Ile Asp Arg Val Ile Gly Val Phe Gly Val Asp Gly Lys Ile Trp Ile
145 150 155 160
Arg Val Tyr Glu Ile Arg Glu Ser Glu Gly Gly Ala Lys Lys Asp Glu
165 170 175
Glu Asn Ser Lys Pro Ala Pro Lys Gly Lys Asn Ala Glu Pro Glu Ile
180 185 190
Ser Leu Val Glu Ile Gly Pro Arg Phe Val Leu Thr Pro Ile Val Ile
195 200 205
Leu Glu Gly Ser Phe Gly Gly Pro Val Ile Tyr Glu Asn Lys Glu Tyr
210 215 220
Val Ser Pro Asn Gln Val Arg Ser Glu Ile Arg Leu Ser Lys Ala Ala
225 230 235 240
Arg Tyr Ala Lys Arg Arg Asp Val Gln Thr Asn Leu Ile Ser Lys Arg
245 250 255
Ser Thr Leu Gly Leu Ala Glu Gly Glu Arg Lys Pro Gly Pro Leu Asp
260 265 270
Asn Lys Ser Leu Phe Ser
275

<210> 28057
<211> 78
<212> PRT
<213> A.fumigatus

<400> 28057
Leu Leu Ile Asn Arg Gly Trp Thr Ser Trp Arg Asp Thr Pro Thr Pro
1 5 10 15
Thr Phe Ser Val His His Gly Gly Thr Phe Ala Ile Gln Leu Phe Ala
20 25 30
Ala Val Gly Tyr Ser Phe Cys Ile Thr Tyr Asp Ile Leu Gln Tyr Ala
35 40 45
Cys Ser Ile Ser Asp Arg Phe Leu Phe Cys Gln Pro Gln Arg Arg Gly

```
    50                  55                  60
Leu His Leu Thr Arg Tyr Pro Tyr Leu Arg Arg Arg Arg Arg
65                  70                  75

<210> 28058
<211> 505
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (114)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28058
Ile Met Ala Ser Ile Phe Thr Tyr Asp Pro Asp Pro Pro Arg Val Ser
1               5                  10                  15
Ser Pro Trp Ser Thr Ser Gly Ser Ser Thr Pro Gln Leu Thr Ala Ser
            20                  25                  30
Gly Asn Arg Gly Leu Thr Ile Arg Thr Arg Ser Gly Thr Glu Leu Asp
        35                  40                  45
Arg Ala Asp Pro Asp Phe Leu Ser Asp Tyr Gly Ile Thr Lys Leu Glu
    50                  55                  60
Pro Glu Pro Gln Glu Gly Pro Thr Glu Tyr Lys Leu His Leu Leu Leu
65                  70                  75                  80
Arg Pro Arg Arg Leu Tyr Asn Ser Met Thr Thr Gly His Val Val Gly
                85                  90                  95
Gly Ser Tyr His Ser Arg Ala Ser Leu Ser Thr Ser Gly Pro Thr Pro
            100                 105                 110
Ser Xaa Tyr Glu Ser Asn Leu Arg Ser Ala Gln Val Arg Ser Thr Gln
        115                 120                 125
Ser Arg Gln Gln Arg Leu Gln Gln Leu Thr Thr Gln Leu Leu Trp Arg
    130                 135                 140
Leu Gln Gln Ser Ser Pro Phe His Ser Ser Thr Thr Ala Asn Leu Val
145                 150                 155                 160
Leu Pro Val Leu Pro Glu Ala Thr Pro His Leu Gly Thr Pro Gln Lys
                165                 170                 175
Pro Ala Arg Leu Ile Pro Gly Leu Glu Glu Ser Gln Gly Ala Leu Tyr
            180                 185                 190
Glu Ile Gly Val Ala Asp Asp Gly Thr Leu Val Gly Leu Thr Gln Asp
        195                 200                 205
Glu Leu Asp Glu Ser Leu Thr Asn Leu Gln Ile Met Ala Ala Ser Leu
    210                 215                 220
Gly Cys Lys Val Glu Ile Leu Arg Arg Val Ile Val Gly Lys Cys Glu
225                 230                 235                 240
Trp Ala Glu Cys Pro Glu Asp Thr Ser Ala Glu Ala Ala Asp Thr Gly
                245                 250                 255
Arg Val His Thr Glu Ser Leu Trp Val Ala Glu Ala Leu Val Ser Pro
            260                 265                 270
Asp Leu Glu Phe Tyr Gly Leu Ile Ser His Arg Asp Glu Phe Gly Arg
        275                 280                 285
Gln Ser Pro Ser His Gly Thr Lys Thr Lys Ser Met Arg Glu Asp Asn
    290                 295                 300
Tyr Ser Thr Thr Glu Gln Ile Arg Ile Ser Ile Thr Gly Pro Ser Ala
305                 310                 315                 320
Ala Gly Lys Ser Ser Leu Leu Gly Thr Leu Thr Ser Ser Ile Leu Asp
```

```
                325                 330                 335
Asn Gly Arg Gly Ala Ser Arg Leu Ser Leu Leu Lys His Arg His Glu
            340                 345                 350
Ile Ser Ser Gly Ile Thr Ser Ser Val Ala Gln Glu Leu Ile Gly Tyr
        355                 360                 365
Ala Thr Gly Glu Ser Met Gln Asp Pro Val Glu Val Ile Asn Tyr Ala
    370                 375                 380
Ser Gly Asn Val Ala Ala Trp Asp Asp Ile His Ala Thr Ala Lys Asp
385                 390                 395                 400
Ser Arg Leu Ala Phe Val Ser Asp Leu Pro Gly Ser Val Arg Tyr Leu
                405                 410                 415
Lys Ser Thr Leu Arg Gly Leu Ile Ser Trp Ala Pro His Tyr Val Phe
            420                 425                 430
Leu Cys Ile Pro Ala Asn Cys Asp Glu Glu Met Val Pro Glu Arg Pro
        435                 440                 445
Val Cys Gly Thr Ser Glu Gln Met Thr Glu Ile Asn Leu Ala Leu Ser
    450                 455                 460
His Leu Asp Leu Cys Ile Lys Ser Gly Ile Pro Thr Val Ile Val Ile
465                 470                 475                 480
Thr Lys Met Asp Val Ala Ser Arg Ala Gly Leu Arg Arg His Leu Val
                485                 490                 495
Phe Thr Lys Glu Gln Pro Gly Ser Ala
            500                 505
```

<210> 28059
<211> 62
<212> PRT
<213> A.fumigatus

<400> 28059

```
Ala Val Asp Asp Cys Trp Ser Val Lys Ser Gly Arg Asp Ala Ser Thr
1               5                   10                  15
Gln Arg Ile Ile Pro Asp Pro Asp Lys Phe Pro Asp Gly Ile Ser Gly
            20                  25                  30
Val Ala Asp Gln Ile His Asp Leu Gly Leu Lys Ile Gly Ile Tyr Ser
        35                  40                  45
Ser Glu Ser Leu Pro Met Asp Arg Tyr Arg Arg Pro Arg Arg
    50                  55                  60
```

<210> 28060
<211> 137
<212> PRT
<213> A.fumigatus

<400> 28060

```
Gln Leu Asp Ser Ile Ser Gln Asp His Leu Ala Ile Leu Ser Asn Lys
1               5                   10                  15
Ile Leu Leu Lys Phe His Gln Asp Pro Val Ile Gly Arg Pro Ala Gln
            20                  25                  30
Pro Tyr Lys Trp Gly Tyr Asn Pro Asp Trp Thr Phe Asp Pro Ala His
        35                  40                  45
Pro Ala Glu Tyr Trp Ser Gly Ala Ser Ser Val Leu Gly Gly Thr Leu
    50                  55                  60
Val Leu Met Leu Asn Ser Glu Asp Thr Thr Gln Arg Arg Thr Ala Val
65                  70                  75                  80
Trp Lys Glu Val Pro Glu Leu Lys Asp Val Leu Gly Arg Gln Gly Lys
```

```
                85                  90                  95
Arg Arg Ile Gly Phe Arg Val Thr Asp Val Trp Thr Gly Lys Asp Leu
            100                 105                 110
Gly Cys Val Arg Asp His Tyr Ser Val Glu Leu Glu Ser His Asp Val
        115                 120                 125
Ala Ala Leu Val Val Gly Arg Ala Cys
    130                 135
```

<210> 28061
<211> 112
<212> PRT
<213> A.fumigatus

<400> 28061

```
Val Ser Gly Glu Ala Phe Ser Arg Asp Asp Asp Val Phe Leu Ser Asp
1               5                   10                  15
His Cys Ser Cys Ser Val Asn Pro Arg Pro Arg Glu Gln Cys Ala His
            20                  25                  30
Gln Thr Arg Gln Cys Gly Lys Leu Leu Val Ser Ser Asn Ile Cys Met
        35                  40                  45
Ser Arg Ser Lys Thr Arg Gln Gly Lys Leu Pro Ala Leu Gly Trp Asn
    50                  55                  60
Thr Trp Asn Ala Phe Gly Cys Asp Ile Asp Ala Thr Lys Ile Met Thr
65                  70                  75                  80
Ala Ala Asn Glu Val Val Asn Leu Gly Leu Lys Asp Leu Gly Tyr Glu
                85                  90                  95
Tyr Ile Asn Ser Glu Leu Pro His Pro Ala Ser Arg Met Tyr Val Cys
            100                 105                 110
```

<210> 28062
<211> 116
<212> PRT
<213> A.fumigatus

<400> 28062

```
Ser Arg Gln Ala Thr Arg Leu Thr Asn Pro Gln Ser Asp Leu Lys Tyr
1               5                   10                  15
Asp Asn Leu Arg Arg Pro Leu Gln Leu Asp Arg His Val His Ile Leu
            20                  25                  30
Val Pro Asp Pro Gly Ser Lys Ala Thr Asn Gly Thr Cys Pro Asp Asn
        35                  40                  45
Lys Asn Pro Ala Pro Ala Gly Tyr Asp Trp Arg Thr Ser Leu Thr Ala
    50                  55                  60
Glu Arg Tyr Arg Arg Met Arg Asp Ala Leu Val Ser Val Asp Arg Thr
65                  70                  75                  80
Ile Leu Tyr Ser Leu Cys Glu Trp Gly Gln Ala Asn Val Asn Asp Trp
                85                  90                  95
Gly Asn Glu Thr Gly Asn Ser Trp Arg Thr Thr Gly Asp Ile Thr Arg
            100                 105                 110
Lys Ile Gln Pro
        115
```

<210> 28063
<211> 71
<212> PRT
<213> A.fumigatus

<400> 28063
Pro Ile Pro Pro Ala Ser Trp Pro Arg Ile Ala Ala Ile Ala Asn Glu
1 5 10 15
Asn Ser Phe Leu Met Asn His Val Asp Phe Trp Gly Tyr Pro Asp Pro
20 25 30
Asp Met Leu Glu Val Gly Asn Gly Asn Leu Thr Leu Ala Glu Asn Arg
35 40 45
Ala His Phe Ala Leu Trp Ala Ala Met Lys Ser Pro Leu Ile Ile Gly
50 55 60
Thr Ala Val Arg Leu Ser Leu
65 70

<210> 28064
<211> 136
<212> PRT
<213> A.fumigatus

<400> 28064
Pro Tyr His Ser Asn Pro Ile Pro Gln Ser Ala Ser Arg His Val Thr
1 5 10 15
Ser Thr Ser Asp Glu Arg Pro Thr Trp Gln Arg Lys Thr Thr Ala Ser
20 25 30
Ala Thr Ser Ser Gly Ser Thr Asn Leu Pro Glu Gly Ile Val Phe Lys
35 40 45
Lys Ala Ser Arg Thr Glu Ser Ser Pro Gln Ala Phe Phe Pro Arg Ala
50 55 60
Val His Thr Thr Val Gly Asp Thr Glu Leu Ala Val Ile Pro Cys Pro
65 70 75 80
Pro His Ser Asp Ala Ile Leu Arg Val Asn Pro His Lys Ala Ala Leu
85 90 95
Glu Ala Gln Tyr Ala Pro Cys Arg Gly Ser Ala Thr Cys Ala Ala Cys
100 105 110
Asp Ala Met Leu Thr Ile Arg Pro Gly Gly Asp Gly Phe Ala Asp Ala
115 120 125
Ser Ala Val Leu Glu Ala Ala Lys
130 135

<210> 28065
<211> 121
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (22)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28065
Tyr Trp Arg His His Gln Ser Ser Met Pro Phe His Ala Leu Gly Arg
1 5 10 15
Glu Met Ile Arg Ala Xaa Ser Ser Pro Gln Ser Asp Val Phe Phe Pro
20 25 30
Ser Ile Leu Ile Asn Thr Ala Gly Tyr Val Ser Leu Ser Asp Met Glu
35 40 45
Met Thr Pro Pro Glu Glu Thr Met Gln His Leu Thr Thr Asn Ile Phe

```
    50                  55                  60
Gly Pro Met Leu Cys Ser Gln Ala Phe Ala Arg Leu Tyr Phe Ala Ala
65                  70                  75                  80
Ser Lys Thr Ala Glu Ala Ser Ala Asn Pro Ser Pro Pro Gly Arg Ile
                85                  90                  95
Val Asn Ile Ala Ser Gln Ala Ala His Val Ala Leu Pro Arg His Gly
            100                 105                 110
Ala Tyr Cys Ala Ser Lys Ala Ala Leu
        115                 120
```

<210> 28066
<211> 77
<212> PRT
<213> A.fumigatus

<400> 28066

```
Gly Leu Thr Arg Ser Met Ala Ser Glu Trp Gly Gly Gln Gly Ile Thr
1               5                   10                  15
Ala Asn Ser Val Ser Pro Thr Val Val Trp Thr Ala Leu Gly Lys Lys
            20                  25                  30
Ala Trp Gly Glu Asp Ser Val Arg Glu Ala Phe Leu Lys Thr Ile Pro
        35                  40                  45
Ser Gly Arg Phe Val Leu Pro Glu Glu Val Ala Asp Ala Val Val Phe
    50                  55                  60
Leu Cys Gln Val Gly Leu Ser Ser Glu Val Glu Val Thr
65                  70                  75
```

<210> 28067
<211> 169
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (68)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28067

```
Gln Ile Ala Ala Lys Asp Tyr Ile Glu Arg Val Ala Val Ala Met Thr
1               5                   10                  15
Thr Met Leu Ile Arg Ser Asp Thr Leu Asp Tyr Pro Glu Val Gln His
            20                  25                  30
Leu Leu Gln His His Phe Thr Glu Leu Arg Ser Gln Gly Arg Pro Glu
        35                  40                  45
Thr Ser Phe Ala Leu Asp Leu Thr Ala Phe Leu Asp Pro Ser Ile Thr
    50                  55                  60
Trp Tyr Thr Xaa Trp Glu Gly Asp Ser Leu Leu Ala Cys Gly Ala Leu
65                  70                  75                  80
Lys Gln Leu Ser Pro Ile His Gly Glu Ile Lys Ser Met Arg Thr Ala
                85                  90                  95
Pro Gly His Leu Arg Lys Gly Val Ala Lys Thr Ile Leu Lys His Ile
            100                 105                 110
Val Ala Glu Ala Arg Glu Arg Lys Tyr Gln Ser Leu Ser Leu Glu Thr
        115                 120                 125
Gly Thr Asp Gly Arg Phe Glu Ser Ala Arg Arg Leu Tyr Leu Gly Met
    130                 135                 140
```

```
Gly Phe Glu Val Cys Gly Pro Phe Gly Asp Tyr Lys Ser Ser Asp Asp
145                 150                 155                 160
Asn Met Phe Leu Thr Leu Arg Leu Cys
                165
```

<210> 28068
<211> 100
<212> PRT
<213> A.fumigatus

<400> 28068

```
Ala Thr Gln Leu Trp Pro Pro Val Val Lys Ala Thr Pro Ala Pro Phe
1               5                   10                  15
Ser Ser Trp Gln Arg Thr Asn Pro Pro Thr Thr Ser Met Ala Arg Pro
            20                  25                  30
Ser Thr Thr Thr Arg Ala Met Ala Thr Ser Ser Pro Ser Thr Pro Pro
        35                  40                  45
Thr Ala Val Trp Ser Arg Met Ser Arg Thr Thr Asn Thr Arg Arg Thr
    50                  55                  60
Gln Ala Ser Thr Ala Trp Ser Leu Thr Pro Gln Lys Pro Thr Ser Thr
65                  70                  75                  80
Arg Pro Ile Cys Arg Pro Thr Arg Ser Gly Pro Ile Ala Arg Thr Leu
                85                  90                  95
Arg Pro Ala Ser
            100
```

<210> 28069
<211> 119
<212> PRT
<213> A.fumigatus

<400> 28069

```
Asp Pro Ile Asp Leu Ile Ser Val Asn Met Lys His His Leu Val Ile
1               5                   10                  15
Gly Thr Trp Thr Pro Pro Gly Arg Leu Tyr Thr Val Ala Phe Asp Asp
            20                  25                  30
Glu Ala Leu Thr Leu Glu Leu Val Lys Lys Thr Glu Ile Pro Glu Asp
        35                  40                  45
Glu Pro Ile Ser Trp Leu Thr Ile Ser Val Gly Ile Gln Pro Leu Pro
    50                  55                  60
Ala Thr Phe Ala Asn Val Val Gln His Asp Lys Lys Thr Leu Tyr Gly
65                  70                  75                  80
Ala Ala Met Lys Lys Trp Asn Ser Phe Ala Ile Asn Ser Pro Thr Asp
                85                  90                  95
Ile Val His Gln Val Ala His Pro Leu Ala Gly His Arg Met Leu Val
            100                 105                 110
Ser Ile Ser Ala Arg Ser Gly
        115
```

<210> 28070
<211> 214
<212> PRT
<213> A.fumigatus

<400> 28070

```
Lys Ser Gly Thr Ala Ser Pro Ser Thr Ala Gln Gln Thr Ser Ser Thr
```

```
1               5                   10                  15
Arg Ser Pro Ile Leu Leu Leu Val Thr Val Cys Ser Tyr Pro Ser Leu
            20                  25                  30
Arg Gly Leu Ala Asp Ala Asp Leu Ser Tyr Pro Ala Leu Ala Ser Ser
        35                  40                  45
Ser Glu Ser Asn Thr Arg Ala Ile Phe Val Leu Ala Ala His Lys Pro
    50                  55                  60
Pro Tyr Asn Val Tyr Gly Ala Pro Phe Tyr Asn Tyr Ala Gly Tyr Gly
65                  70                  75                  80
Asn Val Phe Ser Val Asp Pro Ser Asp Gly Arg Leu Val Lys Asn Val
                85                  90                  95
Gln Asn Tyr Glu Tyr Gln Glu Asn Thr Gly Ile His Gly Met Val Phe
            100                 105                 110
Asp Pro Thr Glu Thr Tyr Leu Tyr Ser Ala Asp Leu Gln Ala Asn Lys
        115                 120                 125
Ile Trp Thr His Arg Lys Asp Ala Gln Thr Gly Glu Leu Thr Leu Val
    130                 135                 140
Asp Cys Leu Glu Ala Pro Ser Pro Asp Asp His Pro Arg Trp Val Asp
145                 150                 155                 160
Ile His Arg Ser Gly Lys Tyr Leu Tyr Ala Leu Met Glu Ala Gly Asn
                165                 170                 175
Arg Leu Ala Val Tyr Val Ile Asp Glu Lys Arg His Val Pro Val Phe
            180                 185                 190
Thr His Ile Thr Tyr Pro Leu Leu Pro Ala Gly Lys Leu Phe Tyr His
        195                 200                 205
Arg Arg Ser Val Gln Asp
    210
```

<210> 28071
<211> 166
<212> PRT
<213> A.fumigatus

<400> 28071

```
Arg Gln Cys Arg Ser Gly Lys Lys Gln Tyr Pro Arg Leu Lys Ser Ile
1               5                   10                  15
Pro Pro His Thr Ser Leu Arg Met Asp Ser Asp Ile Phe Val Leu His
            20                  25                  30
Leu Asn Asn Thr Phe Lys His Ser Thr Arg Tyr Thr Phe Gln His Ile
        35                  40                  45
Arg Lys Lys Ile Thr Leu His His Ala Pro Pro Leu Arg Ser Leu His
    50                  55                  60
Pro Thr Pro Arg Arg Arg Pro Leu His His Arg Asn Leu Arg Pro His
65                  70                  75                  80
Arg Arg Pro Gln Thr Pro Pro Pro Thr His Ser Pro Arg Ser Leu Pro
                85                  90                  95
Ala Thr Leu Pro Pro Arg Arg Arg Arg Leu Glu Gln Phe Pro Gly Arg
            100                 105                 110
His Pro His Ala His Asn Pro Pro Arg Cys Ala Pro Arg Ala Leu Arg
        115                 120                 125
Leu Pro Arg Gly Gly Pro Gln Arg Arg Arg Val Arg Val Glu Arg Ala
    130                 135                 140
Arg Ala Ala Arg Ala Glu Gly Arg Gly Asp Gly Arg Gln Thr Ala Gly
145                 150                 155                 160
Gly Ala Arg Cys Gln Cys
                165
```

<210> 28072
<211> 152
<212> PRT
<213> A.fumigatus

<400> 28072
Asn Gln Phe His Arg Ile His Pro Tyr Val Trp Thr Arg Ile Tyr Leu
1 5 10 15
Tyr Phe Ile Ser Ile Thr His Ser Ser Ile Gln Leu Asp Thr His Ser
20 25 30
Asn Ile Phe Glu Lys Lys Ser His Cys Thr Met Arg Leu Pro Tyr Ala
35 40 45
Pro Ser Thr Pro Pro Arg Asp Ala Asp Pro Ser Thr Thr Glu Ile Tyr
50 55 60
Ala Arg Ile Ala Ala Arg Arg His Pro Arg Pro Leu Ile Pro Leu Asp
65 70 75 80
Leu Ser Leu Leu His Ser Pro Pro Val Ala Asp Gly Trp Asn Ser Phe
85 90 95
Leu Gly Ala Ile Arg Thr Arg Thr Ile Leu Pro Gly Ala Leu Leu Glu
100 105 110
Leu Ser Val Cys Arg Val Ala Val Leu Asn Gly Ala Val Tyr Glu Trp
115 120 125
Asn Ala His Ala Pro Leu Ala Leu Lys Asp Gly Val Thr Ala Asp Lys
130 135 140
Leu Arg Ala Val Arg Asp Val Asn
145 150

<210> 28073
<211> 564
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (511)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28073
Asn Ser Gln Arg Arg Ala Ser Ser Gln Ser Ala Ser Ala Phe Ser Ala
1 5 10 15
Thr Leu Leu Phe Leu His His Phe Leu Trp Tyr Leu Ser Ile Pro Val
20 25 30
Tyr Asn Leu Thr Ala Leu Asp Gly Leu Pro Arg Phe Leu Phe Thr Ser
35 40 45
Ser Asp Leu Met Phe Ala Val Arg Ser Val Phe Ser Leu Ser Phe Lys
50 55 60
Ser Cys Leu Phe Thr Thr His Pro Arg Arg Leu Ala His Ser Gln Lys
65 70 75 80
Ala Phe Phe Ala His Ile Leu Pro His Arg Asn Ala Pro Ser Pro Ile
85 90 95
Lys Ala Met Gln Ser Pro Ser Arg Lys Pro Gln Thr Asp Ala Lys Arg
100 105 110
Arg Lys Lys Gly Arg Ala Asp Arg Thr Lys Asn Ser Gly Phe Asp Glu
115 120 125
Val Leu Gln Thr Asp Ile Asp Asn Leu Leu Arg Arg His Lys Pro Glu

```
    130                 135                 140
Ala Glu Asn Asp Ala Ser Thr Pro Ser Pro Ala Leu Pro Glu Leu Phe
145                 150                 155                 160
Thr Glu Ile Glu Val Thr Val Ser Asp Ile Ser Ser Thr Gly Asp Gly
                165                 170                 175
Leu Ala Leu Ser Glu Asn Lys Asp His Val Tyr Val Val Pro Phe Thr
            180                 185                 190
Val Pro Gly Asp Lys Val Leu Val Lys Val Val Arg His His Glu Pro
        195                 200                 205
Leu Ser His Ser Val Thr Asp Phe Ile Lys Val Leu Glu Pro Gly Pro
    210                 215                 220
Gln Arg Asn Asp Ala Ala Ile Gly Cys Gly Tyr Phe Gly Lys Cys Ser
225                 230                 235                 240
Gly Cys Gln Leu Gln Met Met Ser Tyr Glu Asp Gln Leu Ala His Lys
                245                 250                 255
Lys Arg Ile Val Glu Lys Ala Tyr Ala Asn Phe Ser Gly Leu Ile Pro
            260                 265                 270
Glu Leu Ile Pro Ala Val Glu Asp Thr Phe Pro Ser Pro Leu Gln Tyr
        275                 280                 285
Gly Tyr Arg Thr Lys Leu Thr Pro His Phe Thr Ala Pro Gly Gly His
    290                 295                 300
Ser Ala Ala Lys Arg Arg Lys Ser Gly Glu Val Pro Thr Glu Val Pro
305                 310                 315                 320
Pro Ile Gly Phe Thr Tyr Lys Asn Arg Arg Met Asp Met Asp Ile Glu
                325                 330                 335
Asp Cys Pro Leu Gly Thr Asp Ile Val Arg Arg Gly Leu Arg Ser Glu
            340                 345                 350
Arg Lys Arg Val Ala Glu Asn Leu His Lys Tyr Thr Lys Lys Gly Ala
        355                 360                 365
Thr Leu Leu Met Arg Glu Ser Thr Arg Arg Ile Pro Lys Asp Ser Ala
    370                 375                 380
Glu Ala Glu Ala Gly Ala Val Gln Lys Glu Gly Asp Asn Pro Pro Glu
385                 390                 395                 400
Ser Glu Ser Gly Asp Val Ile Arg Ile Glu Arg Asp Asn Tyr Ile Glu
                405                 410                 415
Glu Lys Arg Cys Val Thr Asp Asn Asn Ala Thr Ser Val Glu Tyr Ile
            420                 425                 430
Asp Asp Tyr Ile Phe Thr Asn Lys Ala Gly Ala Phe Phe Gln Asn Asn
        435                 440                 445
Asn Ser Ile Leu Ser Ser Phe Thr Glu Tyr Ile Arg Gln His Ala Phe
    450                 455                 460
Pro Lys Gly Asn Glu Gln Asp Pro Lys Pro Ile Lys Tyr Leu Leu Asp
465                 470                 475                 480
Ala Tyr Ser Gly Ser Gly Leu Phe Thr Ile Thr Leu Ser Pro Leu Phe
                485                 490                 495
Lys Ser Ser Leu Gly Val Asp Val Ala Ala Asp Ser Ile Ala Xaa Ala
            500                 505                 510
Arg Glu Asn Ala Arg Ala Asn Asn Leu Pro Asn Thr Gly Phe Ala Arg
        515                 520                 525
Pro Asp Ala Ala Thr Leu Phe Lys Asn Val Pro Tyr Pro Pro Asp Lys
    530                 535                 540
Leu Tyr Ser Ser Trp Thr Gln Pro Val Lys Asp Ala Pro Met Ile Ser
545                 550                 555                 560
Ser Gly Asn Cys
```

<210> 28074
<211> 75
<212> PRT
<213> A.fumigatus

<400> 28074
Asp Cys Thr Leu Gly Trp Arg Gly Thr Thr Lys Asn Gly Gly Gly Lys
1 5 10 15
Glu Val Leu Arg Lys Arg Arg Thr Arg Ile Gly Trp Arg Leu Ser Ala
20 25 30
Glu Asn Phe Thr Ile Pro Ser Ile Val Pro Ile Leu Pro Ser Leu Thr
35 40 45
Tyr Ser Ile Thr Arg Pro Ile Tyr Ser Gly Asn Ser Ala Thr Ser Pro
50 55 60
Arg Ser Leu Leu Gly Ser Cys Ile Pro Ser Gln
65 70 75

<210> 28075
<211> 70
<212> PRT
<213> A.fumigatus

<400> 28075
Leu Arg Ser Ile Ser Leu His Leu Leu Ile Val Phe Arg Ala Glu Asp
1 5 10 15
Lys Ser Val Arg Tyr Val Ala Glu Glu Asn Val Glu Ile Ile Thr Pro
20 25 30
Asp Leu Phe Glu Leu Pro Gln Thr Leu Val Glu Thr Ala Gly Lys His
35 40 45
Phe Lys Arg Trp Asp Gly Cys Ser His Thr Phe Val Ser Asn Ile Arg
50 55 60
Asp Glu Tyr Pro Asp Asp
65 70

<210> 28076
<211> 69
<212> PRT
<213> A.fumigatus

<400> 28076
Cys Phe Val Ala Arg Leu Pro Ser Phe Leu Leu Phe Ala Leu Leu Tyr
1 5 10 15
His Phe Ile Leu Ser Phe Leu Phe Phe Phe Ser Ser Asn Phe Phe Tyr
20 25 30
Leu Phe Asn Phe Ile Ser Leu Phe Phe Gln Ile Ser Ser Pro Arg Asn
35 40 45
Ser Asp Arg Ser Thr Phe Ile Thr Ile Ile Asp Leu Gln Val Gln Asn
50 55 60
Val Val Glu Arg Leu
65

<210> 28077
<211> 138
<212> PRT
<213> A.fumigatus

<400> 28077
Ala Ser Lys Met Arg Arg Gly Val Leu Ile Phe Leu Ile Val Asn Leu
1 5 10 15
Leu Ile Ile Ser Phe Leu Val Arg Ser Val Phe Thr Leu Leu Ser Leu
20 25 30
Leu Val Glu Asp Ala Ser Ala Asp Ala Ile Arg His Ala Glu Leu Pro
35 40 45
Ser Pro Asn Ser Ser Leu Ile Glu Gln Arg Pro Gln Ile Ile Pro Lys
50 55 60
Ile Ile His Gln Thr Tyr Lys Asn Glu Thr Ile Pro Glu Val Trp Arg
65 70 75 80
Glu Ala Gln Gln Ser Cys Lys Asp Leu His Pro Asp Tyr Glu Tyr Ile
85 90 95
Val Cys Ala Ser Phe Pro Val Asn Cys Cys Leu Val Ile Leu Thr Ser
100 105 110
Pro Pro Ala Leu Ala Met Asp Gln Arg Lys Val Pro Arg Ile Tyr Gln
115 120 125
Glu Arg Ile Ser Val Val Pro Arg His Ile
130 135

<210> 28078
<211> 70
<212> PRT
<213> A.fumigatus

<400> 28078
Leu Trp Thr Asn Glu Lys Ser Arg Glu Phe Ile Lys Asn Glu Tyr Pro
1 5 10 15
Trp Phe Leu Asp Thr Phe Asp Gly Tyr Lys Tyr Pro Ile Gln Arg Ala
20 25 30
Asp Thr Ile Arg Tyr Phe Val Leu Gly Leu Leu Gly Pro Asp Ile Tyr
35 40 45
Arg Thr Leu Met Arg Asn Val Val Pro Ser Met Leu Thr Lys Met Asp
50 55 60
Leu Gly Asn Leu Val Pro
65 70

<210> 28079
<211> 231
<212> PRT
<213> A.fumigatus

<400> 28079
Asp Asp Met Ala Val Leu Thr Gln Leu Thr Asn Asn Val Arg Leu Tyr
1 5 10 15
Gly Thr Asp Cys Asn Gln Thr Glu Met Val Leu His Ala Ile Asp Lys
20 25 30
Leu Glu Ile Lys Asp Met Lys Ile Trp Leu Gly Val Trp Ile Asp Ser
35 40 45
Asn Glu Thr Thr Ser Arg Arg Gln Ile Asp Gln Leu Tyr Lys Ile Ile
50 55 60
Asp Asp Ala Lys Asp Ile Ser Ile Phe Asn Gly Ala Ile Val Gly Asn
65 70 75 80
Glu Ala Leu Tyr Arg Ala Gly Ser Asp Lys Thr Ser Ala Gln Thr Thr
85 90 95
Leu Ile Asn Tyr Met Gln Glu Val Lys Asp His Phe Lys Lys Lys Asn

```
            100                 105                 110
Ile Asp Leu Pro Val Ala Thr Ser Asp Leu Gly Asp Asn Trp Asp Ala
        115                 120                 125
Thr Leu Val Gln Ala Ala Asp Val Val Met Ala Asn Val His Pro Phe
    130                 135                 140
Phe Gly Gly Ile Pro Val Asp Gln Ala Ala Ala Trp Thr Trp Arg Phe
145                 150                 155                 160
Trp Gln Asp His Asn Val Ala Leu Thr Lys Gly Thr Asn Lys Lys Gln
                165                 170                 175
Ile Ile Ser Glu Val Gly Trp Pro Ser Gly Gly Gly Asn Asp Cys Gly
            180                 185                 190
Gln Gly Ala Asn Cys Pro Asn Asp Thr Ala Gly Ala Val Ala Gly Val
        195                 200                 205
Asp Glu Leu Asn Lys Phe Met Glu Asp Trp Val Cys Gln Ala Leu Asp
    210                 215                 220
Asn Gly Thr Asp Tyr Phe Trp
225                 230
```

<210> 28080
<211> 77
<212> PRT
<213> A.fumigatus

<400> 28080

```
Ile Met Ala Arg Ile Ile Ser Gly Lys Asp Pro Lys Thr Thr Leu Ser
1               5                   10                  15
Ser Gln Gln Ala Ser Ser Thr Ala Ala Asn Glu Phe Asp Arg Phe Glu
            20                  25                  30
Ala Phe Asp Glu Pro Trp Lys Ile Val Tyr Asn Thr Gly Lys Glu Asn
        35                  40                  45
Trp Glu Asp Lys Trp Gly Leu Met Asp Ser Ala Arg Asn Leu Lys Pro
    50                  55                  60
Gly Leu Lys Ile Pro Asp Cys Gly Gly Lys Thr Ala Thr
65                  70                  75
```

<210> 28081
<211> 294
<212> PRT
<213> A.fumigatus

<400> 28081

```
Gly Ile Val Asn Gly Tyr Leu Asp Thr Glu Lys Asn Leu Lys Gly Ser
1               5                   10                  15
Val Leu Pro Thr Leu Glu Arg Leu His Lys Glu Ile Lys Asn Lys Ser
            20                  25                  30
Lys Glu Leu Gln Ser Gly Ala Ser Lys Ser Ala Lys Ala Val Glu Lys
        35                  40                  45
Ala Arg Gly Val Thr Gln Lys His Ile Glu Leu Leu Ala Gln Gln Val
    50                  55                  60
Ala Ala Phe Asp Ser Thr Ala Gly Asn Lys Phe Asp His Ala His Asp
65                  70                  75                  80
Pro Tyr Ile Leu Arg Arg Gly Val Asn His Arg Leu Asn Lys Gln Val
                85                  90                  95
Ile Glu Glu Asn Asn Asn Arg Gln Asp Ile Ile Ala Val Gln Asn Asn
            100                 105                 110
Phe Gln Gln Phe Glu Ala His Val Leu Gln Thr Ile Gln Ala Ala Met
```

```
        115                 120                 125
Glu Gln Phe Asn Val Phe Ile Gly Gly Gln Leu Asp Arg Gln Arg Gly
    130                 135                 140
Met Tyr Ser Asp Met Leu Ala Ala Ala Gln Arg Ile Pro Pro Asp Tyr
145                 150                 155                 160
Glu Trp Val Asn Phe Ile Thr Arg Asn Ala Asn Val Leu Val Asp Pro
                165                 170                 175
Asp Ser Pro Pro Arg Ser Leu Ser Asn Ile Ser Phe Pro Asn Gln Asp
            180                 185                 190
His Arg Ala Thr Val Pro Leu Ile Glu Gly Ser Leu Glu Arg Lys Ser
        195                 200                 205
Arg Ala Met Leu Lys Gly Tyr Ser Thr Ser Tyr Tyr Val Val Thr Pro
    210                 215                 220
Ala Arg Tyr Leu His Glu Phe Lys Asp Asn Asp Asp Phe Arg Gln Asp
225                 230                 235                 240
Pro Ser Pro Glu Leu Ser Leu Tyr Leu Pro Asp Cys Val Val Gly Gly
                245                 250                 255
Val Asp Gly Asn Lys Phe Thr Ile Lys Gly Lys Asp Val Ser Arg Arg
            260                 265                 270
Gln Gly Arg Gln Arg Leu Pro His Tyr Gln Arg Val Phe Thr Thr Gly
        275                 280                 285
Leu Glu Gly His Ala Leu
    290
```

<210> 28082
<211> 95
<212> PRT
<213> A.fumigatus

<400> 28082

```
Pro Val Val Lys Thr Leu Cys Cys Thr Glu Gln Thr Thr Gly Leu Leu
1               5                   10                  15
Leu Glu Arg Leu Arg Ala Trp Lys His Met Cys Gly Tyr Leu Glu Asp
            20                  25                  30
Tyr Val Glu Val Thr Ala Lys Val Gln Lys Ser Gln Ala Lys Asp Tyr
        35                  40                  45
Glu Lys Val Leu Lys Val Trp Arg Leu Phe Cys Leu Arg Trp Phe Arg
    50                  55                  60
Lys Gly Ala Asp Thr Ala Arg Val Asp Cys Gln Arg Ser Pro Ser Gly
65                  70                  75                  80
Gly Ala Pro Phe Leu Ser Glu Cys Arg Trp Ser Phe Gly Met Val
                85                  90                  95
```

<210> 28083
<211> 156
<212> PRT
<213> A.fumigatus

<400> 28083

```
Leu Leu Pro Arg Phe Pro Asn Leu Val Lys Thr Arg Pro Glu Met Ala
1               5                   10                  15
Ala Thr Tyr Gly Ser Gly Ser Gln Arg Val Arg Arg Leu Ser Ser Ile
            20                  25                  30
Asp Ala Thr Arg Ala Asp Leu Tyr Gly Gly Pro Asn Val Val Val Pro
        35                  40                  45
Pro Lys His Leu Met Ala Ser Ser Asp Ala His Asp Thr Ala Ile Glu
```

```
    50                  55                  60
Met Ala Met Ala Lys Gln His Leu Asp Glu Glu Val Ser Ser Glu Glu
65                  70                  75                  80
Glu Ser Pro Arg Ala Ala Ser Pro Leu Thr Arg Ser Pro His His Leu
                85                  90                  95
Thr Thr Ala Asp Glu Phe Ala Leu Ala Phe Asp Ile Asp Gly Val Leu
            100                 105                 110
Ile Arg Gly Gly Gln Ala Ile Pro Glu Ala Val Asp Ala Leu Lys Tyr
        115                 120                 125
Ile Asn Gly Gln Asn Pro Phe Gly Val Lys Met Tyr Val Ser Leu Pro
    130                 135                 140
Glu Lys Leu Ser Thr Gln His Arg Leu Leu Thr Pro
145                 150                 155
```

<210> 28084
<211> 230
<212> PRT
<213> A.fumigatus

<400> 28084

```
Ser Ser Pro Tyr Ile Phe Val Thr Asn Gly Gly Gly Lys Thr Glu Glu
1               5                   10                  15
Glu Arg Cys Leu Asp Leu Ser Arg Gln Leu Glu Leu Glu Val Ser Pro
            20                  25                  30
Gly Gln Phe Ile Cys Gly His Thr Pro Met Arg Glu Met Ala Glu Lys
        35                  40                  45
Tyr His Thr Val Leu Val Val Gly Gly Glu Gly Glu Lys Cys Arg Ile
    50                  55                  60
Val Ala Glu Gly Tyr Gly Phe Lys Asp Val Ile Thr Pro Gly Asp Ile
65                  70                  75                  80
Ile Lys Thr Arg Gln Asp Thr Thr Pro Phe Arg Lys Leu Thr Glu Glu
                85                  90                  95
Glu Tyr Asn Asn Ser Arg Val Arg Asp Phe Ser Lys Thr Pro Ile Glu
            100                 105                 110
Ala Ile Phe Val Phe Ala Asp Ser Arg Asp Trp Ala Gly Asp Gln Gln
        115                 120                 125
Ile Ile Leu Asp Val Leu Met Ser Lys Asn Gly Tyr Leu Gly Thr Arg
    130                 135                 140
Ser Glu Thr Phe Asp Glu Gly Pro Pro Ile Phe Phe Ser His Asn Asp
145                 150                 155                 160
Val Val Trp Ser Thr Ser His Glu His Val Arg Ile Gly Met Gly Ala
                165                 170                 175
Leu Arg Thr Ser Leu Glu Ala Leu Tyr Asn Ala Val Thr Gly Asn Glu
            180                 185                 190
Leu Thr Thr Val Ala Phe Gly Lys Pro Gln Leu Gly Thr Tyr Glu Phe
        195                 200                 205
Ala Thr Arg Leu Leu Arg Gln Trp Arg Lys Glu Tyr His Gly Ile Asp
    210                 215                 220
Glu Pro Pro Ser Thr Val
225                 230
```

<210> 28085
<211> 114
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (101)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28085
Pro Tyr Ser Leu Ser Ile Phe Ala Ser Pro Tyr Leu Asp Ser Gln Leu
1 5 10 15
Phe Phe Leu Ile Gly Ser Ser Cys Ser Asn Arg Leu Ile Gln Ile Tyr
20 25 30
Ala Thr Ser Glu Glu Arg Lys Gln Arg Asn Arg Gln Ala Gln Ala Ala
35 40 45
Phe Arg Glu Arg Arg Thr Glu Tyr Ile Arg Gln Leu Glu Thr Thr Ile
50 55 60
Lys Arg Asn Glu Glu Thr Leu Gln Thr Leu Gln Gln Asn His Arg Thr
65 70 75 80
Ala Ala Asp Glu Cys Leu Met Leu Arg Tyr Lys Asn Ser Leu Leu Glu
85 90 95
Arg Ile Leu Leu Xaa Lys Gly Thr Ala Thr Ile Phe Val Ser Ser Gly
100 105 110
Leu Tyr

<210> 28086
<211> 132
<212> PRT
<213> A.fumigatus

<400> 28086
Ser Ser Leu Thr Thr Leu Arg Pro Ser Ser Pro Val Val Lys Thr Ile
1 5 10 15
Arg Arg Leu Ala Ile Pro Leu Asp Met Thr Lys Arg Ala Glu Leu Leu
20 25 30
Tyr Asn Ser Glu Pro Phe Glu Leu Ala His Lys Trp Val Glu Gln Thr
35 40 45
Gly Asp Ser Tyr Ala Asp Pro Thr Arg Glu Arg Asn Gly Gly His Phe
50 55 60
Val Ser Phe Val Lys Ser Gly Gly Lys Leu Trp Glu Leu Glu Gly Ser
65 70 75 80
Arg Lys Gly Pro Leu Glu Arg Gly Ile Leu Ala Asp Asp Glu Asp Val
85 90 95
Leu Ser Pro Arg Ala Leu Asp Met Gly Leu Lys Arg Ile Leu Lys Leu
100 105 110
Asn Ala Asp Gly Gly Glu Lys Asn Leu Leu Phe Ser Cys Ile Ala Leu
115 120 125
Ala Arg Arg Pro
130

<210> 28087
<211> 384
<212> PRT
<213> A.fumigatus

<400> 28087
Leu Val Val Asn Asp Leu Ile Leu Ser Glu Glu Gln Val Ile Ser Arg
1 5 10 15

```
Tyr Thr Ala Ser Pro Ile Ser Arg Val Leu Ser Pro Lys Leu Arg Pro
            20                  25                  30
Gln Ser Val Pro Ala Ile Ser Ile Cys Leu Leu Ile Leu Leu Leu Ile
        35                  40                  45
His Thr Ser Ser Ile Tyr Leu Ile Leu Pro Gly His Ser Leu Gly Ser
    50                  55                  60
Ser Leu Leu Lys Asn Ser Thr Gln Trp Tyr Leu Thr Val His Leu Arg
65                  70                  75                  80
Ser Leu Val Ala Val Ala Ile Glu Gly Ala Pro Ser Leu Ser Val Arg
                85                  90                  95
Gly Thr Asn His Leu Lys Gly Asn Met Gly Ser Ala Met Leu Ser Gly
            100                 105                 110
Leu Leu Asp Ala Thr Arg Arg Thr Thr Asp Ser Asn Gly Ser Pro Ser
        115                 120                 125
Ala Lys Ile Ser Arg Phe Ile Val Ser Thr Lys Ser Ala Ala Ser Ala
    130                 135                 140
His Arg Leu Gly Glu Glu Phe Gln Ala Asp Lys Asp Arg Val Asp Ile
145                 150                 155                 160
Arg His Ser Asp Asn Leu Leu Ala Met Gln Glu Ala Asp Ile Val Leu
                165                 170                 175
Leu Ala Cys Lys Pro Tyr Leu Ala Glu Glu Val Leu Gly Glu Leu Gly
            180                 185                 190
Val Arg Glu Ala Leu Ala Gly Lys Leu Val Ile Ser Ile Met Ala Gly
        195                 200                 205
Lys Ser Pro Glu Asp Ile Glu Lys Tyr Ile Tyr Arg Asp Thr Pro Ala
    210                 215                 220
Asp Asp Ala Glu Ser Lys Ala Ile Ile Val Arg Ala Met Pro Asn Val
225                 230                 235                 240
Ala Ala Arg Leu Arg Gln Ser Met Thr Ile Ile Glu Ile Asn Asn Asn
                245                 250                 255
Leu Ser His Asp Ile Ala Asp Thr Leu Thr Trp Ile Phe Glu Gln Ile
            260                 265                 270
Gly Lys Val Lys Phe Leu Ala Ala Asp Leu Phe Asp Ile Gly Thr Met
        275                 280                 285
Leu Val Gly Ser Ser Ile Ala Val Leu Thr Val Pro Leu Asp Gly Ile
    290                 295                 300
Leu Asp Gly Cys Val Ala Glu Gly Leu Arg Arg Ala Asp Ala Leu Glu
305                 310                 315                 320
Met Ala Ala Gln Asn Leu Ile Gly Met Ala Gly Leu Leu Arg Glu Gly
                325                 330                 335
Val His Pro Ala Ile Leu Arg Glu Ser Ile Ser Ser Pro Arg Gly Cys
            340                 345                 350
Thr Ile Gln Gly Leu Leu Ala Val Glu Lys Glu Gly Met Arg Gly Ala
        355                 360                 365
Cys Ala Gln Ala Met Ile Asn Gly Ala Arg His Leu Lys Glu Ile His
    370                 375                 380
```

<210> 28088
<211> 82
<212> PRT
<213> A.fumigatus

<400> 28088

```
Ile His Cys Ile Pro Asn Phe Ser Gly Ser Phe Pro Glu Ala Glu Thr
1               5                   10                  15
Pro Ile Gly Ser Arg Asn Ile Tyr Leu Pro Leu Asp Leu Val Ala His
```

```
            20                  25                  30
Thr Tyr Phe Val Tyr Leu Ser Asn Ser Ser Trp Ala Leu Ser Gly Leu
        35                  40                  45
Val Thr Thr Glu Lys Phe Asn Thr Met Val Ser Asp Arg Thr Leu Ala
    50                  55                  60
Phe Ile Gly Cys Gly Ser Tyr Arg Arg Gly Pro Phe Thr Glu Arg Pro
65                  70                  75                  80
Trp Asn
```

<210> 28089
<211> 356
<212> PRT
<213> A.fumigatus

<400> 28089

```
Arg Leu Arg His Lys Leu Ser Glu Glu Arg Val Ser Ile Cys Cys Leu
1               5                   10                  15
Arg Ile Gly Gln Asp Ile Asp Asn Lys Ser Ser Pro Ser Glu Leu Arg
            20                  25                  30
Gln Leu Leu Pro His Leu Pro Cys Thr Val His Asn Gln Glu Gln Tyr
        35                  40                  45
Leu Leu Pro Ile Ile Tyr Tyr His Tyr Lys Lys Lys Ser Ser Asp Thr
    50                  55                  60
Gly Gly Ser His Ile Arg Thr Pro Thr Val Lys Ser Ile Gly Ser Pro
65                  70                  75                  80
Ile Ser Thr Pro His Ser Pro Arg Val Thr Glu Thr Thr Gln Lys Cys
                85                  90                  95
Pro Leu Thr Lys Val His Thr Thr Phe Arg Thr Glu Ile Arg Thr Asn
            100                 105                 110
Pro His Arg Lys His Ala Lys Arg His Val Phe Phe Ser Thr Val Glu
        115                 120                 125
His Asn Thr Thr Asp Pro Ser Ile Pro Gln Gln Pro Thr Arg Arg Arg
    130                 135                 140
Arg Pro Asp Leu Ser Thr Phe Phe Ser Thr Leu Ser Gln Ile Ser Pro
145                 150                 155                 160
Asp Glu His Arg Ser Arg Pro His Ala Val Pro Val Pro Arg Asp Val
                165                 170                 175
Ser Ala Ala Phe Tyr Thr Leu Ala Glu Ala Leu Glu Val Met Arg Arg
            180                 185                 190
Glu Ser Glu Gly Gly Gly Ala Ser Ala Gly Ser Arg Glu Gly Gly Asn
        195                 200                 205
Gly Asp Gly Asp Gly Asp Asp Leu Leu Ser Gln Met Ile Gln Thr Leu
    210                 215                 220
Leu Arg Glu Ala Asp Thr Pro Pro Lys Glu Val Glu Gly Val Ser Glu
225                 230                 235                 240
Glu Phe Cys Asp Ser Arg Ser Leu Arg Cys Val Met Arg Ala Ser Leu
                245                 250                 255
Glu Arg Glu Leu Thr Ser Gly Val Val Leu Asp Arg Val Pro Arg Thr
            260                 265                 270
Ser Leu Lys Glu Thr Gln Thr Cys Pro Ile Cys Asn Asn Pro Phe Leu
        275                 280                 285
Glu Asp Glu Tyr Pro Leu Val Val Arg Leu Pro Cys His Ser Thr His
    290                 295                 300
Leu Phe Asp Leu Glu Cys Ile Arg Pro Trp Leu Arg Leu Arg Gly Thr
305                 310                 315                 320
```

```
Cys Pro Leu Asp Arg Thr Asp Phe Ala Lys Gln Glu Arg Glu Lys Ala
                325                 330                 335
Glu Ala Arg Arg Lys Lys Pro Val Glu Asp Asp Glu Glu Glu Trp Asp
            340                 345                 350
Gly Met Tyr Gly
        355

<210> 28090
<211> 116
<212> PRT
<213> A.fumigatus

<400> 28090
Ile Gly Gly Arg Ile Leu Lys Lys Leu Val Ala Leu Val Leu Ser Ser
1               5                   10                  15
Gly Val Gly Lys Cys Pro Glu Val Gln Tyr Gln Ile Arg Arg His Gly
            20                  25                  30
Gly Val Glu Thr Ile Leu Ser Gly Thr Asn Phe Asp Ala His Thr Pro
        35                  40                  45
Tyr Ile Lys Glu His Ala Val Met Cys Leu Lys Phe Leu Leu Glu Gly
    50                  55                  60
Asn Arg Glu Asn Gln Lys Leu Val Glu Ala Leu Glu Ala Arg Glu Val
65                  70                  75                  80
Val Arg Asp Glu Asn Gly Leu Leu Glu Arg Ser Gly Phe Glu Ala Val
                85                  90                  95
Ile Asp Lys Thr Gly Lys Leu Ala Ile Arg Leu Lys Glu Gly Gln Pro
            100                 105                 110
Ser Glu Lys Lys
        115

<210> 28091
<211> 74
<212> PRT
<213> A.fumigatus

<400> 28091
Arg Ser Asn Phe Leu Phe Ser Ala Asp Asn Met Ser Tyr Ser Ser Met
1               5                   10                  15
Ala Val Arg Tyr Phe Thr Ala Pro Lys Pro Leu Gly Gly Val Met Glu
            20                  25                  30
Ala Pro Arg Ser Gln Pro Ser Val Asp Ala Arg Val Asn Ala Ser Asn
        35                  40                  45
Pro Thr Ser Val Asn Gly Gly Ser Ala Pro Ala Gln Ser Arg Val Phe
    50                  55                  60
Thr Thr Gly Leu Glu Gly Pro Ala Leu Lys
65                  70

<210> 28092
<211> 81
<212> PRT
<213> A.fumigatus

<400> 28092
Trp Phe Gln Glu Gly Tyr Leu Ser Arg Leu Phe Gly Ser Val Asp Trp
1               5                   10                  15
Arg Cys Ser Thr Ser Tyr Val Ile Pro Met Lys Arg Val Asn Asp Ser
```

```
            20                  25                  30
Pro Ala Ala Thr Thr Ser Leu Tyr Leu Phe Thr Asn Ile Ile Arg Phe
        35                  40                  45
Leu Leu His Leu Asn Arg Leu Asn Gln Leu Thr Arg Glu Ser Asn Ala
    50                  55                  60
Glu Thr Val Tyr Phe Arg Pro Ile Glu Lys Val Asp Arg Pro Val His
65                  70                  75                  80
Asp
```

<210> 28093
<211> 99
<212> PRT
<213> A.fumigatus

<400> 28093

```
Gln Val Pro Ser Gln Asp Leu Pro Pro Pro Pro Tyr Asp Asn Lys Pro
1               5                   10                  15
Pro Ser Asn Met Lys Ser Ser Ala Pro Lys Tyr Thr Pro Tyr Ser Asp
            20                  25                  30
Thr Pro His Thr Ser Ile Thr Ile Pro Pro Thr Phe Gln Arg Phe Glu
        35                  40                  45
Leu Asp Pro Arg Asp Thr Ile Tyr Pro Ser Ser Pro Ser Pro Ala Leu
    50                  55                  60
Ala Lys Arg Val Arg Arg Cys Cys Cys Gly Ile Leu Ile Gly Phe Val
65                  70                  75                  80
Val Ala Thr Val Leu Phe Tyr Val Trp Leu Tyr Leu Ala Phe Gln Asn
                85                  90                  95
Trp Arg Phe
```

<210> 28094
<211> 110
<212> PRT
<213> A.fumigatus

<400> 28094

```
Arg Pro Gly Gly Ile Ala Val Ala Val Gly Ile Phe Asn Val Pro Ser
1               5                   10                  15
Phe Thr Leu Ala Arg Ala Ile Gly Gly Ile Ile Ala Trp Trp Trp Ser
            20                  25                  30
Arg Lys His Thr Asn Thr Thr Thr Ser Asn Ile Pro Gly Glu Thr Val
        35                  40                  45
Ala Asp Leu Pro Pro Gly Ala Ser Arg Val Pro Ala Ala Val Ala Gly
    50                  55                  60
Lys Thr Ala Glu Gln Ala Ala Arg Glu Ala Asp Ala Ala Ser Ser Ser
65                  70                  75                  80
Val Val Val Leu Ala Ser Gly Leu Ile Leu Gly Glu Gly Ile Ile Ser
                85                  90                  95
Ile Val Asn Leu Leu Leu Ala Ser Gly Asn Val Pro His Leu
            100                 105                 110
```

<210> 28095
<211> 274
<212> PRT
<213> A.fumigatus

<400> 28095
Gly Arg Thr Ser Phe His Ala Ala Val Lys Thr Phe Gly Pro Gly Gly
1 5 10 15
Ala Thr Gly Pro Pro Pro Pro Gly Pro Ser Asn Val His Arg Val Gln
20 25 30
Met Asp Phe Gln Pro Ser Met Glu Asp Glu Leu Glu Leu Arg Ala Gly
35 40 45
Gln Leu Val Arg Leu Leu His Glu Tyr Asp Asp Gly Trp Ala Leu Cys
50 55 60
Val Arg Leu Asp Arg Ser Gln Gln Gly Val Val Pro Arg Ser Cys Leu
65 70 75 80
Ser Ala Arg Pro Val Lys Pro Arg Ala Arg Pro Pro Pro Gly Ala Gly
85 90 95
Pro Gly Pro Gly Pro Arg Gly Pro Pro Arg Pro Pro Met Met Gly Pro
100 105 110
Asn Gly Pro Trp Ala Pro Pro Pro Gly Pro Pro Gly Pro Ala Gly Pro
115 120 125
Val Gly Pro Met Gly Pro Pro Pro Pro Gly Phe Tyr Pro His Asp Pro
130 135 140
Arg Pro Arg Ser Pro Ser Ala Pro Arg Pro Met Ser Pro Ala Gln His
145 150 155 160
Pro His Gly Gly Pro Pro Pro Pro Arg Pro Tyr Pro Gln His Pro Met
165 170 175
Ser Pro Ala Gln Phe Pro Pro Thr Pro Arg Ser Phe Ser Pro Gly Pro
180 185 190
Gly Gly Arg Pro Met Pro Pro Arg Ser Met Ser Pro Gly Pro Tyr Gly
195 200 205
Pro Pro Gly Leu Gln Arg Pro Glu Met Pro Ala Ser Gln Arg Lys Arg
210 215 220
Ser Asn Ser Ala Gly Arg Val Ser Gly Thr Tyr Ser Ser Phe Thr Arg
225 230 235 240
Ile Thr Arg Thr Lys Pro Ser Ser Arg Pro Asn Asp Ala Thr Ser Val
245 250 255
Gln Cys Pro Pro Ser Asn Ser His Pro Ala Thr Ala Ala Ser Thr Gly
260 265 270
Ser Arg

<210> 28096
<211> 71
<212> PRT
<213> A.fumigatus

<400> 28096
Ile Asp Ser His Gly Ser Leu Met Glu Gly Phe Trp Phe Tyr Ser Gly
1 5 10 15
Phe Ser Pro Asn Gly Leu Leu Leu Ser Arg Leu Lys Arg Arg Pro Lys
20 25 30
Ile Ile Lys Asp Val Thr Gln Leu Val Leu Ser Arg Arg Thr Arg Met
35 40 45
Cys Asn Phe Leu Glu Tyr Lys Gly Met Leu Leu Phe Pro Thr Asp Cys
50 55 60
Leu Arg Thr Leu Gln His Gln
65 70

<210> 28097
<211> 101
<212> PRT
<213> A.fumigatus

<400> 28097
Leu Leu Ser Phe Ser Phe Leu Asp Thr Lys Val Val Tyr Arg Arg Tyr
1 5 10 15
Ala Ser Leu Phe Phe Ile Ala Gly Cys Ala Ser Thr Asp Asn Glu Leu
20 25 30
Ile Thr Leu Glu Ile Val His Arg Tyr Val Glu Gln Met Asp Lys Tyr
35 40 45
Tyr Gly Asn Val Cys Glu Leu Asp Ile Ile Phe Asn Phe Gln Lys Ala
50 55 60
Tyr Phe Ile Leu Asp Glu Leu Leu Leu Ala Gly Glu Met Gln Glu Ser
65 70 75 80
Ser Lys Lys Asn Val Leu Arg Cys Ile Ser Gln Gln Asp Ser Leu Glu
85 90 95
Asp Ile Glu Val Ser
100

<210> 28098
<211> 85
<212> PRT
<213> A.fumigatus

<400> 28098
Phe Ser Leu Ile Pro Arg Ile Pro Cys Leu His Pro Pro Pro Gln Cys
1 5 10 15
Val Glu Val Val Ser Ala Met Arg Leu Ile Ser Leu Thr Pro Pro Ser
20 25 30
Ala Cys Leu Pro Ala Ser Asp Pro Val Tyr Val Arg Glu Ala Ala Ala
35 40 45
Asn His Pro Ser Ile Ala Pro Ile Phe Ile Ser Pro Thr His Tyr Ile
50 55 60
Ser Asn Thr Ile Val Ile Arg Trp Val Leu Leu Ala Ser Ser Asp Val
65 70 75 80
Asn Thr Ser His Val
85

<210> 28099
<211> 278
<212> PRT
<213> A.fumigatus

<400> 28099
Met Ala Asp Thr Leu Lys Thr Gly Glu Pro Ser Gly Trp Arg Ile Pro
1 5 10 15
Lys Ala Cys Gln Glu Cys Arg Lys Arg Lys Ile Lys Cys Asn Gly Val
20 25 30
Asn Pro Cys Lys Thr Cys Arg Val Arg Asn Thr Leu Cys Val Tyr Arg
35 40 45
Asp Val Ile Arg Gln Arg Lys Lys Lys Arg His Gly Pro Val Asp Glu
50 55 60
Gly Leu Ala Ser Cys Glu Ser Thr Arg Thr Glu Leu Gly Thr Gln Gln
65 70 75 80

```
Pro Ser Ser Pro Pro Pro Gln Pro Leu Gly Arg Arg Asn Lys Ser Ala
                85                  90                  95
Ser Tyr Thr Phe His Asn Ser Val Ser Ala Thr His Met Thr Ser Pro
            100                 105                 110
Ser Cys Lys Val Gln Leu Tyr Tyr Gly Pro Thr Ser His Phe Thr Leu
        115                 120                 125
Met His Glu Ile Tyr Arg Gly Leu Val Ser Asn Gln Thr Thr His Pro
    130                 135                 140
Glu Glu Pro Gln Gly Glu Val Glu Glu Ala Gly Ala Gly Leu Asp Met
145                 150                 155                 160
Phe Ser Val Arg Gly Ile Phe Phe Gly Thr Pro Ala Glu Thr His Asp
                165                 170                 175
Pro Asn Lys Gly Ile Gly Thr Thr Val Ala Pro Val Met Phe Met Pro
            180                 185                 190
Tyr Glu Leu Ala Arg Val Phe Leu Gln Arg Phe Leu Ser Thr Leu Tyr
        195                 200                 205
His Leu Val Pro Phe Trp Ser Lys Glu Leu Tyr Glu Arg Gln Leu Glu
    210                 215                 220
Thr Leu Tyr Leu Pro Ser Ser Gly Thr Gly Ser Asp Thr Cys Thr Asn
225                 230                 235                 240
Ser Ile Leu Leu Met Ala Leu Ala Met Gly Ser Leu Gly Thr Gln Arg
                245                 250                 255
Tyr Arg Trp Gly Arg Ile Phe Trp Leu Asn Gly Ser Arg Arg Leu Val
            260                 265                 270
Leu Pro Gly Asn Asn Trp
        275
```

<210> 28100
<211> 208
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (7)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28100

```
Arg Gly Ser Leu Ala Arg Xaa Gly Glu Asp Tyr Arg Ser Gly Val Lys
1               5                   10                  15
Lys Glu Ser Gly Leu Asn Pro Ala Glu Pro Gly Ala Lys Ala His Pro
            20                  25                  30
Gly His Val Ser Asn Ile Leu His Ala Ser Val Asn Glu Gly Asp Thr
        35                  40                  45
Ile Lys Val Ser His Pro Phe Gly Asp Phe Phe Leu Ser Asp Ala Lys
    50                  55                  60
Ala Ala His Pro Val Val Leu Leu Ser Ala Gly Val Gly Leu Thr Pro
65                  70                  75                  80
Met Thr Ser Ile Leu Asn Thr Leu Thr Ser Gln Ala Pro Glu Arg Lys
                85                  90                  95
Val Ser Phe Ile His Gly Ala Arg Asn Ala Arg Ala Arg Ala Phe Lys
            100                 105                 110
Asn His Ile Thr Ser Leu Glu Gln Lys Leu Pro Asn Leu Lys Ser Thr
        115                 120                 125
Phe Phe Thr Ser His Pro Thr Glu Glu Asp Lys Glu Gly Asp Asp Tyr
    130                 135                 140
```

```
Gln Phe Arg Gly Arg Val Asp Leu Ser Gln Leu Asp Ser Asn Arg Asp
145                 150                 155                 160
Leu Phe Leu Asp Asp Ala Thr Thr Glu Tyr Tyr Val Cys Gly Pro Asp
                165                 170                 175
Thr Phe Met Thr Asp Met Leu Asn Val Leu Lys Ser Lys Gly Val Ser
            180                 185                 190
Glu Asp Arg Val Lys Leu Glu Leu Phe Gly Thr Gly Gly Val Pro His
        195                 200                 205
```

<210> 28101
<211> 120
<212> PRT
<213> A.fumigatus

<400> 28101

```
Ile Ile Ser Thr His Glu Leu Arg Leu Ser Asp Arg Phe Leu Ser Ile
1               5                   10                  15
Ser Arg Met Phe His Ile Arg Asp Ile Ile Tyr Ser Arg Ile Leu His
            20                  25                  30
Glu Tyr Ser Ser Ala Glu Tyr Ile Phe Arg Tyr Ser Asn Ile Lys Ala
        35                  40                  45
Thr Asn Ser Ile Lys Ile Gln Asn Tyr Lys Thr Thr Lys Leu Gln Tyr
    50                  55                  60
Asn Tyr Val Lys Met Ser His Leu Thr Tyr Tyr Asn Tyr Asp Gly Val
65                  70                  75                  80
Gly Lys Ala Lys Gln Ala Gln Phe Lys Tyr Ser Gln Ala Val Ser Val
                85                  90                  95
Gly Asp Arg Ile Glu Cys Ala Gly Gln Gly Thr Pro Leu Pro Ser His
            100                 105                 110
Ser Pro Pro Thr His Pro His Ser
        115                 120
```

<210> 28102
<211> 65
<212> PRT
<213> A.fumigatus

<400> 28102

```
Asp Gln Thr Arg Gln Ile Ser Thr Gln Pro Pro Leu Gln Ala Ser Thr
1               5                   10                  15
Gly Ala Cys Gln Pro Phe Ile Phe Ile Glu Ile Ser Lys Gln Ile Leu
            20                  25                  30
Leu Tyr Gln Ile Cys Ile Ile Tyr Asn Ala Ser Cys Lys Thr Lys Asp
        35                  40                  45
Glu Gly Lys Lys Pro Arg Thr Leu Leu Gly Arg Ser Pro Arg Phe Lys
    50                  55                  60
Ile
65
```

<210> 28103
<211> 69
<212> PRT
<213> A.fumigatus

<400> 28103

```
Glu Tyr Leu Ile Lys Asn His Ser Ser Leu Arg Lys His Pro Ser Ile
```

```
1               5                   10                  15
Pro Tyr Lys Ile Cys Phe Ile Met Lys Ile Ser Leu Ala Leu Ser Ala
            20                  25                  30
Leu Ala Leu Leu Ala Cys Pro Ala Thr Ala Val Asp Leu Asp Leu Thr
        35                  40                  45
Lys Asp Cys Gly Ala Pro Phe Ser Ala Trp Trp Asn Lys Cys Thr Gln
    50                  55                  60
Ala Ala Ser Asn Cys
65
```

<210> 28104
<211> 174
<212> PRT
<213> A.fumigatus

<400> 28104

```
Ile Gln Thr Met Thr Ile Arg Ile Lys Trp Leu Arg Gly Ile Gln Leu
1               5                   10                  15
Pro Arg His Thr Asn Thr Ser Ile Ser Thr Ser Ser Thr Pro Ser Ser
            20                  25                  30
Ser Thr Ser Ala Ala Ser Ser Ala Ala Ser Ser Ser Thr Pro Thr Ala
        35                  40                  45
Ala Ser Ala Ile Ser Ala Thr Ala Ala Pro Ala Pro Ala Pro Ala Ser
    50                  55                  60
Thr Thr Thr Pro Thr Ala Arg Thr Thr Val Gly Thr Ala Ser Ser Arg
65                  70                  75                  80
Ser Gly Leu Arg Pro Thr Ser Ser Thr Pro Ser Ser Glu Thr Asp Arg
                85                  90                  95
His Arg Lys Val Arg Ile Arg Asp Thr Gly Val Leu His Arg Pro Ser
            100                 105                 110
Cys Ile Leu Pro Arg Arg Ile Ala Pro Leu Arg Ala Pro Glu His Gln
        115                 120                 125
Phe Pro Phe Leu Gly Cys Pro Arg Arg Val Ser Leu Leu Pro His Val
    130                 135                 140
Leu Val Gly Leu Asn Gly Glu Pro Val Ile Arg Asn Pro Leu Arg Asp
145                 150                 155                 160
Glu Glu Val Val Val Arg Ala Ala Leu Gln Arg Val Asp Ile
                165                 170
```

<210> 28105
<211> 134
<212> PRT
<213> A.fumigatus

<400> 28105

```
Glu Ala Tyr Asn Phe Pro Asp Ile Pro Thr Pro Ala Tyr Gln Pro Pro
1               5                   10                  15
Pro Leu Pro Pro Pro Pro Pro Pro Leu Pro Pro Pro Gln Pro Pro Pro
            20                  25                  30
Pro Leu Pro Leu Pro Pro Pro Leu Ser Pro Leu Pro Gln Pro Pro Pro
        35                  40                  45
Pro Pro Pro Pro Pro Pro Gln Leu Pro Gln Leu Ala Pro Gln Leu Ala
    50                  55                  60
Pro Gln Ala Ala Ala Val Ala Cys Val Pro Gln Ala Pro His Pro Val
65                  70                  75                  80
Val Lys Leu Thr Asp Thr Gly Lys Phe Ala Phe Gly Ile Arg Val Tyr
```

```
                85                  90                  95
Ser Thr Ala Gln Val Ala Tyr Ser Pro Gly Gly Ser Leu Pro Ser Ala
            100                 105                 110
Pro Gln Asn Thr Ser Ser Arg Ser Trp Ala Val Arg Gly Glu Tyr Arg
        115                 120                 125
Phe Ser Arg Met Ser Ser
    130
```

<210> 28106
<211> 108
<212> PRT
<213> A.fumigatus

<400> 28106

```
Ser Leu His Asn Ala Cys Ala Asp Leu Arg Pro Pro Met Val Glu Tyr
1               5                   10                  15
Gly Val Ile Ser Val Ala Val Thr Leu Ala Ala Thr Pro Ala Pro Thr
            20                  25                  30
Leu Leu Ile Leu Cys Met Ser Thr Gly Thr Thr Gly Pro Asp Ser Thr
        35                  40                  45
Asn Pro Ser Ile Pro Ile Asn Ser Ser Ser Pro Gly Thr Ala Pro Lys
    50                  55                  60
His Ser Ala Ala Thr Arg Ser Asn Ala Gly Pro Ala His Ser Pro Asn
65                  70                  75                  80
Thr Ser Gly Pro Ser Pro Leu Thr Pro Gly Gln Ser Ser Pro Cys Thr
                85                  90                  95
Ser Pro Glu Thr Asn Ala Pro Ile Pro Arg Pro Asn
            100                 105
```

<210> 28107
<211> 319
<212> PRT
<213> A.fumigatus

<400> 28107

```
Arg Met Arg Gly Ser Ser Ala Ser Tyr Gly Arg Ile Arg Ser Asp Ile
1               5                   10                  15
Arg Arg Cys His Phe Gly Cys Tyr Thr Gly Pro Asp Val Ile Asp Ser
            20                  25                  30
Leu His Glu Tyr Trp Tyr Asp Trp Ala Gly Phe His Lys Pro Leu Tyr
        35                  40                  45
Pro His Gln Phe Leu Phe Pro Trp Asp Cys Thr Glu Ala Leu Arg Arg
    50                  55                  60
Tyr Pro Val Lys Cys Gly Thr Cys Thr Leu Ser Lys His Val Trp Ala
65                  70                  75                  80
Phe Pro Phe Asp Ser Trp Ser Ile Ile Ala Leu His Leu Ser Arg Asp
                85                  90                  95
Lys Cys Ala Tyr Pro Ala Ser Glu Leu Ser Pro Asn Ser Pro Ser Asp
            100                 105                 110
Ala Ser Trp Ile Thr Asn Arg Leu Thr Leu Leu Thr Ala Leu Asp Thr
        115                 120                 125
Leu Ser Ala Gly Ala Thr Ala Met Ser Gln Ser Leu Pro Phe Gln Ser
    130                 135                 140
Ala Thr Gln Trp Phe His Leu Gln Leu Glu Pro Ser Thr Asp Arg Ile
145                 150                 155                 160
Lys Leu Gly Gly Ile Asn Arg Ala Gln Ser Tyr Ile His Ala Leu Glu
```

```
                165                 170                 175
Arg Arg Thr His Asp Asp Phe Phe Val Ala Lys Trp Val Ser Asp Asp
            180                 185                 190
Arg Leu Pro Ile Gln Thr Tyr Glu Asp Met Arg Glu Lys Arg Tyr Ser
        195                 200                 205
Pro Arg Thr Ala Gln Glu Arg Glu Leu Val Phe Trp Gly Ala Glu Gly
    210                 215                 220
Ser Asp Pro Pro Gly Glu Tyr Ala Thr Trp Ala Val Glu Tyr Thr Arg
225                 230                 235                 240
Ile Pro Asn Ala Asn Phe Pro Val Ser Val Ser Phe Thr Thr Gly Cys
                245                 250                 255
Gly Ala Cys Gly Thr Gln Ala Thr Ala Ala Ala Cys Gly Ala Asn Cys
            260                 265                 270
Gly Ala Ser Cys Gly Ser Cys Gly Gly Gly Gly Gly Gly Gly Gly Gly
        275                 280                 285
Cys Gly Ser Gly Asp Ser Gly Gly Gly Ser Gly Ser Gly Gly Gly Gly
    290                 295                 300
Cys Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Ser Gly Gly Gly
305                 310                 315
```

<210> 28108
<211> 163
<212> PRT
<213> A.fumigatus

<400> 28108

```
Gly Gln Ser Pro Val Ser Ile Ser Phe Leu Leu Ala Met Gln Thr Thr
1               5                   10                  15
Asp Ala Ala Ser Ile Ser Asn Arg Leu Met His Ser Lys Phe Ser Ser
            20                  25                  30
Leu Asn Ala Asp Asn Thr Gly Phe Ser His Gly Ala Tyr Asn Ser Asn
        35                  40                  45
Leu Pro Val Gln Gly Phe Ala Asp Arg Asn Ala Arg Arg Pro Asn Ile
    50                  55                  60
Pro His Ile Asn Thr Ser Asn Pro Ala Ser Thr Arg Ser Asp Gly Met
65                  70                  75                  80
Ala Asn Ser Gly Thr Ala Phe Asp Met Asn Phe Thr Pro Leu Leu Pro
                85                  90                  95
Ser Gln Leu Leu Leu Gly Ser Pro Phe Gln Pro Gly Thr Pro Ser Ala
            100                 105                 110
Phe Ala Ser Pro Gln Phe Ala Asn Phe Gly Gly Phe Ser Gln Ala Ser
        115                 120                 125
Ala Ser Ala His Ala Gln Asn His Gln Thr Gln Leu Gly Ser Pro Thr
    130                 135                 140
Gln Ala Ala Pro Asn Ala Gly Leu Tyr Ser Gly Met Met Ala Thr Asp
145                 150                 155                 160
Gly Leu Ala
```

<210> 28109
<211> 67
<212> PRT
<213> A.fumigatus

<400> 28109

```
Leu Phe Pro Leu Asn Ala Thr Leu Lys Gln Ser Ser Glu Leu Pro Tyr
```

```
1               5                   10                  15
Ser Ile Leu Gln Thr Thr Ser Pro Thr Asn Ser Phe Arg Pro Thr Asn
            20                  25                  30
Tyr Arg Ser Arg Arg Leu Thr Leu Thr Leu Leu Phe Ser Pro Pro Ser
        35                  40                  45
Leu Glu Ser Leu Leu Arg Pro Arg Phe Val Phe Pro Pro His Pro Leu
    50                  55                  60
Ser Thr Ile
65
```

<210> 28110
<211> 64
<212> PRT
<213> A.fumigatus

<400> 28110

```
Ser Thr Val Ser Thr Leu Ser Tyr Gly Leu Arg Tyr Arg Thr Ala Ala
1               5                   10                  15
Met Pro Thr Val His Leu Leu Asp Tyr Val Ala Gly Asn Val Arg Ser
            20                  25                  30
Leu Val Asn Ala Ile Asn Lys Val Gly Phe Asp Val Glu Trp Ile Lys
        35                  40                  45
Ser Pro Ala Asp Ile Gln Asn Ala Asp Val Arg Thr Leu Leu Cys Cys
    50                  55                  60
```

<210> 28111
<211> 268
<212> PRT
<213> A.fumigatus

<400> 28111

```
Lys Leu Met Val Pro Gly Val Gly His Phe Gly His Cys Leu Ser Gln
1               5                   10                  15
Leu Ser Glu Gly Gly Phe Leu Glu Pro Ile Arg Gln His Ile Glu Leu
            20                  25                  30
Gly Lys Pro Phe Met Gly Ile Cys Val Gly Leu Gln Ala Leu Phe Glu
        35                  40                  45
Gly Ser Glu Glu Asp Pro Asp Thr Pro Gly Leu Gly Leu Ile Pro Gln
    50                  55                  60
Arg Met Gln Lys Phe Asn Ala Asp Thr Lys Ser Val Pro His Ile Gly
65                  70                  75                  80
Trp Asn Ser Ala Met Asn Thr Thr Ser Glu Arg Gln Thr Phe Tyr Gly
                85                  90                  95
Leu Asn Pro Asn Ser Lys Tyr Tyr Tyr Val His Ser Phe Ala Ala Leu
            100                 105                 110
Tyr Lys Ala Gly Val Leu Glu Asn Asp Gly Trp Ser Val Ala Thr Ala
        115                 120                 125
Thr Tyr Gly Glu Glu Glu Phe Ile Gly Ala Ile Ala Arg Glu Asn Ile
    130                 135                 140
Phe Ala Thr Gln Phe His Pro Glu Lys Ser Gly Gln Ala Gly Leu Arg
145                 150                 155                 160
Thr Leu Arg Ala Phe Leu Asn Gly Asp Lys Phe Gln Pro Leu Gly Thr
                165                 170                 175
Glu Gly Leu Glu Ala Arg Lys Arg Glu Asp Gly Leu Thr Arg Arg Ile
            180                 185                 190
Ile Ala Cys Leu Asp Val Arg Thr Asn Asp Ala Gly Asp Leu Val Val
```

```
        195                 200                 205
Thr Lys Gly Asp Gln Tyr Asp Val Arg Glu Lys Ala Gly Val Gly Ala
    210                 215                 220
Gly Gly Gln Val Arg Asn Leu Gly Lys Pro Val Asp Met Ala Lys Arg
225                 230                 235                 240
Tyr Tyr Glu Gln Gly Ala Asp Glu Val Thr Phe Leu Asn Ile Thr Val
                245                 250                 255
Phe Thr Thr Gly Val Glu Gly Ser Ala Leu Ser Asp
            260                 265
```

<210> 28112
<211> 380
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (122)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28112

```
Cys Trp Cys Leu Pro Gly Arg Ser Val Gly Ala Asn Lys Asp Thr Glu
1               5                   10                  15
Ser Ile Val Pro Ala Arg Pro Phe Arg Ile Leu Asp Ala Pro Tyr Leu
            20                  25                  30
Arg Asp Asp Phe Tyr Cys Thr Thr Leu Ala Tyr Ser Pro Thr Ser Gly
        35                  40                  45
Val Leu Ala Val Gly Leu Ala His Arg Val Tyr Val Trp Ser Glu Ile
    50                  55                  60
Phe Gly Val Leu Tyr Pro Pro Phe Ala Asp His His Pro Ser Asn Phe
65                  70                  75                  80
Val Asn Ser Leu Ser Phe Ser Ser Glu Ser Gly Gly Lys Asp Ile Leu
                85                  90                  95
Ala Val Gly Arg Arg Ser Gly Leu Val Thr Leu Trp Ser Ala Pro Glu
            100                 105                 110
Ala Glu Pro Arg Tyr Glu Ile Ser His Xaa Asn Ser Ile Thr Ser Val
        115                 120                 125
Ala Phe Arg Gln Thr Val Thr Arg Arg Phe Ser Glu Arg Phe His Asn
    130                 135                 140
Val Glu Val Asn Thr Glu Asp Leu Ala Val Gly Asp Glu Leu Gly Asn
145                 150                 155                 160
Ile Trp Tyr Tyr Ser Val Glu Trp Pro Ser Glu Glu Ile Arg Glu Gln
                165                 170                 175
Phe Gly Trp Asn Gly Ala Ile Thr Leu Leu Ala Arg Ile Ser Ala His
            180                 185                 190
Thr Gln Arg Ile Cys Gly Ile Thr Trp Ser Pro Asp Gly Ala Tyr Leu
        195                 200                 205
Ala Thr Gly Gly Asn Asp Asn Ala Cys Leu Ile Phe Glu Leu Arg Asp
    210                 215                 220
Leu Val Pro Trp Leu Gln Leu Asn Cys Ala Thr Lys Pro Cys Lys Ser
225                 230                 235                 240
Ala Gln Thr Cys Gln Ser Ile Ser Val Gln Cys Gln Asn Ala Phe Ser
                245                 250                 255
Ser Leu Ser Ala Ser Thr Ser Lys Arg Leu Phe Arg Arg Arg Asp Phe
            260                 265                 270
Leu Asn Leu Leu Pro Ser Trp Ser His Phe Arg Leu Gly Ser Ser Gln
```

```
        275                 280                 285
Thr Ser Leu Ile Lys His Thr Glu Ser Ile Ala Leu Gly Thr Glu Arg
    290                 295                 300
Thr Val Ile Ile Pro Pro Asn Arg Gln Lys His Ile Leu Ala His Ala
305                 310                 315                 320
Ala Ala Val Lys Ala Ile Ala Phe Ala Pro Trp Gln Pro Ser Leu Leu
                325                 330                 335
Ala Thr Gly Gly Gly Ser Asn Asp Arg Ala Ile His Phe Trp His Ala
            340                 345                 350
Pro Ser Gly Ala Cys Leu Ala Ser Ile Asn Val Tyr Ala Gln Val Ser
        355                 360                 365
Ser Pro Gln Gly Ala Asp Gly Ser Ala Gln Cys Thr
    370                 375                 380
```

<210> 28113
<211> 107
<212> PRT
<213> A.fumigatus

<400> 28113

```
Gln Met Arg Asn Arg Leu Thr Thr Ala Asn Ser Phe Asn Gly Ser Asn
1               5                   10                  15
Cys Arg Val Arg Leu Ile Asp Trp Lys Pro Ala Pro Leu Glu Thr Gly
            20                  25                  30
Arg Ala Asp Gly Leu Glu Ser Ile Ser Leu Glu Val Leu Asp Ser Phe
        35                  40                  45
Arg Ile Gly Asp Arg Val Leu Asn Asp Cys Gln Pro Cys Glu Glu Ile
    50                  55                  60
Val Leu Gly Asn Pro Gly Lys Asp Gly Val Ile Ala Arg Thr Met Thr
65                  70                  75                  80
Ile Pro Asp Lys Trp Arg Ser Trp Glu Arg Pro Lys Arg Tyr Ala Trp
                85                  90                  95
Ser Arg His Gln Leu Trp Ile Phe Gly Arg Ser
            100                 105
```

<210> 28114
<211> 96
<212> PRT
<213> A.fumigatus

<400> 28114

```
Leu Leu Phe Pro Gly Gln Ile Glu Arg Val Met Val Glu Asn Leu Tyr
1               5                   10                  15
Arg His Lys Thr Val Gln Val Asn Trp Asn Thr Gln Pro Val Arg Leu
            20                  25                  30
His Val Ala Pro Val Thr Lys Asp Glu Pro Glu Ala His Pro Leu Thr
        35                  40                  45
Ile Thr Val Gln Asn Lys Glu Thr Leu Gly Gln Glu Thr Ile Arg Ala
    50                  55                  60
Lys Tyr Val Val Gly Ala Asp Gly Ala His Ser Trp Leu Arg Lys Tyr
65                  70                  75                  80
Leu Asn Ile Gly Phe Ser Gly Asp Val Thr Asp Ser Thr Trp Gly Glu
                85                  90                  95
```

<210> 28115
<211> 190

<212> PRT
<213> A.fumigatus

<400> 28115
Gln Gln Lys Thr Ser Arg Ala Val Ala Ser Ala Arg His Glu Leu Gly
1 5 10 15
Pro Arg Ala Arg Val Cys Leu Ile Ser Arg Trp Ser Thr Ile Pro Thr
20 25 30
Arg Cys Arg Ser Lys Leu Thr Thr Asp Ser Pro Val Thr Ala Gly Ser
35 40 45
Ala Phe Leu Phe Ser Pro Gly Asp Ile Ser Gln Ala Leu Ala Phe Gly
50 55 60
Arg Phe Ser Arg Leu Gly Asp Trp Leu Thr Ser His Leu Pro Pro Ser
65 70 75 80
Ser Gly Leu Glu Ile Ile Thr Ile His Gly Ala Arg Arg Ala Asp Val
85 90 95
Glu Leu Met Asp Leu His Pro Ala Phe Arg Pro Trp Ser Asp Glu Glu
100 105 110
Gly Trp Asn Tyr Trp Thr Val Tyr Ala Asp Asp Asp Ser Tyr His Lys
115 120 125
Gly His Gly His Val Tyr Glu Arg Cys Gly Ile Ser Lys Glu Asp Gly
130 135 140
Val Leu Val Leu Leu Arg Pro Asp Gly Tyr Ile Ser Leu Ile Ala Ser
145 150 155 160
Phe Asp Glu Thr His Glu Leu Ile Asp Phe Phe Asp Gly Leu Gln Ser
165 170 175
Gly Pro Arg Thr Val Pro Gln Pro Glu Arg Arg Ala Asn Leu
180 185 190

<210> 28116
<211> 171
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (10),(164)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28116
Ser Leu Met Lys Ala Gly Val Trp Leu Xaa Val Met Asn Leu Val Pro
1 5 10 15
Lys Thr Asp Phe Pro Asp Ile Arg Lys Val Phe Val Val His Pro Arg
20 25 30
Ala Gly Thr Val Met Gly Val Pro Arg Glu Asp Lys Leu Val Arg Leu
35 40 45
Tyr Ile Ser Met Asp Gly Gly Asn Arg His Thr Ser Ile Asp Ala Lys
50 55 60
Ser Ile Thr Ala Glu Asn Leu Leu Gln Ala Ala Arg Ala Ile Leu Ala
65 70 75 80
Pro Tyr Arg Leu Asp Ala Ala Arg Ile Pro Trp Trp Ser Ala Tyr Cys
85 90 95
Val Gly Gln Arg Val Ala Asp Glu Phe Ala Arg His Asn Arg Ile Phe
100 105 110
Leu Ala Gly Asp Ala Val His Thr His Ser Pro Lys Ala Gly Gln Gly
115 120 125

```
Met Asn Thr Ser Ile Gln Asp Gly Tyr Asn Ile Arg Trp Lys Leu Arg
    130                 135                 140
Tyr Cys Leu Glu Gln Lys Gly Lys Pro Gly Pro Ala Leu His Ile Pro
145                 150                 155                 160
Asn Arg Ala Xaa Ala His Arg Ala Gly Ala His
                165                 170
```

<210> 28117
<211> 467
<212> PRT
<213> A.fumigatus

<400> 28117

```
Arg Gln Thr Val Arg Val Phe Ser Met Arg Lys Gln Leu Leu Arg Gln
1               5                   10                  15
Leu Leu Leu Ile Pro Phe Ala Thr Val Ala Ala Val Ala Leu Gly Ser
            20                  25                  30
Leu Ile Val Val Thr Phe Ala Leu Glu Val Phe Ile Ser Glu Val Tyr
        35                  40                  45
Val Gly Pro Leu Lys Gly Tyr Leu Glu Phe Leu Pro Thr Val Leu Phe
    50                  55                  60
Ser Leu Ser Leu Pro Thr Ile Thr Ser Lys Leu Thr Asp Ile Ala Thr
65                  70                  75                  80
Gln Leu Thr Glu Tyr Glu Asn Tyr Arg Thr Gln Asp Gln Tyr Asp Leu
                85                  90                  95
Ala Gln Thr Ala Lys Thr Phe Val Met Asn Phe Ile Thr Ala Phe Leu
            100                 105                 110
Pro Thr Leu Leu Thr Ala Phe Val Tyr Val Pro Phe Gly Ala Lys Ile
        115                 120                 125
Ile Pro Tyr Leu Asp Val Phe His Val Arg Gly Leu His Ser Ser Ile
    130                 135                 140
Ser Thr Glu Phe Gln Val Asp Thr Ser Arg Phe Gln Gln Glu Val Ile
145                 150                 155                 160
Tyr Leu Ser Val Thr Gly Gln Val Val Ser Phe Gly Glu Glu Val Ile
                165                 170                 175
Leu Pro Tyr Val Lys Lys Val Ile Trp Arg Lys Trp Arg Asp Tyr Arg
            180                 185                 190
Leu Gln Lys Thr Gln Ala Gly Arg Pro Arg Arg His Ser Lys Met Thr
        195                 200                 205
Asp Leu Leu Leu Ile Asp Ser Pro Ser Glu Ala Ala Phe Leu Thr Arg
    210                 215                 220
Ile Arg Asn Glu Ala Glu Ala Asp Glu Tyr Asn Val His Glu Asp Thr
225                 230                 235                 240
Leu Glu Met Cys Val Gln Tyr Gly Tyr Leu Ala Leu Phe Gly Val Ala
                245                 250                 255
Trp Pro Leu Val Pro Leu Leu Phe Leu Ile Asn Asn Trp Leu Glu Leu
            260                 265                 270
Arg Gly Asp Phe Phe Lys Leu Thr Leu Glu Cys Gln Arg Pro Pro Pro
        275                 280                 285
Ile Arg Ala Asp Ser Ile Gly Pro Ser Leu Gln Gly Leu Glu Phe Leu
    290                 295                 300
Thr Trp Leu Gly Thr Leu Ser Thr Ala Ser Ile Val Tyr Leu Tyr Arg
305                 310                 315                 320
Asp Gly Met Lys Glu Val His Met Ser Ser Leu Leu Leu Val Leu Phe
                325                 330                 335
Ile Ala Gln Gln Val Tyr Leu Ala Val Arg Phe Ala Val Arg Thr Gly
```

```
            340                 345                 350
Leu Gln Lys Leu Gly Ser Gly Thr Leu Arg Arg Glu Ala Ala Lys Arg
        355                 360                 365
Tyr Ala Val Arg Lys Ser Tyr Leu Glu Lys Phe Cys Ala Arg Arg Thr
    370                 375                 380
His Gly Asn Gly Lys Pro Arg Val Arg Phe Asn Asp His Val Asp Val
385                 390                 395                 400
Tyr Ser Ser Ser Thr Asp Ser Ser Pro Thr Glu Ala Leu Glu Thr Lys
                405                 410                 415
Ser Ala Thr Leu His Gln Glu Thr Ala Tyr Ala Ser Glu Arg Arg Gly
            420                 425                 430
Gly Ile Leu Gly Gly Thr Ala Leu Asp Gly Gly Gly Gly Gly Cys Glu
        435                 440                 445
Val Asp Gln Ser Val Glu Trp Arg Gly Glu Glu Ala Arg Val Ala Tyr
    450                 455                 460
Ser Cys Thr
465
```

<210> 28118
<211> 86
<212> PRT
<213> A.fumigatus

<400> 28118

```
Trp Gly Thr Asn Ile Ser Tyr Trp Leu Ser Asn Ser Leu Asp Val Gly
1               5                   10                  15
Tyr Gln Asn Gln Ser Thr Ala Trp Val Met Gly Gly Lys Asn Ile Arg
            20                  25                  30
Phe Asn Gly His Gly Tyr Gly Thr Leu Asn Gly Asn Gly Gln Val Trp
        35                  40                  45
Tyr Asp Phe Val Lys Ser Val Ser Asn Tyr Pro Arg Arg Pro His Ala
    50                  55                  60
Leu Thr Val Ala Arg Ala Ser Asn Ser Val Phe Gln Gly Leu Arg Phe
65                  70                  75                  80
Leu Gln Ser Gln Met Trp
                85
```

<210> 28119
<211> 109
<212> PRT
<213> A.fumigatus

<400> 28119

```
Gly Gly Ser His Glu Ser Tyr Ala Arg Gln Ser Cys Gln Pro Ile Val
1               5                   10                  15
Val Asp Ile Met Tyr Leu Ala Asn Ile Leu Pro Trp Val Leu Leu Pro
            20                  25                  30
Leu Ala Val Ile Ala Asp Ala Thr Thr Gly Gln Ser His Arg Arg Thr
        35                  40                  45
Cys Val Val Lys Ala Gly Gly Ser Glu Ser Val Asp Asp Thr Pro Ala
    50                  55                  60
Ile Leu Asn Ala Phe Arg Arg Cys Gly Lys Glu Gly Arg Ile Val Phe
65                  70                  75                  80
Gln Asn Thr Thr Tyr His Val Asn Ser Val Met Asn Thr Ser Gly Leu
                85                  90                  95
His Asn Cys Asp Ile Asp Leu Tyr Gly Thr Leu Leu Val
```

100 105

<210> 28120
<211> 129
<212> PRT
<213> A.fumigatus

<400> 28120
Lys Asp Asn Thr Asp Gly Ala Asp Thr Ile Tyr Ser Ser His Ile Thr
1 5 10 15
Phe Asn Asn Trp Thr Val Val Asn Gly Asp Asp Ser Ile Ser Thr Lys
20 25 30
Ala Asn Ser Thr Asp Ile Leu Ile Thr Asn Ser Val Phe Tyr Arg Gly
35 40 45
Leu Gly Ile Ala Ile Gly Ser Ile Gly Gln Tyr Lys Asp Val Phe Glu
50 55 60
Thr Ile Glu Arg Val Arg Ala Glu Asn Ile Thr Tyr Tyr Gly Thr Leu
65 70 75 80
His Ser Leu Tyr Phe Lys Thr Trp Thr Gly Glu Gln Val Asn Tyr Pro
85 90 95
Pro Asn Gly Gly Gly Gly Gly Leu Gly Cys Asn Cys Pro Leu Pro Ile
100 105 110
Pro Leu Phe Leu Asn Ile Arg Pro Pro Pro Ser Asp Val Cys Tyr Leu
115 120 125
Arg

<210> 28121
<211> 215
<212> PRT
<213> A.fumigatus

<400> 28121
Arg Pro Phe Ile Ser Gly Arg Tyr Gly Arg Arg Gly Arg Gly Ser Ala
1 5 10 15
Ser Leu Leu Pro Leu Glu Asp Cys Val Ser Asp Val Tyr Arg Phe Ala
20 25 30
Ala Arg Met Gln Thr Asp Ser Asn Asn Leu Arg Thr Ser Val Glu Ile
35 40 45
Ile Gly Tyr Ile Gly Arg Ile Asp Ser His Gly Lys Thr Gly Gln Leu
50 55 60
Gly Pro Tyr Ile Ile Gln Ser Val Phe Ile Leu Leu Gly Pro Val Leu
65 70 75 80
Phe Ala Ala Ser Val Tyr Met Val Leu Gly Arg Leu Ile Arg Ser Ile
85 90 95
Gln Ala Glu Lys His Ser Val Ile Arg Val Asn Trp Leu Thr Lys Ile
100 105 110
Phe Val Ala Ser Asp Val Leu Ser Phe Leu Ile Gln Gly Ser Gly Ala
115 120 125
Gly Leu Met Ala Asn Gly Ser Arg Ala Asp Met Gly Asn Asn Ile Val
130 135 140
Ile Ala Gly Leu Val Leu Gln Val Leu Met Phe Gly Leu Phe Met Val
145 150 155 160
Thr Ser Phe Glu Phe Glu Arg Arg Met His Arg Ala Pro Gly Gly His
165 170 175
Val Leu Asp Ala Asp Val Pro Trp Lys Thr His Leu His Val Leu Asp

```
            180                 185                 190
Ala Val Ser Ala Leu Ile Leu Ile Arg Ser Val Phe Arg Val Ile Glu
        195                 200                 205
Tyr Ala Glu Gly His Asp Gly
    210                 215

<210> 28122
<211> 254
<212> PRT
<213> A.fumigatus

<400> 28122
Tyr Leu Ile Leu Gln Trp Ile Leu Leu Ala Phe Arg Ser Trp Gln Pro
1               5                   10                  15
Ser Arg Arg Pro Leu Phe Arg Leu Thr Glu Arg Thr Phe Ser Phe Cys
            20                  25                  30
Leu Ile Lys Ala Ser Tyr Thr Ser Lys Met Arg Phe Leu Gly Ser Ile
        35                  40                  45
Ala Leu Val Leu Ser Ser Ile Ser Val Ala Ser Ala Asn Val Arg Ser
    50                  55                  60
Arg Ser Tyr Asp Thr His Glu Phe Phe Ala Leu His Leu Asp Asp Ser
65                  70                  75                  80
Ala Ser Pro Ser His Val Ala Gln Leu Leu Gly Ala Arg His Glu Gly
                85                  90                  95
Gln Ile Gly Glu Leu Ala Asn His His Thr Phe Ser Ile Pro Arg Glu
            100                 105                 110
Arg Ser Ser Asp Leu Asp Ala Leu Leu Glu Arg Ala Arg Ala Ala Arg
        115                 120                 125
Lys Ile Arg Arg Arg Ala Arg Asp Asp Ala Thr Ser Gln Glu Gln His
    130                 135                 140
Asn Asp Ala Leu Gly Gly Ile Leu Trp Ser Gln Lys Leu Ala Pro Lys
145                 150                 155                 160
Lys Arg Leu Val Lys Arg Val Pro Pro Pro Glu Arg Leu Ala Arg Thr
                165                 170                 175
Phe Ala Thr Gly Lys Glu Asp Pro Val Ala Ala Gln Ser Gln Lys Arg
            180                 185                 190
Ile Ala Ser Thr Leu Gly Ile Thr Asp Pro Ile Phe Asn Gly Gln Trp
        195                 200                 205
His Leu Phe Asn Thr Val Gln Leu Gly His Asp Leu Asn Val Thr Gly
    210                 215                 220
Val Trp Met Glu Gly Ile Thr Gly Lys Gly Val Thr Thr Ala Val Val
225                 230                 235                 240
Asp Asp Gly Leu Asp Met Tyr Cys Asn Asp Leu Lys Pro Asn
                245                 250

<210> 28123
<211> 121
<212> PRT
<213> A.fumigatus

<400> 28123
Thr His Cys Ile Lys Arg Asp Gly Leu Ser Thr Leu Val Gly Thr Gly
1               5                   10                  15
Gly Ser Met Leu Ser Gly Gly Gln Lys Gln Arg Ile Ala Ile Ala Arg
            20                  25                  30
Ala Phe Leu Arg Lys Pro Lys Ile Leu Leu Leu Asp Glu Ala Thr Ser
```

```
        35                  40                  45
Ala Leu Asp Ser Gln Ser Glu Ala Ile Val Gln Glu Ala Met Asp Ala
    50                  55                  60
Ile Arg Lys Asp Arg Thr Thr Ile Met Val Ala His Arg Leu Ser Thr
65                  70                  75                  80
Val Gln Asn Ala Asp Val Ile Cys Val Leu Gln Asp Gly Lys Leu Leu
                85                  90                  95
Glu Ile Gly Thr His Glu Gln Leu Leu Gly Lys Arg Gly Lys Tyr Trp
            100                 105                 110
Glu Met Val Ser Met Gln Ser Leu His
        115                 120
```

<210> 28124
<211> 292
<212> PRT
<213> A.fumigatus

<400> 28124

```
Arg Pro Lys Ala Pro Asn Glu Pro Val Pro Phe Ile Pro Glu Lys Asp
1               5                   10                  15
Leu Glu Val Tyr Arg Arg Tyr Arg Asp Pro Ala Phe Glu Val Gln Val
            20                  25                  30
Gly Ile His Glu Leu Leu Gly His Gly Thr Gly Lys Leu Leu Gln Glu
        35                  40                  45
Thr Ala Pro Gly Lys Tyr Asn Phe Asp Val Ser Asn Pro Pro Val Ser
    50                  55                  60
Pro Ile Thr Asn Lys Pro Val Thr Thr Trp Tyr Lys Pro Gly Gln Thr
65                  70                  75                  80
Trp Ser Ser Val Phe Gly Ala Ile Ala Ser Ser Tyr Glu Glu Cys Arg
                85                  90                  95
Ala Glu Cys Val Ala Met Val Leu Ser Cys Asp Phe Glu Ile Leu Lys
            100                 105                 110
Ile Phe Gly Phe Gly Asp Gly Gln Val Asp Leu Asn Asn Glu Ala Gly
        115                 120                 125
Asp Val Leu Phe Val Ala Tyr Leu Gln Met Ala Arg Ala Gly Leu Val
    130                 135                 140
Ala Leu Glu Phe Trp Asp Pro Lys Thr Gln Lys Trp Gly Gln Ala His
145                 150                 155                 160
Met Gln Ala Arg Tyr Ser Ile Leu Arg Thr Phe Leu Asp Ala Gly Asp
                165                 170                 175
Asp Phe Val Arg Leu Val Tyr Thr Lys Glu Asp Leu Ser Asp Leu Glu
            180                 185                 190
Ile His Leu Asp Arg Ser Lys Ile Leu Thr His Gly Arg Pro Ala Val
        195                 200                 205
Glu Arg Tyr Leu Gln Gln Leu His Ile Tyr Lys Ser Thr Ala Asp Ile
    210                 215                 220
Asp Ala Gly Lys Lys Leu Tyr Ser Asp Ile Thr Phe Val Asp Glu Trp
225                 230                 235                 240
Trp Gly Thr Lys Val Arg Asp Ile Val Leu Lys Asn Lys Ile Pro Arg
                245                 250                 255
Lys Ile Phe Val Gln Gly Asn Thr Ile Leu Asn Gly Asp Glu Val Thr
            260                 265                 270
Leu Lys Glu Tyr Glu Pro Thr Leu Glu Gly Met Ile Gln Ser Phe Val
        275                 280                 285
Glu Arg Asn Val
    290
```

<210> 28125
<211> 77
<212> PRT
<213> A.fumigatus

<400> 28125
Gly Gln Glu Met Ala Val Tyr Pro Ser Ala Gln Thr Gln Val Ala Asp
1 5 10 15
Trp Ile Gly Ala Gly Asn Gln Pro Trp Met Asp Ser Asp Cys Gln Ser
20 25 30
Glu Lys Asn Glu Glu Lys Asn Val Ala Arg Glu Ser Arg Leu Gln Gly
35 40 45
Gln Pro Arg Tyr Phe Glu Glu Gly His Pro Leu Trp His Trp Leu Glu
50 55 60
Gln Arg Phe Gln Thr Gln Cys Ser Cys Glu Leu Val Arg
65 70 75

<210> 28126
<211> 695
<212> PRT
<213> A.fumigatus

<400> 28126
Ala Glu Ile Ile Ser Glu Arg Lys Ser Thr Gly Ser Ser Asp Ala Ser
1 5 10 15
Phe Gly Asp Asp Arg Ser Ile Pro Ala Gln Ser Asp Lys Thr Leu Arg
20 25 30
Pro Thr Asn Val Glu Ser Tyr Asp Gly Cys Asp Lys Glu Arg Ala Pro
35 40 45
Ser Gly Asp Arg Arg Pro Arg Ile Arg Thr Glu Lys Ser Pro Ser Arg
50 55 60
Ser Ala Val Asp Gly Asn Asp Glu Asp Leu Pro Pro Leu Arg Gly Arg
65 70 75 80
Lys Leu Arg Asp Arg Val Lys Asp Ala Gln Ile Arg Met Ala Ser Pro
85 90 95
Ser Leu Glu Gln Phe Arg Glu Glu Ile Gly Trp Pro Pro Ala Glu Glu
100 105 110
Glu Phe Arg Arg Tyr Ser Gly Val Ser Thr Ser Ser Thr Ile Glu Ala
115 120 125
Met Ile Ile Asp Ala Pro Arg Pro Ala Asn Arg Lys Leu Arg His Thr
130 135 140
Gly Lys Arg Gln Ser Leu Arg Ser Thr Ser Ser Pro Val Thr Lys Ser
145 150 155 160
Ala Arg Thr Ser Leu Val Ser Asn Pro Asp Ser Gln His Arg Leu Val
165 170 175
His Lys Asp Ala Arg Ile Thr Glu Gln Val Arg Lys Ser Ile Ala Ser
180 185 190
Glu Thr Ser Val Pro Ala Ser Ala Thr Ala Asp Gly Pro Pro Arg Asn
195 200 205
Ile Glu Val Val Pro Val Val Val Ile Pro Glu Arg Arg Ser Ser Leu
210 215 220
Arg Ser Ser His Ser Asp Ser Arg Asn Pro Ser Lys Ala Gly Ser Arg
225 230 235 240
Arg Arg Ser Ser Gln Arg Pro Glu Ser Ala Arg Lys Asp Arg Pro Pro
245 250 255

```
Ser Leu Asp Leu Thr Arg Gln Arg Lys Arg Thr Phe Ser Asp Ser Ile
            260                 265                 270
Val Thr Ala Thr Pro Ala Ser Arg Pro Arg Gly Arg Ser Leu Gly Arg
        275                 280                 285
Arg Val Ile Leu Leu Arg Ser Ser Ser Leu Ser Ala Pro Thr Ser Arg
    290                 295                 300
Asp Ser Ser Arg Arg Pro Ser Phe Ala Ser Glu Arg Leu Pro Asn Gln
305                 310                 315                 320
Asp Leu Leu Met Asp Arg Glu Met Asp Lys Ile Pro Ile Glu Gln Leu
                325                 330                 335
Glu Pro Arg Leu Asp Asn Gln Thr Ser Asn Ala Gly Arg Trp Asp Ala
            340                 345                 350
Thr Asp Ala Pro Lys Thr Gln Ser Ile Trp Ile Gly Ile Glu Asp Met
        355                 360                 365
Thr His Leu Arg Pro Pro Ser Ile Leu Phe Thr Pro Ala Ser Val Ala
    370                 375                 380
Ser Ser Ser Pro Gly Leu Ile Glu Ile Lys Glu Ala Lys Thr Val Ala
385                 390                 395                 400
Phe Phe Pro His Asn Asn Glu Ser Leu Leu Leu Val Asp Gln Pro Val
                405                 410                 415
Arg Ala Ala Leu Asp His Pro Ala Ser Gln Pro Asp Asp Cys Gln Arg
            420                 425                 430
Gln Arg Asp Ser Arg Thr Pro Glu Asn Leu Leu Pro Gln Asp Ser Ser
        435                 440                 445
His Val His Ser Pro Leu Arg Asn Pro Arg Pro Pro Pro Asn Pro Pro
    450                 455                 460
Val Pro Asn Val Ile Pro Pro Thr Pro Glu Asp Glu Ala Asp Arg Gln
465                 470                 475                 480
Leu Arg Val Ser Asp Glu Arg Asp Glu Ser Asn Gly Ile Asn Leu Arg
                485                 490                 495
Arg Phe Gly Ser Leu Arg Arg Arg Val Val Arg Pro Arg Ser Asp Ser
            500                 505                 510
Phe Asp Arg Phe Val Arg Ser Leu Ser Val Ala Ser Ala Lys Asn Arg
        515                 520                 525
Lys Ala Gly Arg Asp Ile Asp Ser Arg Leu His Pro Phe Trp Arg Pro
    530                 535                 540
Arg Arg Phe Trp Asp Asp Ser Pro Glu Ser Glu Glu Pro Pro Gln Gln
545                 550                 555                 560
Ala Ala Arg Thr Glu Ser Asp His Ile Ile Ser Asn Ser Leu Gly Met
                565                 570                 575
Pro Gln Pro Arg Val Val Phe Asp Gly Pro Ser Leu Ala Arg Arg Ser
            580                 585                 590
Pro Phe Gln Gly Thr Asn Pro Arg Arg His Pro Lys Arg Ser Ser Ala
        595                 600                 605
Leu Ile Gly Ser Thr Met Leu Ser Pro Glu Ala Leu Arg Ser Gln Thr
    610                 615                 620
Ser Leu His Arg Arg Arg Met Leu Ser Leu Ser Trp Trp Arg Leu Arg
625                 630                 635                 640
Leu Gln Leu Gly Pro Val Arg Asn Phe Arg Arg Arg Leu Arg Arg Ser
                645                 650                 655
Leu Gln Gln Trp Glu Glu Ala Lys Arg Glu Ala Arg Arg Glu Lys Leu
            660                 665                 670
Lys Gln Lys Ile Gly Glu Ala Val Leu Val Gly Ser Ser Met Gln Ala
        675                 680                 685
Arg Asp Leu Leu Asn Arg Pro
    690                 695
```

<210> 28127
<211> 61
<212> PRT
<213> A.fumigatus

<400> 28127
Ile Ala Met Ser Ser Phe Ser Leu Ile Asp Phe Asp Gly Met His Ser
1 5 10 15
His Asp Met Asn Asp Val Tyr Asp Leu Leu Val Cys Leu Leu Val Pro
20 25 30
Cys Leu Leu Cys Arg Arg Ser Val Leu Thr Thr Leu Ala Asp Ile Tyr
35 40 45
Asp Phe Pro Tyr Glu His Asp Asp Leu Thr Pro Thr Arg
50 55 60

<210> 28128
<211> 580
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (570),(577)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28128
Arg Leu Thr Ala Arg Ser Thr Gly Thr Pro Lys Gly Val Lys Ile Ser
1 5 10 15
His Glu Thr Tyr Thr Ser Ser Ala Ile Pro Arg Ala Asn Ala Val Gly
20 25 30
Tyr Thr Glu Asp Ser Arg Val Leu Asp Phe Ala Ser Tyr Ala Phe Asp
35 40 45
Val Ser Ile Asp Ser Met Leu Leu Thr Leu Gly Asn Gly Gly Cys Leu
50 55 60
Cys Ile Pro Ser Asp Glu Asp Arg Leu Asn Asp Ile Asn Gly Val Ile
65 70 75 80
Arg Arg Met Lys Val Asn Tyr Ala Gly Leu Thr Pro Ser Val Ala Arg
85 90 95
Ile Leu Asp Ala Asp Val Ile Ser Ser Leu Ser Gly Leu Gly Leu Gly
100 105 110
Gly Glu Ala Val Ser Ala Arg Asp Val Asn Leu Trp Gly Gln Asp Thr
115 120 125
Arg Ile Ile Ile Gly Tyr Gly Pro Cys Glu Cys Thr Ile Gly Cys Thr
130 135 140
Val Asn Ser Ser Ala Ala Thr Gly Arg Asp Tyr Ile Ser Ile Gly Pro
145 150 155 160
Gly Asn Gly Ala Val Ile Trp Ile Val Asp Pro Asn Asp His Asp Ser
165 170 175
Leu Val Pro Leu Gly Ala Val Gly Glu Leu Leu Val Glu Gly Pro Ile
180 185 190
Val Gly Gln Gly Tyr Leu Asn Asp Pro Glu Lys Thr Ala Ala Ala Phe
195 200 205
Ile Glu Asp Pro Ser Trp Leu Val Ala Gly His Glu Gly Tyr Pro Gly
210 215 220
Arg Arg Gly Arg Leu Tyr Lys Thr Gly Asp Leu Gly Arg Tyr Asp Pro

```
225                 230                 235                 240
Asp Gly Ser Gly Gly Ile Val Phe Val Gly Arg Lys Asp Thr Gln Val
                245                 250                 255
Lys Leu Arg Gly Gln Arg Val Glu Leu Gly Glu Ile Glu Ser Gln Leu
            260                 265                 270
Arg Ala Arg Leu Pro Ser Glu Thr Thr Val Ile Ala Glu Val Ile Val
        275                 280                 285
Pro Gln Gly Ser Gly Gly Gln Pro Thr Leu Val Ala Phe Val Ala Ala
    290                 295                 300
Gln Thr Thr Lys Gly His Asp His Thr Gly Leu Glu Ala Ala Glu Leu
305                 310                 315                 320
Pro Asp Glu Leu Arg Arg Ala Leu Ser Glu Ala Asp Ala Glu Leu Ala
                325                 330                 335
Lys Val Leu Pro Arg Tyr Met Val Pro Thr Ala Tyr Ile Pro Val Asn
            340                 345                 350
His Ile Pro Thr Leu Ile Ser Gly Lys Thr Asp Arg Lys Arg Leu Arg
        355                 360                 365
Gln Phe Gly Ala Thr Val Asp Leu Arg Gln Leu Asp Gln Asp Ala Thr
    370                 375                 380
Asn Thr Ala Ala Arg Glu Leu Ser Asp Leu Glu Arg Arg Leu Arg Gln
385                 390                 395                 400
Ala Trp Ser Gln Thr Leu Lys Leu Gln Ala Gly Ser Ile Arg Leu Gln
                405                 410                 415
Asp Asn Phe Phe Ala Leu Gly Gly Asp Ser Leu Thr Ala Met Lys Leu
            420                 425                 430
Val Ser Val Cys Arg Ser Gln Gly Leu Asp Leu Ser Val Thr Ser Met
        435                 440                 445
Phe Ser Asn Pro Thr Leu Ser Ala Met Ala Ser Val Val Arg Ile Cys
    450                 455                 460
Asp Val Asp Val Gln Arg Thr Val Pro Ala Phe Ser Met Ile Thr Ser
465                 470                 475                 480
Asp Met Asn Ser Ala Cys Val Glu Ala Ala Glu Pro Cys Gly Val Gly
                485                 490                 495
Pro Ala Asp Ile Glu Asp Ile Tyr Pro Cys Thr Pro Thr Gln Glu Ser
            500                 505                 510
Leu Phe Thr Phe Ser Leu Lys Ser Val Lys Pro Tyr Val Ala Gln Arg
        515                 520                 525
Val Leu Cys Ile Pro Ser His Ile Asp Leu Asn Ala Trp Arg Lys Ala
    530                 535                 540
Trp Glu Asp Val Val Ala Ala Leu Pro Ile Val Arg Thr Arg Val Ala
545                 550                 555                 560
Gln Leu Pro Glu Pro Gly Leu Gln Cys Xaa Asn Arg Ala Arg Trp Lys
                565                 570                 575
Xaa Pro Ile Leu
            580
```

<210> 28129
<211> 95
<212> PRT
<213> A.fumigatus

<400> 28129

```
Arg Val Phe Asn Glu Arg Cys Cys Ser Phe Leu Arg Ile Ile Gln Val
1               5                   10                  15
Ala Leu Pro Tyr Tyr Gly Thr Phe Tyr Gln Gln Leu Ser Tyr Arg Ala
            20                  25                  30
```

```
Glu Arg His Glu Arg Ile Met Val Val Arg Ile Asp Tyr Pro Asp Tyr
        35                  40                  45
Cys Pro Ile Thr Arg Ala Asn Gly Asp Ile Val Ser Ser Arg Cys Arg
    50                  55                  60
Ala Thr Ile His Cys Ala Ser Asn Arg Ala Phe Ala Gly Pro Val Ala
65                  70                  75                  80
Asp Asn Asn Pro Gly Val Leu Thr Pro Glu Ile Asp Ile Ser Arg
                85                  90                  95
```

<210> 28130
<211> 65
<212> PRT
<213> A.fumigatus

<400> 28130

```
His Ser Ala Asp Ile Leu Pro Arg Ser Gly Lys His Ile Ser Tyr Lys
1               5                   10                  15
Gln Met Ser His Ala Ile Gln His Ala Tyr Asn Leu Ala Pro Ser Leu
            20                  25                  30
Ala Asp Gln Leu Thr Ser Ser Ala Tyr Gln Leu Asp Gln Gly Arg Gly
        35                  40                  45
Trp Ile Asp Leu Gln Asp Leu Ser Ala Leu Asn Val Ser Tyr Gln Asp
    50                  55                  60
Ala
65
```

<210> 28131
<211> 295
<212> PRT
<213> A.fumigatus

<400> 28131

```
Asn Ile Leu Lys Thr Val Ala Glu Arg Lys Arg Val Leu Asp Thr Lys
1               5                   10                  15
Ser Lys Thr Ala Cys Phe Tyr His Pro Met Lys Leu Lys His Gln Lys
            20                  25                  30
Lys Gln Tyr Lys Tyr Pro Cys Cys Gly Lys Arg His Gly Cys Ala Ser
        35                  40                  45
Leu Pro Ala His Val Tyr Ala Pro Val Pro Gly Phe Ile Leu Glu Asn
    50                  55                  60
Trp Gln Ser Tyr Gln Leu Thr Pro Ser Pro Met Pro Gly Leu Arg Pro
65                  70                  75                  80
Pro Arg Arg Val Val Ala Leu Asp Cys Glu Met Val Glu Val Lys Gly
                85                  90                  95
Gly Asp Ser Glu Val Ala Gln Val Cys Ala Val Asp Thr Leu Thr Gly
            100                 105                 110
Glu Val Ile Val Asp Ile Tyr Val Val Pro Ser Lys Thr Val Thr Asp
        115                 120                 125
Trp Arg Thr Pro Trp Ser Gly Val Ser Gln Arg Leu Leu Glu Glu Met
    130                 135                 140
Lys Glu Ala Gly Lys Thr Val Asn Gly Trp Glu Glu Ala Arg Lys Ala
145                 150                 155                 160
Leu Trp Ala His Ile Asp Ala Asp Thr Ile Leu Val Gly Gln Ser Leu
                165                 170                 175
Gln His Asp Leu Asp Val Met Arg Met Val His Leu Asn Ile Ile Asp
            180                 185                 190
```

```
Thr Ala Ile Leu Ser Arg Glu Ala Val Ala Lys Asn Cys Lys Gln Asn
        195                 200                 205
Trp Gly Leu Lys Arg Leu Cys Lys Gln Met Leu Asp Arg Asp Ile Gln
    210                 215                 220
Gln Ser Arg Gly Gly His Asp Cys Leu Glu Asp Thr Met Ala Thr Arg
225                 230                 235                 240
Glu Val Val Leu Trp Cys Val Arg His Pro Gly Lys Ile Gln Glu Trp
                245                 250                 255
Ala Val Ser Gln Arg Glu Trp Lys Lys Lys Ala Asp Ala His Gly Lys
            260                 265                 270
Leu Lys Arg Lys Glu Ser Asp Lys Ala Gln Val Lys Gln Pro Gln Lys
        275                 280                 285
Ser Val Ser Gln Val Pro Pro
    290                 295
```

<210> 28132
<211> 206
<212> PRT
<213> A.fumigatus

<400> 28132

```
Ala Ala Leu Leu Leu Gly Glu Ser Pro Tyr Ser Thr Gly Glu Asn Leu
1               5                   10                  15
Gly Lys Pro Glu Gly Gln Tyr Tyr Asp Ala Ala Pro Val Ser Pro Val
            20                  25                  30
Glu Thr Asp Pro Phe Thr Glu Gly Lys Asp Leu Ala Pro Arg Gln Pro
        35                  40                  45
Ala Thr Thr Ala Ala Asp Ser Gln Ala Pro Tyr Ala Ser Gln Tyr Tyr
    50                  55                  60
Pro Gln Gln Gly Ser Asn Ile Tyr Gly Gly Arg Pro Ala Ser Ala Asn
65                  70                  75                  80
Asp Asp Arg Ser Tyr Asp Pro Ser Val Ala Ser Ser Glu Gln Gly Asp
                85                  90                  95
Glu Glu Tyr Ser Ser Tyr Arg His Ala Gln Gly Arg Pro Ile Glu Tyr
            100                 105                 110
Pro Pro Ala Met Ser Glu Asp Ser Glu Glu Tyr Glu His Glu Pro His
        115                 120                 125
Glu Glu Asn Tyr Ala Ser Ser Ser Leu Pro Ala Ser Ser Ala Pro Leu
    130                 135                 140
Tyr Thr Pro Thr Thr Val Asp Tyr Ser Gly Ser Gly Trp Gly Val Gly
145                 150                 155                 160
Val Gly Trp Glu Ser Met Thr Pro Arg His Arg His Pro Thr Arg Leu
                165                 170                 175
Ser Asp Val Leu Glu Glu Asp Glu Pro Arg Thr Thr Pro Ser Arg Ala
            180                 185                 190
Ser Arg Ala Ser Arg Ala Ser Gln Ala Ser Arg Ser Val Gln
        195                 200                 205
```

<210> 28133
<211> 288
<212> PRT
<213> A.fumigatus

<400> 28133

```
Lys Ala Gly Thr Gln Asn Gly Ala Thr Arg Thr Ala Gln Gly Pro Val
1               5                   10                  15
```

```
Pro Val Asn His His Pro Pro Ser Gly Val Arg Thr Pro Thr Asp Ile
            20                  25                  30
Met Arg Gln Arg Arg Asp Arg Glu Ala Arg Lys Lys Ala Glu Gln Glu
        35                  40                  45
Ala Met Ala Arg Glu Gln Glu Glu Ala Glu His Arg His Gln Glu Glu
    50                  55                  60
Gln Ala Lys Gln Ala Gln Gln Thr Gln Pro Tyr Ala Ala Gly Val Ala
65                  70                  75                  80
Gly Glu Lys Pro Gly Gln Arg Gly Ala Ala Pro Arg Thr Thr Ala Ala
                85                  90                  95
Pro Gly Met Thr Thr Asn Thr Ser Gly Met Ala Arg Arg Ala Asp Ser
            100                 105                 110
Gln Ile Pro Arg Gln Pro Val Pro Pro Thr Gln Gln Val Pro Gly Ala
        115                 120                 125
Gln Gln Pro Ala Thr Ala Lys Ala Ala Ala Pro Pro Ser Thr Phe Ala
    130                 135                 140
Lys Pro Gln Gly Gln Ala Pro Ser Ala Ser Gln Ser Asp Pro Val Gln
145                 150                 155                 160
Asn Gln Gln Gln Pro Arg Arg Val Gly Phe Pro His Ala Phe Glu Arg
                165                 170                 175
Trp Glu Thr Leu Ser Ser His Trp Glu Gly Leu Thr Ser Tyr Trp Ile
            180                 185                 190
Arg Lys Leu Glu Gln Asn Asn Glu Ala Leu Glu Arg Asp Pro Leu Ser
        195                 200                 205
Gln Gln Met Ala Arg Gln Val Thr Asp Leu Ser Ala Ala Gly Ala Asn
    210                 215                 220
Leu Phe His Ala Val Val Glu Leu Gln Arg Leu Arg Ala Ser Ser Glu
225                 230                 235                 240
Arg Lys Phe Gln Arg Trp Phe Phe Asp Thr Arg Ala Glu Gln Glu Arg
                245                 250                 255
Thr Lys Glu Leu Gln Ala Glu Leu Glu Asn Gln Leu Lys Asn Asp Ala
            260                 265                 270
Gly Arg Pro Arg Arg Asn Arg Arg Leu Ser Thr Lys Gly Arg Asp Arg
        275                 280                 285

<210> 28134
<211> 113
<212> PRT
<213> A.fumigatus

<400> 28134
Ser Thr Lys Met Gln Pro Phe Ile Val Leu Phe Thr Trp Leu Met Gly
1               5                   10                  15
Thr Ala Tyr Ala Ala Pro Ala Phe Phe Asp Asn Ile Tyr Asp Tyr Ser
            20                  25                  30
Asp Glu Leu Ala Glu Phe Tyr Ser Lys Val Ser Lys Tyr Ile Asp Asp
        35                  40                  45
Ser Lys Asp Val Leu Thr Ala Thr Thr Thr Cys Asp Pro Ser Lys Ile
    50                  55                  60
Ser Leu Pro Ala Phe Ala Ser Gly Leu Pro Ser Pro Gly Asn Gln Lys
65                  70                  75                  80
Pro Leu Tyr Val Ala Val Gly Arg Gly Thr Gln Val Ser Asn Asn Cys
                85                  90                  95
Thr Ser Arg Ser His Ile Arg Arg Met Ala Asn Val Ala Asp Pro Thr
            100                 105                 110
Gln
```

<210> 28135
<211> 115
<212> PRT
<213> A.fumigatus

<400> 28135
Gly Val Lys Gln Val Lys Arg Thr Asp Leu Asp Ala Arg Phe Leu Phe
1 5 10 15
Leu Ala Pro Pro Ser Leu Glu Glu Leu Glu Lys Arg Leu Arg Gly Arg
20 25 30
Ala Thr Glu Thr Glu Glu Ser Leu Thr Val Trp Leu Ser Ser Thr Phe
35 40 45
Leu His Phe Pro Asn Ser Pro Asp Cys Pro Ala Gly Ile Leu Thr Leu
50 55 60
Arg Gln Lys Arg Leu Ala Gln Ala Lys Asn Glu Leu Glu Tyr Ala Ala
65 70 75 80
Gln Pro Gly Ser His Asp Lys Ile Val Val Asn Asp Asp Leu Glu Lys
85 90 95
Ala Tyr Lys Glu Leu Arg Asp Trp Ile Val Asp Gly Gly Asn Phe Gly
100 105 110
Ala Arg Gln
115

<210> 28136
<211> 76
<212> PRT
<213> A.fumigatus

<400> 28136
Leu Phe Thr Lys His Phe Arg Ser Cys Leu His Trp Val Leu Val Ala
1 5 10 15
Ile Leu Tyr Asp Asp Pro Arg Ser Leu Trp Tyr Ile Lys Leu Ala Met
20 25 30
Asn Ile Thr Asn Ser Ala Gly Val Leu Cys Ala Glu Tyr Asn Gly Tyr
35 40 45
Ser Ala Ser Thr Glu Asn His His Trp Thr Phe Glu Val Tyr Ser Thr
50 55 60
Gln Tyr Ser Leu Trp Phe Val Met His Glu Asp Met
65 70 75

<210> 28137
<211> 76
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (18),(62)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28137
Arg Pro Arg Ser Pro Pro Gly Thr Glu Thr Val Ser Gly Thr Gly Ile
1 5 10 15
Gly Xaa Ala Leu Gly Ala Thr Glu Leu Ser Pro Leu Leu Thr Val Thr

```
            20                  25                  30
Ile Leu Leu Ala Thr Ile Pro Asp Val Leu Ser Glu Asn Ala Lys Met
        35                  40                  45
Ala Ala Asn Glu Asn Lys Thr Ala Pro Glu Met Lys Cys Xaa Pro Arg
    50                  55                  60
Leu Arg Ala Arg Glu Gly Ser Pro Tyr Ala Arg Ala
65                  70                  75
```

<210> 28138
<211> 148
<212> PRT
<213> A.fumigatus

<400> 28138

```
Cys Ser Ala Thr Pro Thr Thr Pro His Glu Asp Ala Arg Thr Arg Thr
1               5                   10                  15
Ile Ser Lys Ser Arg Ser Arg Ser Arg Ala Lys Ser Pro Ser Arg Pro
            20                  25                  30
Thr Ser Arg Ser Arg Ser Pro Gly Pro Ser Asp Val Asp Gly Arg Arg
        35                  40                  45
Ser Val Arg Arg Ala Leu Pro Thr Val Asp Lys Asp Ala Asp Asp Arg
    50                  55                  60
Glu Arg Arg Arg Asp Ala Pro Lys Lys Ser Pro Pro Glu Asp Lys Phe
65                  70                  75                  80
Asp Glu His Ser Ala Ala Glu Asp Asp Arg Arg Ser Arg Ser Pro Ser
                85                  90                  95
Val Asp Ser Lys Arg Ser Ser His Arg Arg Asp Arg Glu Arg Glu Asp
            100                 105                 110
Arg Asn Ala Arg Arg Ser His Arg Pro His Arg Arg Ser Arg Ser Arg
        115                 120                 125
Ser Arg Ser Arg Ser Cys Asn Gly Asp Ser His Asp Val Asp Arg Leu
    130                 135                 140
Pro Arg Ile Leu
145
```

<210> 28139
<211> 164
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (24)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28139

```
Tyr Val Gly Asn Gly Gly Glu Lys Asn Ser His Cys Gln Gln Gly Thr
1               5                   10                  15
Glu Phe Gly Arg Ala Glu Ser Xaa Ser Asp Thr Cys Pro Ala His Gly
            20                  25                  30
Leu Gly Pro Arg Trp Arg Ser Arg Ser Leu Ser Arg Ser Arg Tyr Arg
        35                  40                  45
Ser Arg Ser Arg Ser Arg Leu Arg Ser Arg Ser Leu Ser Leu Ser Arg
    50                  55                  60
Ser Arg Ser Arg Ser Leu Ser Arg Ser Trp Ser Arg Ser Arg Arg Leu
65                  70                  75                  80
```

```
Glu Ser Arg Ser Arg Ser Arg Ser Arg Ser Leu Ser Arg Ser Arg Ser
                85                  90                  95
Ser Ser Arg Arg Leu Glu Arg Ser Phe Arg Glu Ile Asp Ala Leu Leu
            100                 105                 110
Ser Glu Arg Glu Ala Gly Ser Tyr Arg Ile Arg Gly Arg Arg Ser Thr
        115                 120                 125
Ser Cys Glu Ser Pro Leu Gln Leu Arg Leu Arg Leu Arg Leu Arg Leu
    130                 135                 140
Arg Arg Trp Gly Arg Cys Asp Arg Arg Ala Phe Leu Ser Ser Arg Ser
145                 150                 155                 160
Leu Ser Arg Arg
```

<210> 28140
<211> 60
<212> PRT
<213> A.fumigatus

<400> 28140

```
Met Leu Cys Ser Pro Ser Gly Arg Gln Ala Pro Ile Glu Ser Ala Gly
1               5                   10                  15
Asp Asp Arg His His Val Asn Leu Arg Cys Ser Ser Asp Ser Gly Phe
            20                  25                  30
Gly Cys Asp Ser Gly Asp Gly Val Asp Ala Thr Asp Val His Phe Cys
        35                  40                  45
Pro Pro Val Leu Tyr Pro Ala Gly Glu Thr Ile Val
    50                  55                  60
```

<210> 28141
<211> 234
<212> PRT
<213> A.fumigatus

<400> 28141

```
Glu Glu Leu Thr Val His His Tyr Arg Phe His Gly Glu Glu Thr Tyr
1               5                   10                  15
Asp Pro Ala Ser Pro Leu Thr Asp Ala Pro Thr Phe Val Val Asp Pro
            20                  25                  30
Ile Asp Gly Thr Val Asn Phe Val His Gly Phe Pro Tyr Ala Cys Ile
        35                  40                  45
Ser Leu Gly Phe Ala Ile Asp Arg Lys Pro Val Val Gly Val Val Tyr
    50                  55                  60
Asn Pro Phe Asn Asn Thr Leu Tyr Ser Ala Ile Arg Gly Glu Gly Ala
65                  70                  75                  80
Tyr Leu Asn Arg Asn Thr Lys Leu Pro Leu Asn Ala Arg Ser Leu Glu
                85                  90                  95
Pro Leu Asn Gly Leu Glu Asn Ala Leu Ile Gly Val Glu Trp Gly Ser
            100                 105                 110
Glu Arg Ala Gly Asn Asn Trp Val Thr Lys Val Arg Thr Phe Glu Lys
        115                 120                 125
Leu Gly Lys Thr Asn Gly Asp Gly Gly Ala Met Val Arg Ser Met Arg
    130                 135                 140
Ser Met Gly Ser Ala Ala Leu Asn Leu Cys Ala Val Ala Cys Gly Asn
145                 150                 155                 160
Leu Asp Leu Tyr Trp Glu Gly Gly Cys Trp Ala Trp Asp Val Cys Ala
                165                 170                 175
```

```
Gly Trp Val Ile Leu Thr Glu Ala Gly Gly Thr Ile Val Asp Gly Asn
            180                 185                 190
Pro Gly Asn Trp Glu Ala Thr Val Asp Gly Arg Lys Tyr Leu Ala Val
        195                 200                 205
Arg Gly Ser Pro Asn Gln Ala Gly Gln Lys Glu Leu Ile Glu Glu Phe
    210                 215                 220
Trp Gly His Ile Gln Gly His Leu Glu Tyr
225                 230
```

<210> 28142
<211> 332
<212> PRT
<213> A.fumigatus

<400> 28142

```
Leu Leu Glu Pro Phe Ile Met Arg Asn Gln Ile Gly Val Thr Ala Thr
1               5                   10                  15
His Glu Ser Glu Leu Glu Ala Lys Lys Asp Glu Ala His Ile Glu Glu
            20                  25                  30
Val Val Leu Ala Asn Leu Thr Glu Glu Asp Val Phe Arg Ile Ser Arg
        35                  40                  45
Glu Ala Leu Asp Leu Arg Ser Trp Thr Gly Phe Arg Leu Phe Leu Ile
    50                  55                  60
Ile Phe Val Gln Gly Cys Asn Gln Ala Gly Tyr Gly Ile Asp Trp Ala
65                  70                  75                  80
Val Ile Ser Gly Ile Asn Ala Leu Pro Ala Trp His Thr Tyr Phe Gly
                85                  90                  95
Phe Gly Thr Ser Gly Gly Thr Tyr Gly Leu Leu Asn Ala Leu Met Ser
            100                 105                 110
Ile Gly Ile Val Cys Gly Ala Pro Phe Leu Ser Leu Ala Asp Ile Ile
        115                 120                 125
Gly Arg Arg Gly Ile Asn Phe Leu Gly Asn Phe Ile Val Ile Val Gly
    130                 135                 140
Ala Val Leu Gln Gly Cys Ala Val Asn Leu Ser Met Phe Met Ala Ala
145                 150                 155                 160
Arg Phe Leu Leu Gly Phe Gly Ser Ala Leu Leu Ser Ser Ser Gln Tyr
                165                 170                 175
Val Gly Glu Val Ala Pro Thr His Leu Arg Gly Leu Ile Val Gly Ile
            180                 185                 190
Phe Gly Ala Cys Phe Gln Ile Gly Ser Leu Gly Met Asn Gly Ala Met
        195                 200                 205
Ile Gly Leu Thr Lys Ile Glu Gly Asn Trp Ser Trp Arg Leu Pro Leu
    210                 215                 220
Leu Leu Glu Ala Val Phe Pro Ala Ile Val Cys Ala Thr Ile Tyr Leu
225                 230                 235                 240
Leu Thr Pro Glu Ser Pro Arg Tyr Tyr Ile Met Arg Gly Arg Arg Asp
                245                 250                 255
Ala Ala Lys Gln Met Val Ala Arg Tyr His Thr Thr Ser Gly Asp Ile
            260                 265                 270
Asn Glu Pro Ile Val Glu Ile Val Val Ser Gln Ile Glu Ala Ser Leu
        275                 280                 285
Glu His Asp Arg Thr Gly Phe Asn Gln Phe Trp Asp Tyr Arg Val Phe
    290                 295                 300
Phe Thr Lys Met Ala Arg Phe Arg Leu Leu Val Leu Phe Val Tyr Ser
305                 310                 315                 320
Ile Phe Gln Gln Trp Asn Gly Gly Gly Ile Ile Thr
```

325 330

<210> 28143
<211> 96
<212> PRT
<213> A.fumigatus

<400> 28143
Ile Phe Thr Gly Leu Ala Thr Met Ile Leu Phe Gln Phe Ala Ala Thr
1 5 10 15
Ile Thr Ser Trp Gln Phe Asp Val Thr Gly Asn Thr Ala Ala Ala Ala
20 25 30
Leu Thr Ile Leu Trp Ile Tyr Leu Tyr Gln Thr Phe Ser Ala Met Leu
35 40 45
Ile Ala Thr Met His Asn Leu Tyr Pro Val Glu Val Leu Ser Leu Pro
50 55 60
Leu Arg Ala Lys Gly Met Gly Leu Tyr Gly Leu Ile Gln Gly Gly Ala
65 70 75 80
Gly Ala Val Gln Thr Tyr Gly Ile Ser Gly Leu His His Arg Ala Ser
85 90 95

<210> 28144
<211> 160
<212> PRT
<213> A.fumigatus

<400> 28144
Phe Arg Ser Phe Ser Pro Arg Ser Lys Leu Leu Phe Ser Arg Ser Gly
1 5 10 15
Ala Arg Ala Glu Trp Asp Val Val Gly Arg Lys Ala Asp Ile Asp Asp
20 25 30
Ala Val Val Val Asp Ala Val Leu Ser Leu Asp Gln Asp Asp Leu Asn
35 40 45
Glu Lys Leu Ile Gly Ile Lys Lys Val Thr Gly Gly Gly Leu Gln Glu
50 55 60
Ser Leu Phe Val Asn Gly Val Ala Phe Lys Lys Thr Phe Ser Tyr Ala
65 70 75 80
Gly Phe Glu Gln Gln Pro Lys Ser Phe Lys Asn Pro Lys Ile Val Cys
85 90 95
Leu Asn Val Glu Leu Glu Leu Lys Ser Glu Lys Asp Asn Ala Glu Val
100 105 110
Arg Val Glu Gln Val Ser Glu Tyr Gln Ala Ile Val Asp Ala Glu Trp
115 120 125
Gln Ile Ile Tyr Asn Lys Leu Glu Ala Ile Tyr Lys Thr Gly Ala Lys
130 135 140
Val Val Leu Ser Lys Leu Pro Ile Gly Asp Leu Ala Thr Gln Tyr Val
145 150 155 160

<210> 28145
<211> 246
<212> PRT
<213> A.fumigatus

<400> 28145
Phe Gly His Ala Val Arg Leu Lys Phe Thr Leu Tyr Val Val Asp Gly
1 5 10 15

```
Thr Leu Thr Asn Val Tyr Ala Val Tyr Arg Tyr Phe Ala Asp Arg Asp
            20                  25                  30
Ile Phe Cys Ala Gly Arg Val Ser Ala Asp Asp Met Asp Arg Val Cys
        35                  40                  45
Gln Ala Thr Gly Ala Ala Thr Gln Ser Thr Cys Ser Asp Ile His Asp
    50                  55                  60
Arg His Leu Gly Thr Cys Gly Ser Phe Glu Glu Arg Gln Ile Gly Gly
65                  70                  75                  80
Glu Arg Tyr Asn Ile Phe Ser Asp Cys Pro Gly Ala Lys Thr Cys Thr
                85                  90                  95
Leu Val Leu Arg Gly Gly Ala Glu Gln Phe Ile Ala Glu Val Glu Arg
            100                 105                 110
Ser Leu His Asp Ala Ile Met Ile Val Lys Arg Ala Leu Arg His Thr
        115                 120                 125
Thr Ile Val Ala Gly Gly Gly Ala Cys Glu Met Ala Val Ser His Tyr
    130                 135                 140
Leu His Asp Phe Ala Gln His Asp Pro Ser Lys Gln Gln Ala Val Ile
145                 150                 155                 160
Arg Ala Phe Ala Lys Ala Leu Glu Val Ile Pro Arg Gln Leu Cys Asp
                165                 170                 175
Asn Ala Gly Phe Asp Ala Thr Asp Ile Leu Asn Arg Leu Arg Val Glu
            180                 185                 190
His Arg Lys Glu Asn Thr Trp Ala Gly Val Asp Phe Asp Asn Glu Gly
        195                 200                 205
Val Arg Asp Asn Met Ala Ala Phe Val Trp Glu Pro Ser Leu Val Lys
    210                 215                 220
Val Asn Ala Ile Gln Ala Ala Val Glu Val Phe Thr Thr Gly Val Ala
225                 230                 235                 240
Gly Ala Ala Leu Glu Tyr
                245
```

<210> 28146
<211> 190
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (112),(114)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28146

```
Glu Leu Arg Val Leu Ala Ala Leu Glu Glu Leu Arg Ile Asn Gly Leu
1               5                   10                  15
Asp His Val Asp Gly Ala Val Asp Ala Ile Val Glu Leu Leu Lys Gly
            20                  25                  30
Phe Leu Val Val Phe His Arg His Asp Val Gly Ala Gly Glu Ala Gly
        35                  40                  45
Asp Gly Val Leu Gly Cys Val Ala Asp Ala Leu His Leu Glu Ala Gln
    50                  55                  60
Arg Glu His Val Trp Val Glu Thr Gly Leu Gly Glu Leu Gly Glu Gly
65                  70                  75                  80
Asp Val Val Phe Phe Gly Val Phe Phe Gly Leu Phe Glu His Glu Ser
                85                  90                  95
Gln Gly Val Gln Ala Leu Glu Val Gly Gly Asp Gly Val Gly Val Xaa
            100                 105                 110
```

```
Arg Xaa Gly His Phe Asp Cys Val Leu Ser Gly Arg Pro Ser Glu Val
        115                 120                 125
Arg Ile Glu Phe Val Ile Ser Val Pro Val Val Leu Ser Phe Ala Ile
    130                 135                 140
Glu Met Leu Gly Phe Arg Leu Ile Tyr Thr Ser Ser Asp Cys Pro Ala
145                 150                 155                 160
Asn Gly Ser Ser Ser Glu Pro Arg Arg Arg Tyr Gly Ser Asn Val Leu
                165                 170                 175
Asn Pro Ser Gly Gly Thr Ser Asn Gly Ile Ser Ser Ala Thr
            180                 185                 190
```

<210> 28147
<211> 179
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (12),(14)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 28147
Arg Ser Ser Thr Gln Asp Ala Val Lys Met Thr Xaa Ser Xaa Tyr Thr
1               5                   10                  15
Tyr Thr Val Pro Thr Tyr Leu Lys Gly Leu Asp Thr Leu Thr Phe Met
            20                  25                  30
Leu Lys Lys Ala Glu Glu Tyr Ala Lys Glu Asn Asn Ile Pro Leu Ser
        35                  40                  45
Glu Phe Ala Glu Ala Arg Leu Tyr Pro Asp Met Leu Pro Leu Ser Phe
    50                  55                  60
Gln Val Gln Cys Val Ser Asn Thr Ser Lys Asn Ser Val Ala Arg Leu
65                  70                  75                  80
Ser Gly Thr Asp Ile Val Pro Met Glu Asp Asn Glu Lys Thr Phe Glu
                85                  90                  95
Glu Phe Tyr Asp Arg Ile Asn Arg Thr Ile Asp Val Ile Lys Ala Val
            100                 105                 110
Asp Pro Lys Leu Phe Glu Gly Arg Glu His Thr Glu Phe Ser Val Lys
        115                 120                 125
Leu Gly Ser Tyr Glu Ser Thr Phe Thr Gly Glu Ser Tyr Val Asn Arg
    130                 135                 140
Phe Gly Leu Pro Asn Phe Phe Phe His Leu Asn Ile Ala Tyr Ala Ile
145                 150                 155                 160
Leu Arg Ser Lys Gly Val Pro Leu Gly Lys Phe Asp Tyr Leu Lys Tyr
                165                 170                 175
Phe Asn Ser
```

<210> 28148
<211> 96
<212> PRT
<213> A.fumigatus

```
<400> 28148
Ile Ser Val Pro Ser Ala Leu Val Cys Thr Pro Pro Asp Arg Ala Arg
1               5                   10                  15
Thr Arg Asn Pro Arg Phe Leu Phe Asn Ala Val Leu Ser Lys Ile Gly
```

```
            20                  25                  30
Leu Asp Gly Arg Cys Ser Gly Asn Ala Tyr Ser Ser Ser Pro Tyr Trp
        35                  40                  45
Ser His Gly Leu Met Ala Trp Phe Leu Thr Cys Val Met Gln Pro Met
    50                  55                  60
Gly Lys Leu Val Val Gly Gln Asn Lys Ser Met His Glu Ala Ile Arg
65                  70                  75                  80
Lys Arg Ala Leu Arg Lys Ala Glu Arg Glu Lys Gly Lys Lys Ser Thr
                85                  90                  95
```

<210> 28149
<211> 78
<212> PRT
<213> A.fumigatus

<400> 28149

```
Tyr Gly Lys Thr Gly Arg Arg Pro Ala Asn Gln Val Trp Ile Gly Cys
1               5                   10                  15
Thr Lys Arg Asp Val Tyr Ser Gly Ala Tyr Ser Asn Arg Ser Phe Arg
            20                  25                  30
Tyr Ser Ser Leu Leu Ile Val Leu Ile Ser Leu Arg Ser Leu Cys Pro
        35                  40                  45
Pro Thr Leu Asp Leu Asn Ser His Ala Val Thr Asn Ile Ser Cys Arg
    50                  55                  60
Gly Gln Gly Thr Tyr Gly Leu Lys Ala Asn Gln Cys Pro Pro
65                  70                  75
```

<210> 28150
<211> 220
<212> PRT
<213> A.fumigatus

<400> 28150

```
Ser Ile Glu Ser Glu Tyr Val Val Thr Gly His Ala Phe Phe Asn Val
1               5                   10                  15
Thr Ala Tyr Thr Ile Ile Gly Glu Gly Tyr Ile Pro Met Thr Ala Arg
            20                  25                  30
Leu Ser Leu Leu Asp Gln Ser Gly Ser Glu Ser Pro Trp Ala Glu Glu
        35                  40                  45
Arg Pro Glu Ala Ala Thr Pro Ser Pro Ala Trp Gln Asn Thr Arg Thr
    50                  55                  60
Asp Ser Gln Asn Met Ser Ser Met Pro His Val Val Arg Gly Asn Gly
65                  70                  75                  80
Ser Thr Ser Pro Phe Gln Thr Ser Tyr Ile Gly Asn Glu Pro Gly Tyr
                85                  90                  95
Ser Ser Gln Tyr Leu Gln Gln Ala Asp His Gly Ser Leu Ala Pro Gly
            100                 105                 110
Ser Gly Ile Glu Thr Pro Tyr Val Thr Asp Ser Thr Met Thr Thr Pro
        115                 120                 125
Ser Ser His Glu Leu Ile Glu Val Asp Glu Pro Ser His Ala Gly Ala
    130                 135                 140
Glu Pro Thr Thr Gln Leu Leu Ser Arg Asn Thr Ser Ala Ala Pro Ala
145                 150                 155                 160
Pro Pro Leu Pro Gln Pro Pro Asn Ala Asp Ala Asn Gln Ala Pro Pro
                165                 170                 175
Leu Pro Leu Arg Asn Ala Ala Leu Ser Glu Ser Asp Glu Gln Gln Gln
```

```
            180                 185                 190
Asn Glu Gln Arg Ser Glu Thr Tyr Thr Ile Arg His Val Asn Trp Asp
        195                 200                 205
Arg Pro His Arg Gly Asn Cys Gln Ser Leu Pro Ser
    210                 215                 220
```

<210> 28151
<211> 99
<212> PRT
<213> A.fumigatus

<400> 28151

```
Ala Val Cys Glu Asn Gln Pro Ile Tyr Pro Val Leu Thr Ser Cys Pro
1               5                   10                  15
Leu Tyr Tyr Ser Ile Tyr Cys Leu Glu Lys Asn Lys Pro Ser Ala Ala
            20                  25                  30
Trp Asn Phe Ile Asn Ser Ala Ser His Met Ile Gln Ala Leu Gly Leu
        35                  40                  45
Gln His Asn Val Pro Ala Gly Thr Glu Gln Pro Gly Val Lys Ala Gln
    50                  55                  60
Asn Arg Ser Leu Phe Trp Thr Ile Tyr Ile Thr Glu Lys Met Leu Ser
65                  70                  75                  80
Leu Arg Leu Gly Cys Ser Ser Thr Phe Arg Asp Gln Asp Ile Thr Leu
                85                  90                  95
Ala Arg Pro
```

<210> 28152
<211> 135
<212> PRT
<213> A.fumigatus

<400> 28152

```
Gln Leu Ser Ile Phe Ala Thr Pro Pro Asp Lys Met Leu Gly Tyr Leu
1               5                   10                  15
Pro Leu Phe Ala Ser Leu Ala Ser Ala Ala Thr Leu Tyr Ala Thr His
            20                  25                  30
Tyr Ser Gly Ala Val Tyr Thr Leu Ser Leu Thr His Arg Asn Gly Lys
        35                  40                  45
Tyr Asn Leu Ser Leu Ala Ser Asp Met Thr Thr Cys Gly Gly Met Pro
    50                  55                  60
Ser Trp Leu Thr Leu Asp Arg Asp Thr Thr Thr Ser Thr Leu Tyr Cys
65                  70                  75                  80
Ser Asp Glu Thr Gly Asp Ala Thr Thr Asn Gly Thr Leu Thr Ser Tyr
                85                  90                  95
Ala Val Gly Lys Asp Gly Ser Leu Thr Gln Leu Ala Lys Val Val Asp
            100                 105                 110
Val Gly Gly Gly Val His Ser Val Val Tyr Glu Gly Glu Gly Gly Ala
        115                 120                 125
Lys Tyr Ile Ala Ile Ala His
    130                 135
```

<210> 28153
<211> 279
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (23),(27)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28153
Gln Gln Arg Ser Ser Gly Ser Ala Val Ser Thr Phe Ala Leu Pro Leu
1 5 10 15
Glu Ser Gly Asp Glu Pro Xaa Gln Ile Leu Xaa Tyr Gln Thr Pro Pro
20 25 30
Gly Pro Leu Pro Gln Gln Asp Ser Ser His Pro His Gln Ile Ile Leu
35 40 45
Asp Pro Thr Gly Ser Phe Ile Leu Val Pro Asp Leu Gly Thr Asp Gln
50 55 60
Val Arg Val Tyr Ala Ile Asp Lys Gln Ser Gly Gln Leu Asn Thr Cys
65 70 75 80
Pro Ser Leu Asn Tyr Thr Pro Gly Ser Gly Pro Arg His Gly Leu Phe
85 90 95
Trp Ser Ser His His Ser His Arg Asp Gly Leu Arg Ile Gln Lys Thr
100 105 110
Ala Ala Leu Thr Ala Pro His Thr Ile Leu Tyr Thr Val Ser Glu Leu
115 120 125
Ser Arg His Phe His Ala Phe Ala Val Ser Tyr Leu Pro Ser Gly Cys
130 135 140
Leu Gly Phe Arg Glu Thr Gln Asp Phe Val Pro Tyr Pro Gly Gly Glu
145 150 155 160
Ile Thr Glu Gly Ala Ser Leu Ala Glu Leu Gln Gln Ala Gly Ser Asn
165 170 175
Leu Tyr Ala Ser Ile Arg Ser Asp His Ala Phe Ser Gly Asn Asp Ser
180 185 190
Leu Ala Thr Leu Asn Arg Ser Gln Asn Gly Thr Val Thr Phe Gln Glu
195 200 205
Leu Thr Ser Ser Tyr Gly Leu Val Pro Arg Thr Phe Val Ile Asn Arg
210 215 220
Ala Gly Thr Leu Val Ala Ile Gly Asp Gln Ser Ser Ser Asn Val Ala
225 230 235 240
Ile Val Ser Arg Asp Ser Ala Ser Gly Lys Leu Gly Asp Leu Val Ala
245 250 255
Asn Leu Gln Val Gly Glu Pro Gly Lys Pro Gly Thr Ser Thr Gly Leu
260 265 270
Ser Ser Val Ile Trp Ala Glu
275

<210> 28154
<211> 459
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (455),(456),(457)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28154
Ser Gln Gly Ala Gly Val Ser Gly Val Gly Ser Leu Gln Arg Leu Leu

```
1               5                   10                  15
Thr Gln Gly Gln Leu His Ser Ala Lys Leu Leu Ala Gly Trp Thr Ser
            20                  25                  30
Cys Thr Gly Gly Arg Ala Leu Arg Glu Lys Lys Lys Glu Glu Lys Leu
        35                  40                  45
Arg Glu Glu Ile Glu Gln Asp Leu Val Val Ser Cys Ala Thr Pro Ala
    50                  55                  60
Val Phe Ser Gly Pro Ser Ser Leu Gly Asn Ser Thr Gly Leu Leu Pro
65                  70                  75                  80
Glu Ala Ala Leu Arg Glu Thr Leu Ser Gly Phe Gly Leu His Asn Met
                85                  90                  95
Thr Pro Asp Asp Ala Trp Asp Phe Leu Lys Ala Lys Leu Leu Val Ile
            100                 105                 110
Phe Asp Gly Glu Asp Val Arg Ile Ala Ile Glu Asp Leu Asn Lys Leu
        115                 120                 125
Val Leu Ile His Ile Gln Arg Cys Val Gln Lys His Thr Pro Thr Ala
    130                 135                 140
Ile Val Asp Asp Leu Arg Glu Leu Leu Glu Thr Gly Cys Ala Ser Leu
145                 150                 155                 160
Asn His Thr Leu Asn Gly Val Pro Asp Glu Lys Leu Val Pro His Leu
                165                 170                 175
Val Gln Ile Trp Leu Leu Val Phe Gly Thr Ile Leu Pro Phe Ile Gln
            180                 185                 190
Ala Val Phe Leu Pro Leu Asp Leu Glu Phe Arg Gly Ala Gly Ser Val
        195                 200                 205
Met Asn Leu Arg Glu Ala Lys Asp Phe Trp Asn Ser Val Pro Thr Gly
    210                 215                 220
Lys Asp Phe Glu Asn Glu Leu Glu Val Arg His Leu Val Leu Val Ala
225                 230                 235                 240
Phe Arg Asp Met Val Ile Leu Lys Arg Tyr Glu Gly Leu Lys Ala Thr
                245                 250                 255
Phe Ser Arg Leu Ser Leu Asp Ser Ile Asn Val Gly Ser Ser Ala Leu
            260                 265                 270
Ser Ile Thr Thr Lys Ser Ser Asn Asn Ser Gly Arg Pro Ala Thr Ala
        275                 280                 285
Ala Ser Leu Asp Ala Gly Phe Gly Ser Tyr Asn Ser Gln Ser Ser Thr
    290                 295                 300
Leu Leu Asn Thr Ala Gly Ser Tyr Ser Ser Asp Ser Met Ser Asn Arg
305                 310                 315                 320
Ser Arg Ala Ala Ser Asn Thr Ser Ser Asn Pro Asp Gln Leu Ile Phe
                325                 330                 335
Gln Ser Phe Ser Ser Pro Asn Gln Arg Ala Thr Val Ile His Arg Ala
            340                 345                 350
Ser His Thr Ala Asp Thr Ser Gln Leu Ile Thr Glu Thr Val Gly Arg
        355                 360                 365
Met Leu Gln Cys Leu Ser Val Leu Ala Ser Val Gln Thr Gly Asp Glu
    370                 375                 380
Ala Gln Glu Lys Ile Glu Thr Leu Ser Lys Ala Leu Lys His Asn Trp
385                 390                 395                 400
Leu Gly Arg Gly Arg Thr Gly Arg Asp Arg Arg Gly Phe Val Gly Ala
                405                 410                 415
Lys Val Arg Pro Ser Ile Thr Thr His Thr Thr Ser Asp Asp Ser Met
            420                 425                 430
Asn Asp Pro Arg Asn Ser Asp Leu Gly Trp Ser Ser Pro Arg Gly Trp
        435                 440                 445
Glu Val Pro Lys Ser Gln Xaa Xaa Xaa Phe Asn
```

450 455

<210> 28155
<211> 211
<212> PRT
<213> A.fumigatus

<400> 28155
Ser Pro Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
1 5 10 15
Gly Gly Gly Ala Gly Arg Gly Gly Val Ala Gly Gly Gly Gly Gly Gly
20 25 30
Gly Gly Gly Gly Ala Glu Ser Lys Gly Phe Pro Thr Gly Lys Glu Leu
35 40 45
Arg Val Ile Pro Phe Gln Gln Gly Glu Gly Gly Leu Ser Arg Val Arg
50 55 60
Arg Gly Val Asn Gln Gly Leu Val Arg Gly Val Gly Arg Gly Gly Gly
65 70 75 80
Gly Gly Gly Gly Gly Gly Asp Gly Gly Val Glu Trp Asp Ala Ser Val
85 90 95
Asn Pro Gly Ser Thr Arg Gly Gln Pro Cys Gly Gly Gly Gly Gly Met
100 105 110
Gly Gly Arg Gly Gly Ser Gly Glu Ala Gly Gly Trp Gly Gly Gly Gly
115 120 125
Gly Gly Gly Glu Gly Arg Asp Gly Ala Gly Glu Arg Ala Trp Val Gly
130 135 140
Arg Arg Gly Ala Val Gly Gly Arg Val Ile Pro Gly Arg Gly Gly Val
145 150 155 160
Gly Gly Arg Val Ala Pro Ala Ser Pro Asn Ala Gly Ser Thr Thr Phe
165 170 175
Ser Lys Thr Val Gly Gly Leu Asp Leu Leu His Gly Trp Ser Gly Ala
180 185 190
Ser Arg Lys Lys Glu Arg Gly Glu Ala Glu Gly Gly Asn Arg Ala Arg
195 200 205
Leu Ser Gly
210

<210> 28156
<211> 124
<212> PRT
<213> A.fumigatus

<400> 28156
Pro Cys Val Arg Arg Arg Trp Ser Asp Pro Thr Pro Asp Thr Pro Ala
1 5 10 15
Pro Trp Asp His Pro Ala Ser Asn Cys Ser Thr Pro Thr His Pro Arg
20 25 30
Pro Leu Pro Arg Thr Ile Pro Pro Leu Pro Pro Ala Pro Pro Pro Pro
35 40 45
Pro Thr Pro Ser Leu Pro Ala Ser Pro Pro Pro Pro His Pro Ser Pro
50 55 60
Pro Pro Ala Trp Leu Ser Pro Cys Thr Ser Arg Ile His Arg Cys Val
65 70 75 80
Pro Leu His Pro Pro Ile Pro Pro Thr Pro Pro Pro Pro Pro Pro Pro
85 90 95
Pro His Pro Pro Tyr Gln Ser Leu Ile Asn Pro Pro Ser Asn Pro Gly

```
            100                 105                 110
Lys Pro Pro Leu Ala Leu Leu Glu Arg Tyr Tyr Pro
        115                 120
```

<210> 28157
<211> 142
<212> PRT
<213> A.fumigatus

<400> 28157

```
Pro Leu Ser Leu Ala Leu Phe Pro Pro Ser Ala Ser Pro Leu Ser Phe
1               5                   10                  15
Phe Leu Glu Ala Pro Asp His Pro Cys Lys Arg Ser Asn Pro Pro Thr
            20                  25                  30
Val Leu Leu Asn Val Val Asp Pro Ala Leu Gly Asp Ala Gly Ala Thr
        35                  40                  45
Arg Pro Pro Thr Pro Pro Arg Pro Gly Ile Thr Arg Pro Pro Thr Ala
    50                  55                  60
Pro Arg Arg Pro Thr His Ala Arg Ser Pro Ala Pro Ser Leu Pro Ser
65                  70                  75                  80
Pro Pro Pro Pro Pro Pro Pro Gln Pro Pro Ala Ser Pro Leu Pro Pro
                85                  90                  95
Leu Pro Pro Ile Pro Pro Pro Pro Pro His Gly Cys Pro Leu Val Leu
            100                 105                 110
Pro Gly Phe Thr Asp Ala Ser His Ser Thr Pro Pro Ser Pro Pro Pro
        115                 120                 125
Pro Pro Pro Pro Pro Pro Arg Pro Thr Pro Leu Thr Asn Pro
    130                 135                 140
```

<210> 28158
<211> 67
<212> PRT
<213> A.fumigatus

<400> 28158

```
Val Arg Pro Arg Ser Gly Phe Gly Val Leu Arg Leu Asp Thr Tyr Phe
1               5                   10                  15
Val Leu Gly Arg Val Ser Gly Ile Ala Gly Gly Gly Arg Leu Arg Val
            20                  25                  30
Leu Arg Ala Leu Trp Gly Lys Val Asp Asn Leu Glu Gly Arg Pro Asp
        35                  40                  45
Ala Met Asp Asn Ala Ala Val Arg Asp Thr Gly His Ile Arg Val Asn
    50                  55                  60
Glu Arg Arg
65
```

<210> 28159
<211> 210
<212> PRT
<213> A.fumigatus

<400> 28159

```
Tyr Lys Ala Gln Phe Met Leu Gln Thr Leu Ala Asp Gln Leu Lys Glu
1               5                   10                  15
Ser Ala Gly Gln Gly Thr Arg Asp Ile Ala Gly Ala Ala Pro Trp Thr
            20                  25                  30
```

```
Gly Thr Glu Ser Leu His Asp Ala Thr Leu Arg Met Leu Asp Ser Ser
        35                  40                  45
Lys Lys Pro Met Arg Val Pro Tyr Lys Ile Pro His Pro Ala Pro Val
    50                  55                  60
Asp Met Arg Ile Ser Pro Lys Pro Ser Lys Ser Pro Gly Leu Arg Ile
65                  70                  75                  80
Ala Asp Ala Lys Glu Arg Ser Ala Thr Tyr Thr Met Ser Gln Arg Pro
                85                  90                  95
Gly Ile Ser Glu Asp Glu Arg Glu Ala Leu Arg Arg Glu Met Ser Glu
            100                 105                 110
Arg Phe Thr Ala Gly Ala Arg Pro Met Pro Met Thr Leu Gln Gly Leu
        115                 120                 125
Ser Ser Leu Ala Asn Glu Arg Ile Glu Asp Ala Ile Ala Arg Gly Gln
    130                 135                 140
Phe Asn Asn Ile Lys Arg Gly Lys Gly Val Asn Val Gln Ser Asp His
145                 150                 155                 160
Asn Ala Asn Ser Ala Phe Ile Asp Thr Thr Glu Tyr Phe Met Asn Lys
                165                 170                 175
Ile Ile Gln Lys Gln Glu Ile Val Pro Pro Trp Ile Glu Lys Gln Gln
            180                 185                 190
Glu Phe Thr Arg Glu Val Gly Leu Thr Pro Arg Arg Leu Glu Gly His
        195                 200                 205
Ala Tyr
    210
```

<210> 28160
<211> 80
<212> PRT
<213> A.fumigatus

<400> 28160

```
Arg Met Trp Ala Lys Val Phe Leu Ser Tyr Ala Thr Cys Met Ser Val
1               5                   10                  15
Thr Gln Leu Leu Ile Gln Ile Leu Tyr Ala Gly Ile Thr Glu Val Gln
            20                  25                  30
Ile Ile Gln Trp Tyr Val Glu Glu Gly Ala His Ile Glu Glu Trp Lys
        35                  40                  45
Pro Leu Cys Gln Tyr Gln Ser Asp Lys Ala Val Asp Asp Val Ser Lys
    50                  55                  60
Phe Phe Ser Ile Pro Leu Ser Thr Tyr Leu Thr Ile Tyr Gln Ser Arg
65                  70                  75                  80
```

<210> 28161
<211> 62
<212> PRT
<213> A.fumigatus

<400> 28161

```
Asp Ile Met Gly Leu Glu Lys Gln Thr Leu Arg Met Gly Asn Gly Lys
1               5                   10                  15
Asp His Pro Gln Pro Gly Asp Pro Val Glu Leu Asn Tyr Thr Gly Tyr
            20                  25                  30
Leu Tyr Asp Glu Ser Asn Pro Asp His His Lys Gly Lys Glu Tyr Val
        35                  40                  45
Thr Ala Val Thr Asn Thr His Arg Gln Arg Arg Lys Ala Ser
    50                  55                  60
```

<210> 28162
<211> 76
<212> PRT
<213> A.fumigatus

<400> 28162
Glu Phe Leu Ala Arg Gly Gly Arg Phe Val Leu Ser Asp Asp Ser His
1 5 10 15
Gly Leu Asp Gln Val Gly Phe Asn Phe His Gly Val Leu Ala Phe Met
20 25 30
Glu Lys Ala Gly Ile Ser Thr Leu His Tyr Leu Glu Leu Gly Asp Glu
35 40 45
Pro Ala Val Asp Glu Arg Phe Pro Arg Thr Gln Ile Arg Ser Ile His
50 55 60
Val Ser Glu Leu Lys Lys Met Ser Phe Trp Gln Val
65 70 75

<210> 28163
<211> 247
<212> PRT
<213> A.fumigatus

<400> 28163
Ser Leu Val Lys Val Leu Gly Gly Gly Ser Ala Ser Gln Glu Gly Leu
1 5 10 15
Ser Leu Phe Leu Val Gly Phe Ile Ile Asp Gln Glu Leu Val Gln Gly
20 25 30
Ala Thr Gly Gly Asn His Gly Glu His Gly His Leu Ala Val Ser Glu
35 40 45
Asp Leu Lys Gln Ser Gly Thr Ile Ala Leu Asp Gln Pro Leu Gln Leu
50 55 60
Leu Leu His Leu Arg Arg Leu Ser Ala Ala Leu Ser Ser Asp Thr His
65 70 75 80
Arg Pro Ser His Gly His Lys Val Arg Val Leu Leu Val Gly Met Arg
85 90 95
Val Pro Val Leu Val Lys Gln Val Leu Pro Leu Cys His His Ala Leu
100 105 110
Leu Phe Val Val Gln Lys Glu Asp Leu Asp Ala Asp Val Glu Leu Ser
115 120 125
Ser Arg Gly Lys Phe Ser Lys Ser His Val Glu Arg Ser Val Thr Ile
130 135 140
Asp Ile Asn Asp Glu Ala Ile Gly Ala Cys Asp Leu Gly Ala Asp Ser
145 150 155 160
Ser Gly Lys Ala Val Ser His Gly Thr Glu Thr Thr Arg Gly Asn His
165 170 175
Gly Ala Gly Met Ala Pro Thr Glu Val Leu Gly Ser Pro His Val Met
180 185 190
Leu Thr Asp Thr Gly Ser Asp Asp Gly Ala Val Phe Asp Gly Gly Ser
195 200 205
Glu Ile Ala Glu Phe Leu Asn Gln Gly Leu Gly Leu Asp Gly Ala Leu
210 215 220
Arg Ala Leu Leu Leu Val Gln Arg Lys Gly Glu Ala Gly Phe Pro Val
225 230 235 240
Ile Asp Leu Ser Thr Pro Leu
245

<210> 28164
<211> 61
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (1)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28164
Xaa Arg Lys Arg Val Thr Phe Gln Pro Arg Gly Glu Asp Ser Met Leu
1 5 10 15
Gly Met His Gly Ser Ala Tyr Ala Asn Met Ala Met Gln Glu Ala Asp
20 25 30
Leu Ile Ile Ala Val Gly Ala Arg Phe Asp Asp Arg Val Thr Gly Asn
35 40 45
Leu Ser Lys Phe Ala Pro Gln Ala Lys Tyr Gly Cys Ile
50 55 60

<210> 28165
<211> 310
<212> PRT
<213> A.fumigatus

<400> 28165
Pro Val Thr Ser Pro Ser Leu Leu Leu Arg Pro Ser Met Ala Ala Ser
1 5 10 15
Glu Lys Arg Gly Gly Ile Val His Cys Glu Ile Met Pro Lys Asn Ile
20 25 30
Asn Lys Val Val Gln Ala Asn Glu Ala Val Glu Gly Asp Cys Ala His
35 40 45
Asn Ile Arg Leu Leu Leu His His Val Asn Pro Val Ser Glu Thr Ser
50 55 60
Gln Trp Cys Ala Gln Ile Asn Asp Trp Lys Ala Arg Phe Pro Phe Ser
65 70 75 80
Leu Tyr Glu Lys Gln Ser Pro Glu Gly Pro Ile Lys Pro Gln Ala Leu
85 90 95
Ile Glu Lys Leu Ser Asp Leu Thr Ala Pro Ile Lys Asp Arg Thr Ile
100 105 110
Ile Thr Thr Gly Val Gly Gln His His Met Trp Ala Ala Gln His Phe
115 120 125
Arg Trp Arg His Pro Arg Thr Met Ile Thr Ser Gly Gly Leu Gly Thr
130 135 140
Met Gly Tyr Gly Leu Pro Ala Ala Ile Gly Ala Lys Val Ala Arg Pro
145 150 155 160
Asp Cys Leu Val Ile Asp Ile Asp Gly Asp Ala Ser Phe Asn Met Thr
165 170 175
Leu Thr Glu Leu Thr Thr Ala Ala Gln Phe Asn Ile Gly Val Lys Val
180 185 190
Leu Leu Leu Asn Asn Glu Glu Gln Gly Met Val Thr Gln Trp Gln Asn
195 200 205
Leu Phe Tyr Glu Asp Arg Tyr Ser His Thr His Gln Lys Asn Pro Asp
210 215 220
Phe Val Pro Met Ala Arg Ser Met Gly Val Ala Ala Glu Arg Cys Thr

```
225                 230                 235                 240
Lys Pro Ser Glu Val Glu Glu Lys Leu Lys Trp Leu Ile Glu Ser Asp
                245                 250                 255
Gly Pro Ala Leu Leu Glu Val Phe Thr Asp Arg Lys Val Pro Val Leu
            260                 265                 270
Pro Met Val Pro Ala Gly Ser Ala Leu His Glu Phe Leu Val Tyr Asp
        275                 280                 285
Glu Ala Asn Glu Lys Glu Arg Lys Ala Leu Leu Arg Ser Arg Thr Ala
    290                 295                 300
Pro Glu Tyr Leu His Lys
305                 310
```

<210> 28166
<211> 143
<212> PRT
<213> A.fumigatus

<400> 28166

```
Pro Phe Met Ser Arg Val Ile Ser Arg Ser Asn Thr Val Ile Ile His
1               5                   10                  15
His Pro Ser Ser Leu Ala Met Asp Lys Leu Gln Leu Thr Leu His Ala
            20                  25                  30
Leu Gln His Gln Ser Ile His Phe Leu Lys Leu Tyr Ala Gln His Pro
        35                  40                  45
Trp Leu Tyr Thr Ala Ala Cys Leu Thr Ala Tyr Leu Thr Leu Thr Leu
    50                  55                  60
Ser Leu Arg Phe Gln Arg Leu Arg Ser Ile Gln Ala Lys Tyr His Lys
65                  70                  75                  80
Tyr Ser Thr Arg Ala Ser Phe Ala Ser Met Thr Asp His Asp Ala Trp
                85                  90                  95
Ala Ile Gln Lys Arg Ile Leu Gln Leu Glu Phe Pro Phe Thr Ala Leu
            100                 105                 110
Lys Ala Leu Gln Phe Ala Leu Phe Arg Val Leu Pro Pro Lys Ala Phe
        115                 120                 125
Pro Ala Cys Ser Pro Arg Ala Pro Asp Pro Ala Ile Val Gly Gly
    130                 135                 140
```

<210> 28167
<211> 413
<212> PRT
<213> A.fumigatus

<400> 28167

```
Arg Met Lys Met Cys Val Arg Lys Ser Tyr Pro Cys Asp Thr Leu Phe
1               5                   10                  15
Val Leu Ser Gly Val Ser Ile Arg Leu Ala Arg Lys Met Gly Leu His
            20                  25                  30
Arg Asp Gly Ser Leu Leu Gly Leu Ser Pro Phe Asp Ala Glu Met Arg
        35                  40                  45
Arg Arg Leu Trp Trp His Leu Val His Val Asp Phe Leu Leu Ala Asp
    50                  55                  60
Val Leu Gly Thr Arg Pro Ser Met Asp Ile Ser Cys Ala Asp Thr Lys
65                  70                  75                  80
Thr Pro Leu Asn Val His Asp Ala Asp Leu His Pro Asp Met Thr Asp
                85                  90                  95
Leu Pro Pro Glu Arg His Gly Ile Thr Asn Ile Ser Leu Cys Leu Ile
```

```
            100                 105                 110
Arg Tyr Gln Ile Met Val Ser Leu His Asp Phe Ser Thr Ser Ser Pro
        115                 120                 125
Ala Asp Met Arg Trp Glu Val Leu Leu Gly Pro Asn Val Pro Pro Ala
    130                 135                 140
Lys Lys Asp His Ile Ile Ser Gln Ile Glu Asp His Leu Glu Gln Lys
145                 150                 155                 160
Tyr Leu Arg Tyr Cys Asp Pro Ala Asn Pro Leu His Thr Phe Val Ser
                165                 170                 175
Ile Ile Thr Arg Phe Ser Ile Cys Lys Met Lys Leu Val Ala His Asn
            180                 185                 190
Pro Arg Gln Phe Ala Cys Ser Pro Pro Lys Asp Leu Gln Ala Glu Arg
        195                 200                 205
Asp Ile Val Phe Ala Asn Ala Thr Lys Leu Leu Glu Tyr Val Ala Leu
    210                 215                 220
Val Gln Gly Gly His Cys Gly Leu Glu Lys Tyr Thr Arg Gln Ile Gly
225                 230                 235                 240
Thr Ser Ala Leu Trp Asn Ala Met Leu Tyr Met Leu Ile Glu Ile Arg
                245                 250                 255
His Arg Gly Thr Gly Pro Glu Val Asp Arg Ser Trp Gln Leu Ile Gly
            260                 265                 270
Val Val Phe Ser Cys Pro Arg Ile Phe Gly Arg Thr Pro Pro Gln Val
        275                 280                 285
Asp Thr Val Leu Arg Lys Trp Thr Leu Glu Val Trp Asp His Tyr Val
    290                 295                 300
Ala Thr Ser Lys Ile Glu Gly Leu Pro Glu Pro Leu Thr Pro Glu Tyr
305                 310                 315                 320
Ile Asn Glu Ile Arg Arg Trp Ile Arg Ser Arg Ser Asp Leu Ser Arg
                325                 330                 335
Asn Glu Thr Arg Ala Ala Glu Arg Asp Pro Val Ala Glu Pro Ser Phe
            340                 345                 350
Arg Cys Ala Gln Val Thr Tyr Glu Gly His Glu Arg Leu Pro Gly Phe
        355                 360                 365
Pro Glu Leu Leu Thr Leu Thr Ser Leu Met Thr Phe Cys Leu Ser Arg
    370                 375                 380
Trp Thr Arg Met Asn Gly Ser Ser Gly Ser Ser Trp Ser Gln Gly Gly
385                 390                 395                 400
Pro Leu Leu Ser Ala Arg Ile His Ala Leu Glu Lys Asp
                405                 410
```

<210> 28168
<211> 89
<212> PRT
<213> A.fumigatus

<400> 28168

```
Phe Gly Gln Tyr Ala Ala Val Met Gly Ile Arg Lys Asp Leu Lys Leu
1               5                   10                  15
Val Gly Asn Asp Phe Ser Asn Ala Ala Thr Trp Phe Phe Ile Ala Tyr
            20                  25                  30
Leu Ile Ala Glu Ala Pro Leu Gly Thr Phe His Ala Ser Asp Asp Val
        35                  40                  45
Cys Ile Leu Leu Ile Ser Ala Thr Phe Ser Ser Asn Ser Ser Ala Lys
    50                  55                  60
Asp Ser Ser Ser Gln Met Ala Arg Ser Lys Cys Leu Ser Leu Gly Gly
65                  70                  75                  80
```

Cys Cys Gly Gly Arg Cys Gly His Pro
85

<210> 28169
<211> 438
<212> PRT
<213> A.fumigatus

<400> 28169
Ser Gln Arg Leu Pro Ser Val Arg Phe Met His Pro Thr Met Phe Ala
1 5 10 15
Ser Tyr Ser Ser Pro Arg Arg Ser Pro Val Ile Leu Leu Gln Lys Thr
20 25 30
Pro Pro Ala Lys Trp Leu Gly Ala Asn Val Phe Leu Trp Gly Val Ala
35 40 45
Ala Ala Ala Gly Ala Gly Thr Arg Asp Tyr Pro Thr Leu Leu Val Ala
50 55 60
Arg Ile Phe Leu Gly Ile Phe Glu Ala Thr Val Gly Pro Ser Leu Met
65 70 75 80
Leu Leu Ser Ser Gln Tyr Tyr Thr Lys Ser Glu Ala Ala Pro Arg Phe
85 90 95
Thr Leu Trp Tyr Val Gly Leu Gly Val Ala Gln Ile Leu Gly Gly Leu
100 105 110
Ile Ser Phe Gly Phe Gln His Val Lys Asn Pro Ser Phe Gln Gly Trp
115 120 125
Arg Val Met Phe Leu Val Leu Gly Leu Ile Thr Ser Ile Thr Gly Ala
130 135 140
Leu Thr Phe Phe Phe Leu Pro Asp Thr Pro Met Lys Ala Lys Trp Leu
145 150 155 160
Thr Asp Arg Glu Lys Val Ala Leu Leu Asn His Val Ser Val Asn Gln
165 170 175
Thr Gly Val Trp Ser Ser Asp Phe Asn Ile Lys Gln Ile Trp Glu Ala
180 185 190
Val Cys Asp Ile Gln Leu Trp Phe Ile Thr Ile Ile Thr Met Leu Val
195 200 205
Cys Met Leu Ala Cys Pro Ile Gly Pro Ala Asn Phe Pro Ile Thr Asp
210 215 220
Thr Ser Ile Ala Gln Ile Ser Val Ser Ser Gly Val Val Thr Ser Tyr
225 230 235 240
Ser Ala Thr Leu Ile Ala Gly Phe Gly Phe Ser Gly Pro His Ala Ala
245 250 255
Leu Leu Asn Met Pro Ser Gly Ile Val Ser Ile Phe Phe Thr Leu Leu
260 265 270
Val Gly Phe Gly Ile Arg Arg Val Ser His Arg Trp Ala Trp Leu Ile
275 280 285
Ala Ser Thr Leu Pro Gly Ile Leu Gly.Gly Gly Leu Leu Ser Phe Leu
290 295 300
Pro Lys His Asn Lys Ala Gly Val Leu Ile Gly Ile Tyr Leu Val Asn
305 310 315 320
Ala Ile Val Ala Thr Leu Pro Ile Leu Tyr Gln Trp Thr Ala Ala Asn
325 330 335
Cys Ala Gly His Thr Lys Arg Ala Phe Ala Ser Ala Leu Val Ala Gly
340 345 350
Ser Phe Ser Val Gly Asn Ile Ile Gly Pro Gln Thr Phe Gln Ala Arg
355 360 365
Asp Ala Pro Glu Tyr Arg Pro Ala Lys Ile Ala Val Leu Ala Thr Gln

```
    370                 375                 380
Ala Ala Ala Ala Val Leu Ser Phe Val Leu Phe Leu Tyr Tyr Val Trp
385                 390                 395                 400
Glu Asn Lys Arg Arg Asp Arg Ala Ala Gln Gly Gln Gln Glu Asp Gln
                405                 410                 415
Ala Pro Asp Asp Thr Lys Trp Ala Gly Leu Thr Asp Arg Gln Asn Lys
            420                 425                 430
Ala Phe Arg Tyr Val Tyr
        435
```

<210> 28170
<211> 192
<212> PRT
<213> A.fumigatus

<400> 28170

```
Gln Gln Gln Glu Trp Gln Thr Ala Ser Ile Pro Leu His Asn Ile Gly
1               5                   10                  15
Ala Arg Gln Thr Gly Gly Gly Asn Asp Phe Thr Arg Asp Arg Met Gly
            20                  25                  30
Arg Tyr Ile Tyr Leu Arg Arg Asn Asp Ser Gln Ser Asn Ile His Pro
        35                  40                  45
Lys Pro Val Val Gly Trp Lys Val Cys Pro Tyr Thr Glu Ser Ile Ser
    50                  55                  60
Val Arg Ser Thr Arg Cys Pro Met Thr Pro Ser Gln Leu Ile Arg Glu
65                  70                  75                  80
Glu Ala Val Trp Arg Phe Ser Leu Pro Arg Val Leu Ser Thr Pro Thr
                85                  90                  95
Thr Met Leu Glu Thr Thr Glu Pro Ile Ala His Ala Ser Glu Leu Asp
            100                 105                 110
Lys Pro Ser Ile Val Val Thr Asn Thr Glu Val Asp Ser Glu Asp Asn
        115                 120                 125
Thr Ser Ser Val Leu Gly Arg Tyr Ile Pro Gln Lys Cys Leu Gln Asn
    130                 135                 140
Ala Arg Leu Ala Ala Val Asn Ser Cys Val Asn Glu Ile Phe Glu Ala
145                 150                 155                 160
Arg Phe Arg Glu Arg Pro Asp Ala Pro Ala Val Cys Ala Trp Asp Gly
                165                 170                 175
Ser Tyr Thr Tyr Arg Glu Leu Asn Asp Arg Ser Ser Ala Leu Ala His
            180                 185                 190
```

<210> 28171
<211> 125
<212> PRT
<213> A.fumigatus

<400> 28171

```
Arg Thr Leu Glu Pro Val Pro Ile Pro Gly Asn Ile Asp Thr Thr Thr
1               5                   10                  15
Tyr Gly Phe Thr Pro Leu Cys Leu Ala Ala Lys Asn Gly His Pro Ala
            20                  25                  30
Gly Val Arg Leu Leu Leu Glu Glu Gly Ala Asn Leu Ile Leu Pro Asp
        35                  40                  45
Lys Asn Gly Thr Thr Pro Leu Met His Ala Leu Ala Glu Gly His Ser
    50                  55                  60
Glu Val Val Tyr Leu Leu Leu Glu Ala Gly Ala Gln Lys Glu Ser Thr
```

```
65                  70                  75                  80
Pro Leu Glu Val Ala Val Glu Asn Asn Lys Lys Ser Ala Ile Arg Asn
                85                  90                  95
His Leu Ala His Gly Ala Asn Tyr Asp Leu Leu Ala Arg Glu Ser Ser
            100                 105                 110
Leu Ser Trp Thr Ile Asn Asn Arg Asp Gln Glu Ala Val
        115                 120                 125
```

<210> 28172
<211> 72
<212> PRT
<213> A.fumigatus

<400> 28172

```
Leu Ile Cys Pro Cys Ser Cys Ser Val Thr Thr Arg Arg Pro His Gly
1               5                   10                  15
Thr Leu Ser Pro Ala Gln His Met Gln Ala Pro Glu Ala Asn Val Ala
            20                  25                  30
Phe Glu Ser Met Thr Trp Ile Val Ser Met Glu Thr Tyr Ala Arg Met
        35                  40                  45
Ser Pro Ser Thr Ile Tyr Phe Tyr Leu Gln Leu Gln Arg Cys Phe Thr
    50                  55                  60
Gly Asn Gln Glu Arg Lys Leu His
65                  70
```

<210> 28173
<211> 135
<212> PRT
<213> A.fumigatus

<400> 28173

```
Leu Thr Ala Thr Leu Cys Arg Phe Ile Ser Leu Val Ala Ala Ala Cys
1               5                   10                  15
Met Val Leu Tyr Gly Tyr Asp Ala Ser Val Tyr Asn Ser Val Gln Gly
            20                  25                  30
Ser Lys Asn Trp Val Lys Phe Phe Asn Asp Pro Asp Glu Asn Met Ile
        35                  40                  45
Gly Ala Val Asn Thr Ala Tyr Thr Val Gly Ala Ile Phe Gly Gly Phe
    50                  55                  60
Phe Leu Gly Gly Pro Ile Ala Asp Tyr Leu Gly Arg Lys Ile Gly Met
65                  70                  75                  80
Gly Val Gly Cys Val Leu Val Ile Ala Ser Thr Phe Met Gln Thr Trp
                85                  90                  95
Ser Pro Arg Gly Asn Ile Gly Cys Phe Leu Ala Gly Arg Leu Ile Ile
            100                 105                 110
Gly Ile Gly Gln Gly Ile Ala Leu Ser Glu Tyr Pro Leu Pro Met Glu
        115                 120                 125
Cys Ile Leu Ser Cys Thr Asn
    130                 135
```

<210> 28174
<211> 133
<212> PRT
<213> A.fumigatus

<400> 28174

```
Leu Thr Ser Tyr Thr Leu Ser Trp Arg Gly Ser Phe Gln Ser Ser Trp
1               5                  10                  15
Arg Ile Val Arg Val Thr Arg Leu Cys Ile Glu Ser Glu Lys Arg Met
            20                  25                  30
Val Glu Lys Tyr Thr Pro Gly Ala Gln Ser Gln Ser Leu Val Leu Val
        35                  40                  45
Ser Gln Ala Leu Asp Cys Arg Arg Val Leu Val Val Leu Tyr Thr Thr
    50                  55                  60
Gln Met Leu Lys Asp Asn Thr Leu Pro Arg Gly Pro Lys Arg Gln Ile
65                  70                  75                  80
Tyr Ser Leu Arg Glu Gly Ser Arg Arg Asp Gly Ala Arg Gly Asp Arg
                85                  90                  95
Asn Glu Gln Glu Pro Ala His Tyr Ile Arg Pro Trp Asp Thr His Ala
            100                 105                 110
His Gly Arg Ile Leu Val Asn Thr Arg Lys Lys Ala Pro Gly Asn Ser
        115                 120                 125
Pro Ile Ser Ile Asp
    130
```

<210> 28175
<211> 159
<212> PRT
<213> A.fumigatus

```
<400> 28175
Trp Ile Leu Thr Arg Ser Pro Gly Ala Arg His Asn Leu Ala His Ser
1               5                  10                  15
Tyr Ser Leu Pro Val Thr Ile Gln Glu Leu Gly Ser Leu Gly Thr Gly
            20                  25                  30
Pro Glu Glu His Val Asp Asn Pro Leu Ala Thr Thr Leu Ser Leu Pro
        35                  40                  45
Met Asn Tyr Gly Pro Ser Phe Thr Gly Leu Glu Thr Leu Arg Met Asn
    50                  55                  60
Ile Ala Ala Leu Tyr Gly Ser Glu Ser Glu Ala Val Ile Ser Pro Ser
65                  70                  75                  80
Asn Ile Ile Thr Thr Pro Gly Ala Ser Leu Ala Asn Phe Ile Val Phe
                85                  90                  95
Phe Ala Leu Val Gly Pro Gly Asp His Val Ile Val Gln Asn Pro Thr
            100                 105                 110
Tyr Pro Gln Leu Tyr Ser Leu Pro Ser Gly Leu Gly Ala Glu Val Ser
        115                 120                 125
Leu Trp Gln Ala Ser Glu Ser Asn His Trp Gln Leu Asp Leu Asp Glu
    130                 135                 140
Leu Glu Arg Leu Ile Gln Pro Asn Thr Lys Met Ile Val Leu Lys
145                 150                 155
```

<210> 28176
<211> 214
<212> PRT
<213> A.fumigatus

```
<400> 28176
His Ser Val Ser Val Ser Asn Pro Gln Asn Pro Thr Gly Ala Ile Ile
1               5                  10                  15
Thr Lys Ser Ala Leu Gly Lys Ile Val Asp Leu Ala Arg Arg His Ser
            20                  25                  30
```

```
Ile Thr Ile Phe Ser Asp Glu Ile Tyr Arg Ala Leu Phe His Ser Ile
        35                  40                  45
Pro Ser Thr Asp Pro Glu Tyr Pro Pro Ser Val Leu Ala Phe Gly Tyr
    50                  55                  60
Glu Lys Thr Val Val Thr Cys Ser Leu Ser Lys Thr Phe Ser Leu Ala
65                  70                  75                  80
Gly Ile Arg Val Gly Trp Ile Ala Ser His Ser Ser Ser Ile Ile Asp
                85                  90                  95
Leu Cys Leu Asn Ala Arg Ser Tyr Thr Val Ile Thr Val Ser Gln Ile
            100                 105                 110
Asp Glu Gln Val Ala Ala Met Ala Leu Glu Pro Val Arg Leu Arg Glu
        115                 120                 125
Leu Thr Lys Arg Asn Leu Gly Leu Ala Thr His Asn Ile Glu Ile Val
    130                 135                 140
Gln Ser Phe Ile Asp Arg His Ala Ala Val Cys Glu Trp Val Arg Pro
145                 150                 155                 160
Ala Ala Gly Pro Val Gly Phe Val Lys Phe Ser Arg Asn Gly Val Pro
                165                 170                 175
Val Asp Asp Leu Glu Leu Cys Val Leu Leu Leu Glu Lys Lys Gly Val
            180                 185                 190
Leu Leu Val Pro Gly Gln Lys Cys Phe Gly Glu Glu Phe Lys Gly Tyr
        195                 200                 205
Gly Leu His Arg Gly Thr
    210
```

<210> 28177
<211> 138
<212> PRT
<213> A.fumigatus

<400> 28177

```
Pro Val Ser Tyr Asp Ile Lys Pro Ile Ile Ile Glu Asn Arg Arg Trp
1               5                   10                  15
Asp Pro Leu Thr Gly Val Thr Ser Ala Ala Val Gly Thr Gly Thr Asp
            20                  25                  30
Leu Leu Lys Ser Thr Thr Asn Met Phe Tyr Lys Pro Tyr Lys Glu Leu
        35                  40                  45
Ala Arg Asn Lys Thr Asp Val Ala Pro Asp Gly Ala Glu Arg His Pro
    50                  55                  60
Val Val Thr Ala Gly Ala Met Ala Gly Gln Phe Ala Lys Ser Phe Gly
65                  70                  75                  80
Gln Phe Met Gly Ser Tyr Ala Lys Gly Val Ile Val Asp Ile Pro His
                85                  90                  95
Ala Ala Ala Glu Ser Phe Arg Gln Val Pro Arg Leu Tyr Gly Glu Gln
            100                 105                 110
Pro Lys Asp Tyr Gly Ala Val Gln Asp Trp Asn Ser Gly Ala Thr Val
        115                 120                 125
Gly Gly Lys Asn Phe Val Asp Gly Met Met
    130                 135
```

<210> 28178
<211> 143
<212> PRT
<213> A.fumigatus

<400> 28178

```
Asn Ile Leu Ile Ser Ile Asp Val Cys Gly Phe Phe Phe Arg Gln Pro
1               5                  10                  15
Pro Ser Tyr Gln Pro Pro Pro Asp Leu Glu Gln Phe Leu Ala Ser Gly
            20                  25                  30
Pro Pro Pro Val Tyr Ile Gly Phe Gly Ser Ile Val Val Asp Ser Pro
        35                  40                  45
Gln Arg Leu Ser Asn Thr Val Leu Gln Ala Val Ala Ala Ser Gly Val
    50                  55                  60
Arg Ala Ile Val Ser Arg Gly Trp Ser Lys Leu Ala Gly Asp Gly Asn
65                  70                  75                  80
Pro Asn Ile Tyr Phe Ile Gly Asp Cys Pro His Glu Trp Leu Phe Gln
                85                  90                  95
His Val Ser Ala Val Val His His Gly Gly Ala Gly Thr Thr Ala Cys
            100                 105                 110
Gly Leu Ala Asn Gly Lys Pro Thr Val Val Val Pro Phe Phe Gly Glu
        115                 120                 125
Trp Val Cys Ile Pro Pro Tyr Thr Gly Gln Glu Leu Ile Ser Met
    130                 135                 140
```

<210> 28179
<211> 255
<212> PRT
<213> A.fumigatus

```
<400> 28179
Met Cys Val Ala Ser Ser Ser Gly Asn Pro Arg Arg Thr Asn Arg Arg
1               5                  10                  15
Gln Ile Ser Ser Asn Ser Leu Leu Gln Ala His Arg Leu Cys Ile Ser
            20                  25                  30
Ala Leu Glu Ala Ser Leu Trp Thr Ala Arg Asn Ala Cys Pro Ile Gln
        35                  40                  45
Cys Cys Arg Gln Trp Leu Arg Leu Val Phe Val Pro Ser Cys His Glu
    50                  55                  60
Val Gly Ala Asn Trp Leu Glu Thr Gly Ile Gln Thr Ser Thr Ser Ser
65                  70                  75                  80
Ala Thr Val Pro Thr Asn Gly Cys Ser Ser Thr Phe Gln Gln Ser Ser
                85                  90                  95
Thr Thr Glu Val Leu Gly Leu Pro Pro Val Asp Trp Pro Thr Gly Asn
            100                 105                 110
Gln Gln Ser Ser Tyr Leu Ser Leu Glu Ser Gly Phe Ala Phe Leu Arg
        115                 120                 125
Ile Leu Gly Lys Ser Ser Leu Val Cys Ser Gln Gln Phe Trp Gly Asn
    130                 135                 140
Met Ile Ala Arg Ala Gly Ala Gly Pro Ser Pro Ile Pro His Ala Thr
145                 150                 155                 160
Leu Ser Ile Arg Asn Leu Ala Glu Ala Ile Arg Phe Cys Leu Lys Pro
                165                 170                 175
Gln Thr Val Ala Ala Ala Arg Glu Ile Ala Ala Lys Met Gln Phe Glu
            180                 185                 190
Ser Gly Val Thr Ala Ala Val Gln Ser Phe His Arg His Leu Pro Leu
        195                 200                 205
Glu Gln Met Arg Cys Gln Val Phe Pro Asp Gln Val Ser Val Trp Lys
    210                 215                 220
Tyr Ala Arg His Lys Arg Glu Ile Arg Leu Ser Arg Lys Ala Val Gln
225                 230                 235                 240
Ile Leu Ile Asp His Leu Lys Ile Asp Pro Lys Asn Leu Arg Trp
```

245 250 255

<210> 28180
<211> 281
<212> PRT
<213> A.fumigatus

<400> 28180
Ser Glu Arg Gly Val Tyr Ile Val Ala Asn Thr Leu Arg Gln Thr Gln
1 5 10 15
Gly Ile Val Val Thr Phe Arg His Trp Arg Val Ile Phe Trp Leu Leu
20 25 30
Thr Ala Leu Thr Gly Phe Ala Val Leu Leu Ile Ile Ile Phe Leu Pro
35 40 45
Glu Thr Ile Pro Tyr Lys Ser Lys Ala Glu Leu Ala Gly His Ser His
50 55 60
Pro Lys Arg Ile Lys Met Leu Trp Gln Arg Ile Ser Pro Leu Arg Ala
65 70 75 80
Ile Ile Ile Pro Leu Ser His Pro Asn Ile Phe Ile Thr Gly Leu Ala
85 90 95
Ala Gly Ala Leu Val Trp Asn Gln Tyr Ser Leu Leu Thr Pro Ile Arg
100 105 110
Tyr Val Leu Asn Pro Arg Phe His Leu Ser Ser Pro Ile Arg Ala Gly
115 120 125
Leu Phe Tyr Leu Ala Pro Gly Cys Gly Tyr Leu Ala Gly Thr Phe Val
130 135 140
Gly Gly Arg Trp Ala Asp Tyr Thr Val Lys Lys Tyr Ile Lys Lys Arg
145 150 155 160
Asn Gly Gln Arg Val Ser Glu Asp Arg Leu Arg Ser Cys Leu Pro Tyr
165 170 175
Ile Cys Ile Val Thr Pro Gly Cys Leu Leu Val Tyr Gly Trp Thr Leu
180 185 190
Asp Arg Glu Val Gly Gly Ile Ala Val Pro Val Val Ala Met Phe Leu
195 200 205
Gln Gly Val Ala Gln Met Phe Cys Phe Pro Ser Leu Gln Ser Tyr Cys
210 215 220
Leu Asp Val Met Gln Pro His Gly Arg Ser Ala Glu Val Val Ala Ser
225 230 235 240
Ser Tyr Val Phe Arg Tyr Val Phe Ala Ala Ile Gly Thr Gly Val Val
245 250 255
Leu Pro Ala Thr Gln Ser Leu Gly Val Gly Trp Phe Asn Thr Ile Ser
260 265 270
Ala Leu Phe Leu Val Phe Ala Gly Val
275 280

<210> 28181
<211> 62
<212> PRT
<213> A.fumigatus

<400> 28181
Pro Ser Arg Cys Pro Ile Phe His Arg Leu Gly Phe His Thr His Asn
1 5 10 15
His Pro Gln Trp Glu Phe Tyr Phe Tyr Asn Val Val Phe Gly Leu Phe
20 25 30
Gln Ala Pro Tyr Tyr Ala Val Arg Ser Thr Thr Ser Pro Ser Pro Phe

```
        35                  40                  45
Glu Thr Arg Leu Thr Cys Pro Thr Pro Arg Glu Met His Thr
    50                  55                  60

<210> 28182
<211> 77
<212> PRT
<213> A.fumigatus

<400> 28182
Gly Arg Ile Leu Val Ala Pro Val Val Lys Thr Ser Cys Ile Ala Met
1               5                  10                  15
Leu Gly Glu Asn Glu Lys Pro Asp Val Thr Tyr Ala Asp Val Gly Gly
            20                  25                  30
Leu Asp Met Gln Lys Gln Glu Ile Arg Glu Ala Val Glu Leu Pro Leu
        35                  40                  45
Thr His Phe Asp Leu Tyr Lys Gln Ile Gly Glu Ser Glu Ser Ser Arg
    50                  55                  60
Ala Met Ser Ser Ala Val Cys Leu Arg Tyr Ser Arg Tyr
65                  70                  75

<210> 28183
<211> 258
<212> PRT
<213> A.fumigatus

<400> 28183
Arg Ile Ser Thr Phe Thr Asn Arg Leu Val Ser Arg Ser His Arg Gly
1               5                  10                  15
Gln Cys Leu Val Arg Phe Ala Tyr Ala Thr Gln Gly Ile Asp Pro Pro
            20                  25                  30
Arg Gly Val Leu Leu Tyr Gly Pro Pro Gly Thr Gly Lys Thr Met Leu
        35                  40                  45
Val Lys Ala Val Ala Asn Ser Thr Thr Ala Ser Phe Ile Arg Val Asn
    50                  55                  60
Gly Ser Glu Phe Val Gln Lys Tyr Leu Gly Glu Gly Pro Arg Met Val
65                  70                  75                  80
Arg Asp Val Phe Arg Met Ala Arg Glu Asn Ser Pro Ala Ile Ile Phe
                85                  90                  95
Ile Asp Glu Ile Asp Ala Ile Ala Thr Lys Arg Phe Asp Ala Gln Thr
            100                 105                 110
Gly Ala Asp Arg Glu Val Gln Arg Ile Leu Leu Glu Leu Leu Asn Gln
        115                 120                 125
Met Asp Gly Phe Glu Gln Thr Ser Asn Val Lys Val Ile Met Ala Thr
    130                 135                 140
Asn Arg Ala Asp Thr Leu Asp Pro Ala Leu Leu Arg Pro Gly Arg Leu
145                 150                 155                 160
Asp Arg Lys Ile Glu Phe Pro Ser Leu Arg Asp Arg Arg Glu Arg Arg
                165                 170                 175
Leu Ile Phe Thr Thr Ile Ala Ser Lys Met Ser Leu Ser Pro Glu Val
            180                 185                 190
Asp Leu Asp Ser Leu Ile Val Arg Asn Glu Pro Leu Ser Gly Ala Val
        195                 200                 205
Ile Ala Ala Ile Met Gln Glu Ala Gly Leu Arg Ala Val Arg Lys Asn
    210                 215                 220
Arg Tyr Asn Ile Ile Gln Ser Asp Leu Glu Asp Ala Tyr Ala Ala Gln
```

225 230 235 240
Val Lys Thr Gly Gln Glu Ala Asp Arg Tyr Ala Leu Pro Cys Ile Pro
245 250 255
Ile Tyr

<210> 28184
<211> 109
<212> PRT
<213> A.fumigatus

<400> 28184
Pro Ser Leu Gly Asp Leu Gly Gly Ser Phe Ala Pro Arg Gly Glu Asp
1 5 10 15
Ser Ala Gly Glu Asn Pro Val Asn Leu Leu Pro His Leu Gln Leu Phe
20 25 30
Gly Met Asp Ser Asp Cys Asn Lys Arg Gly Ala Lys Ile Cys Val Thr
35 40 45
Thr Thr Asn Leu Ile Lys Lys Thr Pro Arg Tyr Ser Pro Glu Glu Ser
50 55 60
Ser Asp His Arg His Pro Ser Phe Ala Ile Pro Asp Leu Ser Ala Lys
65 70 75 80
Asn Ser Ser Lys Ile Val Ile Glu Val Leu Val Glu Ala Leu Thr Ser
85 90 95
Asp Arg Glu Ile Asn His Phe Arg Gln Ile His Ile Leu
100 105

<210> 28185
<211> 194
<212> PRT
<213> A.fumigatus

<400> 28185
Leu Asn Arg Leu Leu Arg Ala Ala Arg Asp Ala Glu Asn Ala Gln Ser
1 5 10 15
His Glu Tyr Val Ser Leu Val Glu Ala Val Arg Leu Glu His Val Gln
20 25 30
Val Val Glu Ile Gln Ile Lys Ser Glu Pro Leu Arg Thr Gln Leu Ile
35 40 45
Ser Glu Ile Asn Gly Glu Cys Glu Arg Val Leu Lys Val Leu Glu Ala
50 55 60
Ala Gln Thr Leu Gly Glu Ile Ser Ala Arg Cys Val Asp Lys Val Ile
65 70 75 80
Ser Thr Gly Glu Lys Leu Ser Cys Arg Leu Met Ala Ala Phe Leu Gln
85 90 95
Asp Arg Gly Val Asp Ser Gln Tyr Val Asp Leu Ala Glu Val Ile Asp
100 105 110
Phe Pro Ile Gly Ser Gln Gly Leu Asp Gln Asp Phe Tyr Asn Asn Leu
115 120 125
Ala Thr Val Leu Gly Arg Lys Ile Arg Asp Cys Glu Gly Arg Val Pro
130 135 140
Val Val Thr Gly Phe Phe Gly Thr Val Pro Gly Gly Leu Leu Asp Gln
145 150 155 160
Val Gly Arg Gly Tyr Thr Asp Leu Cys Ala Ala Leu Val Ala Val Gly
165 170 175
Val His Ala Lys Glu Leu Gln Val Trp Lys Glu Val Asp Gly Ile Phe

180 185 190

Thr Arg

<210> 28186
<211> 97
<212> PRT
<213> A.fumigatus

<400> 28186
Lys Leu Leu Arg Arg Cys Ser Ala Phe Ala Thr Pro Ala Lys Leu Phe
1 5 10 15
Lys Lys Val Ser Leu Leu Pro Ala Pro Ile Thr Gly Pro Leu Ser Tyr
20 25 30
Met Leu Asn Ser Cys Ile Cys Lys Ala Ala Cys Ser Cys His Thr Arg
35 40 45
Pro Ser Ser Met Gly Asp Gln Val Gln Ser Asp Ser Ser Pro Tyr Thr
50 55 60
Leu Ser Met Thr Asn Gly Ser Ser Asn Trp Val Val Gln Lys Phe Gly
65 70 75 80
Gly Thr Ser Val Gly Lys Phe Ala Leu Asn Ile Ile Asp His Val Val
85 90 95
Leu

<210> 28187
<211> 158
<212> PRT
<213> A.fumigatus

<400> 28187
Tyr Phe Trp Val Lys Ser Ile Leu Tyr Ala Met Ala Ile Leu His Asn
1 5 10 15
Glu Asn Arg Pro Arg Gly Leu Arg Val Pro Ser Leu Ser Ala Phe Lys
20 25 30
Ser Lys Lys Ala Ile Asp His Glu Pro Ala Pro Ala Ala Thr Pro Val
35 40 45
Ser Thr Ala Pro Ser Ala Ala Ala Pro Ala Pro Pro Ala Pro Val Ala
50 55 60
Pro Pro Gln Tyr Pro Val Arg Thr Asp Ser Ala Pro Ile Arg Pro Ala
65 70 75 80
Arg Pro Gln Asn Asp Lys Glu Leu Pro Pro Asn Pro Leu Pro Gly Phe
85 90 95
Ser Ser His Ile Gly Ile Pro Arg Ala Gly Gly Tyr Pro Pro Ser Pro
100 105 110
Ser Glu Met Asn Arg Gln Leu Arg Gly Thr Thr Ile Met His Leu Leu
115 120 125
Pro Glu Pro Ala Thr Asn His Gln Ser Arg Ser Arg Leu Asn Arg Pro
130 135 140
Leu Pro Ala Arg Ala Gln Tyr Arg Gln Met Gln Ala Thr His
145 150 155

<210> 28188
<211> 221
<212> PRT
<213> A.fumigatus

<400> 28188
Arg His Pro Asp Leu Val Ile Asn Ile Pro Thr Ile Ser Asn Arg His
1 5 10 15
Phe Leu Ile Phe Ser Glu Asn Lys Asn Gly Asp Ser Val Ala Ile Val
20 25 30
Glu Asp Leu Ser Ser Asn Gly Thr Phe Val Asn Asp Ala Ile Ile Gly
35 40 45
Arg Asn Lys Tyr Arg Glu Leu Glu Asp Gly Asp Glu Ile Thr Ile Leu
50 55 60
Asp Glu Ala Arg Phe Val Phe Arg Tyr Pro Arg Thr Arg Asp Thr Asn
65 70 75 80
Gly Phe Arg Gln Gln Tyr Arg Val Leu Gln Gln Leu Gly Lys Gly His
85 90 95
Phe Ala Thr Val Tyr Leu Cys Val Glu Arg Ala Thr Gly Thr Gln Tyr
100 105 110
Ala Val Lys Val Phe Glu Arg Arg Pro Gly Asp Ser Gln Lys Ser Gln
115 120 125
Asn Glu Ser Leu Gln Gln Glu Ile Gly Leu Leu Met Gly Val Asn His
130 135 140
Pro Asn Leu Leu Cys Leu Lys Asp Thr Phe Asp Glu Ala Asp Gly Val
145 150 155 160
Tyr Leu Val Leu Glu Leu Ala Pro Glu Gly Glu Leu Phe Asn Leu Ile
165 170 175
Val Ser Arg Gln Lys Phe Ser Glu Glu Glu Thr Arg His Ile Phe Val
180 185 190
Gln Leu Phe Glu Gly Leu Lys Tyr Leu Val Arg Ser Leu Phe Ile Gly
195 200 205
Leu Gln Ser Thr Leu Pro Val Pro Ala Glu Lys Lys Thr
210 215 220

<210> 28189
<211> 99
<212> PRT
<213> A.fumigatus

<400> 28189
Asp Pro Cys Ser Leu Asp Cys Asn Leu Arg Tyr Gln Ser Gln Arg Lys
1 5 10 15
Arg Arg Leu Glu Leu Ile Gln Thr Gln His Asp Arg Gly Ile Val His
20 25 30
Arg Asp Ile Lys Pro Glu Asn Ile Leu Val Ala Asp Lys Lys Leu Thr
35 40 45
Val Lys Leu Gly Asp Phe Gly Leu Ala Lys Ile Ile Gly Glu Asp Ser
50 55 60
Phe Thr Thr Thr Leu Tyr Val Leu Pro Leu Phe Leu Gln Ile Ala Phe
65 70 75 80
Phe Leu Leu Pro Trp Leu Ile Leu Leu Phe Thr Asp Val Gly His Gln
85 90 95
Val Val Ser

<210> 28190
<211> 60
<212> PRT
<213> A.fumigatus

<400> 28190
Met Ser Leu Gln Arg Ser Tyr Arg Ser Pro Val Val Glu Asp Thr Pro
1 5 10 15
Arg Leu Trp Thr Ser Gly His Cys Gly Val Val Leu Tyr Ile Cys Leu
20 25 30
Cys Gly Phe Pro Pro Phe Ser Asp Glu Leu Tyr Thr Arg Glu Asn Pro
35 40 45
Phe Thr Leu Ala Gln Gln Ile Ile Met Gly Pro Ile
50 55 60

<210> 28191
<211> 192
<212> PRT
<213> A.fumigatus

<400> 28191
Leu Asn Ser Gln Phe Ile Ile Ile Ile Thr Ile Asp Ser Val Phe Val
1 5 10 15
Leu Ile Ala Cys Val Asp Ser Thr Leu Ile Cys Val His Tyr Cys Phe
20 25 30
Ser Leu Pro Phe Phe Ile Pro Ala Asp Phe Leu Thr Leu Cys Tyr Leu
35 40 45
Arg Ser Trp His Cys Ser Thr Arg Thr Pro Pro Ala Ser Ala Ser Phe
50 55 60
Leu Ser Ser Asn Leu Ser Arg Ser Tyr His Pro Ile Ile Val His Leu
65 70 75 80
Pro Ser Gln Ser Ile His Tyr Gln Ala Phe His Ser His Pro Phe Ser
85 90 95
Ser Ser Ser Val Thr Phe Ser His Phe Ser Gln Ser His Lys Ile Met
100 105 110
Ala Thr Thr Leu Thr Asp Gln Lys Arg Pro Gln Leu Gln Pro Val Cys
115 120 125
Gln Asn Cys Gly Thr Ser Thr Thr Pro Leu Trp Arg Arg Asp Glu Leu
130 135 140
Gly Ser Val Leu Cys Asn Ala Cys Gly Leu Phe Leu Lys Leu His Gly
145 150 155 160
Arg Pro Arg Pro Ile Ser Leu Lys Thr Asp Val Ile Lys Ser Arg Asn
165 170 175
Arg Val Lys Thr Ala Gly Gln Gly Pro Lys Arg Lys Val Ser Leu Gly
180 185 190

<210> 28192
<211> 252
<212> PRT
<213> A.fumigatus

<400> 28192
Gly Leu Leu Asp Ser Asn Ile Ala Leu Phe Gln Ser Ser Ser Ala Val
1 5 10 15
Asp Ala Asn Gly Leu Pro Thr Ser Arg Ser Glu Asp Gly Thr Pro Pro
20 25 30
Leu Gly Ser Gln Gly Tyr Arg Arg Ala Ser Arg Lys Ala Ser Pro Gly
35 40 45
His Ser Asp Arg Ser Asn Ser Pro Val Ser Arg Thr Asp Thr Pro Gly
50 55 60

```
Val Ser Ala Leu Gln Gln Gln Gln Gln His Gln His Gln His Thr Ser
65                  70                  75                  80
Asn Ile Ala Pro Gln His Met Phe Asp Ser Val Thr Leu Ala Asp His
                85                  90                  95
Thr Leu Asn Gln Pro Asn Gly Leu Pro Ser Leu Gln Leu His Gln Pro
            100                 105                 110
Ser Pro Thr Ser Thr Ser Ser Ala Ala Val Asp Arg His Ala Asp Ala
        115                 120                 125
Pro Gln Thr Tyr Glu Gly Leu Leu Ala Ala Asn Ala Ser Leu Lys Thr
    130                 135                 140
Arg Val Ser Glu Leu Glu Leu Ile Asn Gly Leu Phe Arg Gly Arg Val
145                 150                 155                 160
Ala Glu Leu Glu Gln Ser Asp Ala Thr Ala Arg Arg Ser Glu Met Ile
                165                 170                 175
Val Arg Asp Ser Glu Ala Arg Leu Arg Arg Ser Leu Glu Glu Ala Gln
            180                 185                 190
Arg Arg Glu Glu Glu Leu Lys Arg Arg Val Ser Asp Leu Glu Arg Gln
        195                 200                 205
Leu Ala Asp Gln Ala Asn Ser Asn Asn Ser Ala Asn Asn Asp Ser Pro
    210                 215                 220
Gly Glu Pro Leu Ser Lys Lys Ile Arg Leu Ser Asp Met Val Glu Gln
225                 230                 235                 240
Ser Ser Ala Ser Pro Thr Lys Ser Pro Lys Ser Ile
                245                 250
```

<210> 28193
<211> 67
<212> PRT
<213> A.fumigatus

<400> 28193

```
Leu Pro Leu Lys Val Thr His Thr Pro Phe Glu Leu Phe Phe Ser Thr
1               5                   10                  15
Leu Arg Phe Phe Glu Arg Pro Ala Lys Thr Cys Phe Arg Ile Ser Asp
            20                  25                  30
Asp His Leu Gly Pro Ala Cys Gly Arg Val Ala Leu Phe Glu Leu Arg
        35                  40                  45
Asn Ala Ala Pro Lys Lys Pro Val Asp Glu Phe Gln Phe Ala His Ala
    50                  55                  60
Arg Leu Gln
65
```

<210> 28194
<211> 132
<212> PRT
<213> A.fumigatus

<400> 28194

```
Pro Ser Pro Ser Ser Thr Pro Ala Ala Val Leu Glu Pro Ser Ala Ser
1               5                   10                  15
His Pro Gln Ala Ala Pro Leu Pro Ser Arg Ala Ala Ser Ser Pro Ser
            20                  25                  30
Glu Ser Thr Thr Asn Ser Thr Thr Gln Ile Cys Thr Pro Ala Cys Thr
        35                  40                  45
Trp Thr Pro Ser Asp Ala Ser Arg Thr Cys Ser His Pro Pro Ser Ser
    50                  55                  60
```

```
His Ala Asp Ala Pro Gln Ser Ala Ser Gly Thr Pro Ser Arg Arg Gly
65                  70                  75                  80
Arg Arg Ser Pro Pro Ala Pro Cys Gly Leu Ala Ala Cys Trp Ser Cys
                85                  90                  95
Ser Arg Ser Ala Thr Asp Pro Ala Leu Leu Trp Phe Leu Ser Arg Ser
            100                 105                 110
Leu Arg Arg Arg Ser Arg Cys Gly Ile Pro Pro Pro Pro Tyr Pro Ser
        115                 120                 125
Thr Pro Val Pro
    130
```

<210> 28195
<211> 174
<212> PRT
<213> A.fumigatus

<400> 28195

```
Cys Leu Ala Asn Arg Leu Gln Asn Arg Leu Arg Asp Ile Arg Thr Ser
1               5                   10                  15
Pro Leu Ser Thr Ser Ser Ser Val Arg Arg Trp Ser Thr Val Arg Ser
            20                  25                  30
Arg Ile Asn Ile Leu Tyr Asp His Pro Leu Leu Leu Tyr Ala Ser Ala
        35                  40                  45
Asn Gly His Gln Met Trp Trp His Ala Asp Asn Ser Thr Tyr Gly Trp
    50                  55                  60
Leu Leu Gln Gly Phe Ala Thr Ser Asp Asn Ile Thr Gly Pro Tyr Thr
65                  70                  75                  80
Phe Val Asp Ala Thr Ala Pro Leu Gly Asn Trp Ser Gln Asp Phe Gly
                85                  90                  95
Leu Phe Thr Asp Tyr Lys Asp Gly Arg Ser Tyr Ala Leu Tyr Ser Asn
            100                 105                 110
Gly Asp Ser Lys Tyr Gly Arg Asp Val Tyr Leu Thr Ala Tyr Asn Lys
        115                 120                 125
Asn Val Ser Ala Leu Glu Glu Val Val Tyr Arg Phe Pro Lys Phe Asp
    130                 135                 140
Leu Glu Ala Pro Thr Ile Ile Gln Thr Glu Lys Ser Tyr Trp Leu Phe
145                 150                 155                 160
Thr Pro Gly Ala Gly Arg Asn Arg Ala Cys Val Arg Lys Gln
                165                 170
```

<210> 28196
<211> 140
<212> PRT
<213> A.fumigatus

<400> 28196

```
Ile Ser Cys Met Ile Ile Leu Ser Tyr Tyr Met Arg Leu Leu Thr Asp
1               5                   10                  15
Thr Arg Cys Gly Gly Met Gln Ile Ile Pro Leu Thr Ala Gly Tyr Cys
            20                  25                  30
Lys Asp Leu Gln Leu Pro Thr Thr Ser Leu Gly Arg Ile Leu Leu Leu
        35                  40                  45
Met Pro Arg His Arg Trp Ala Thr Gly Arg Arg Ile Leu Asp Ser Ser
    50                  55                  60
Pro Thr Thr Arg Met Ala Ala Pro Met Arg Ser Thr Arg Thr Ala Thr
65                  70                  75                  80
```

```
Ala Ser Thr Asp Ala Thr Ser Thr Leu Pro Arg Thr Thr Arg Thr Ser
                85                  90                  95
Ala Arg Trp Arg Arg Ser Ser Thr Asp Ser Gln Ser Leu Thr Trp Arg
            100                 105                 110
Arg Arg Pro Leu Ser Arg Arg Arg Arg Val Thr Gly Ser Ser Pro Arg
        115                 120                 125
Glu Pro Glu Gly Thr Ala His Ala Leu Gly Ser Asn
    130                 135                 140
```

<210> 28197
<211> 66
<212> PRT
<213> A.fumigatus

<400> 28197

```
Val Val Lys Thr Gly Ser Leu Val Ser Asp Tyr Asp Val Asp His Glu
1               5                  10                  15
Cys Met Cys Lys Ala Asn Thr Ala Cys Asn Ser Ile Tyr Tyr Met Ser
            20                  25                  30
Ala Tyr Met Leu Leu Glu Ile Thr Val Thr Ala Arg Leu Arg Asp Asp
        35                  40                  45
Leu Arg Asn Leu Glu Phe Ser Lys Asp Lys Asn Cys Phe Phe Ala Phe
    50                  55                  60
Asn Ala
65
```

<210> 28198
<211> 254
<212> PRT
<213> A.fumigatus

<400> 28198

```
Phe Ile Asp Val Asn Asn Ser Ile His Arg Thr Lys Thr Thr Pro His
1               5                  10                  15
Pro Ile Asn Pro Pro Ala Arg Asp Lys Val Glu Met Gly Trp Leu Trp
            20                  25                  30
Arg Ser Ser Pro Ser Lys Glu Glu Pro Gln Gln Ile Ser Ser Val Pro
        35                  40                  45
Ser Phe Ser Asp Asn Ala Ala Pro Gln Pro Ser Pro Ala Ala Glu Ala
    50                  55                  60
Pro Gly Thr Met Pro Ser Ser Ser Gln Ser Arg Pro Leu Ser Arg Lys
65                  70                  75                  80
Glu Gln Ala Asp Ala Glu Phe Asn Gln Leu Leu Glu Ser Leu Lys Ala
                85                  90                  95
Asp Val Ser Arg Thr Lys Ser Pro Gln Gln Ser Ser Asn Val Ser Glu
            100                 105                 110
Thr Pro Leu Ser Pro Ser Ser Pro Ser Pro Ser Gly Pro Pro Gln Pro
        115                 120                 125
Pro Ser Ser Ile Ala Pro Glu Ser Leu Tyr Pro Asp Ser Met Ser Cys
    130                 135                 140
Arg Ser Ala Phe Asp Tyr Ala Phe Phe Cys Gln Ser Phe Gly Gly Gln
145                 150                 155                 160
Phe Val Asn Val Tyr Arg Tyr Gly Glu Leu Arg Ser Cys Ser Glu His
                165                 170                 175
Trp Asp Asn Phe Trp Leu Cys Met Lys Ala Arg Gly Met Ala Asp Glu
            180                 185                 190
```

```
Glu Arg Lys Lys Val Ile Arg Asp His Tyr Arg Lys Lys Ala Ile Lys
        195                 200                 205
Tyr Lys Thr Gly Pro Ser Ser Glu Asp Val Trp Asp Leu Arg Arg Glu
    210                 215                 220
Pro Val Gln His Ala Phe Gln Gly Asp Phe Glu Ala Leu Glu Arg Glu
225                 230                 235                 240
Met Lys Ala Glu Glu Glu Ala Ser Arg Asn Ala Gly Gly Ile
                245                 250
```

<210> 28199
<211> 525
<212> PRT
<213> A.fumigatus

<400> 28199

```
Ala Pro Thr Pro Ser Arg Phe Phe Gln Pro Gly Leu Asn Thr Ala Val
1               5                   10                  15
Thr Gly Arg Gly Ile Val Ala Arg His Lys Glu Tyr Ala Phe Tyr Arg
            20                  25                  30
Pro Ser Ala Val Ser Ile Ala Arg Val Val Met Asp Phe Pro Ala Ile
        35                  40                  45
Phe Cys Met Val Val Pro Phe Thr Ile Ile Met Tyr Ile Met Thr Gly
    50                  55                  60
Leu Asp Val Thr Ala Ser Lys Phe Phe Ile Tyr Phe Leu Phe Val Tyr
65                  70                  75                  80
Thr Ser Thr Phe Ser Ile Thr Ser Leu Tyr Arg Met Phe Ala Ala Leu
                85                  90                  95
Ser Pro Thr Ile Asp Asp Ala Val Arg Phe Ser Gly Ile Ala Leu Asn
            100                 105                 110
Ile Leu Val Ile Phe Val Gly Tyr Val Ile Pro Lys Gln Gly Leu Ile
        115                 120                 125
Tyr Gly Ser Ile Trp Phe Gly Trp Leu Phe Tyr Val Asn Pro Ile Ala
    130                 135                 140
Tyr Ser Tyr Glu Ala Val Leu Thr Asn Glu Phe Ser Asp Arg Ile Met
145                 150                 155                 160
Asp Cys Ala Pro Ser Gln Leu Val Pro Gln Gly Pro Gly Val Asp Pro
                165                 170                 175
Arg Tyr Gln Gly Cys Ala Leu Pro Gly Ser Glu Leu Gly Arg Arg Gly
            180                 185                 190
Val Ser Gly Ser Arg Tyr Leu Glu Glu Ser Phe Gln Phe Thr Arg Ser
        195                 200                 205
His Leu Trp Arg Asn Phe Gly Val Val Ile Ala Phe Thr Val Leu Tyr
    210                 215                 220
Leu Ile Val Thr Val Leu Ala Ala Glu Phe Leu Ser Phe Val Gly Gly
225                 230                 235                 240
Gly Gly Gly Ala Leu Val Phe Lys Arg Ser Lys Arg Ala Lys Lys Leu
                245                 250                 255
Ala Thr Gln Thr Thr Gln Gly Asn Asp Glu Glu Lys Val Gln Asp Val
            260                 265                 270
Gly Asp Lys Ala Ala Leu Ser Arg Gly Glu Ala Met Ser Ala Ser Asn
        275                 280                 285
Gly Glu Ser Phe Lys Arg Ile Ser Ser Ser Asp Arg Ile Phe Thr Trp
    290                 295                 300
Ser Asn Val Glu Tyr Thr Val Pro Tyr Gly Asn Gly Thr Arg Lys Leu
305                 310                 315                 320
Leu Asn Gly Val Asn Gly Tyr Ala Lys Pro Gly Val Met Ile Ala Leu
```

```
                325                 330                 335
Met Gly Ala Ser Gly Ala Gly Lys Thr Thr Leu Leu Asn Thr Leu Ala
            340                 345                 350
Gln Arg Gln Lys Met Gly Val Val Thr Gly Asp Phe Leu Val Asp Gly
        355                 360                 365
Arg Pro Leu Gly Ala Asp Phe Gln Arg Gly Thr Gly Phe Cys Glu Gln
    370                 375                 380
Met Asp Leu His Asp Asn Thr Ser Thr Ile Arg Glu Ala Leu Glu Phe
385                 390                 395                 400
Ser Ala Leu Leu Arg Gln Asp Arg Asn Val Ser Lys Gln Glu Lys Leu
                405                 410                 415
Asp Tyr Val Asp Gln Ile Ile Asp Leu Leu Glu Leu Asn Asp Ile Gln
            420                 425                 430
Asp Ala Ile Ile Gly Ser Leu Asn Val Glu Gln Lys Lys Arg Val Thr
        435                 440                 445
Ile Gly Val Glu Leu Ala Ala Lys Pro Ser Leu Leu Leu Phe Leu Asp
    450                 455                 460
Glu Pro Thr Ser Gly Leu Asp Ser Gln Ala Ala Phe Ser Ile Val Arg
465                 470                 475                 480
Phe Leu Lys Lys Leu Ser Leu Ala Gly Gln Ala Ile Leu Cys Thr Ile
                485                 490                 495
His Gln Pro Ser Ser Met Leu Ile Gln Gln Phe Asp Thr Ile Leu Ala
            500                 505                 510
Leu Asn Pro His Ser Ala Thr Glu Trp Lys Asp Arg Val
        515                 520                 525

<210> 28200
<211> 64
<212> PRT
<213> A.fumigatus

<400> 28200
Arg Arg Gly Gln Thr Ser Ile Val Ala Val Val Arg Ile Trp Val Phe
1               5                   10                  15
Ser Phe Gly Val Phe Cys Ile Met Gly Gly Leu Tyr Tyr Leu Leu Gln
            20                  25                  30
Gly Ser Thr Gly Phe Asp Asn Leu Met Asn Gly Lys Ser Phe Ser Arg
        35                  40                  45
Ser Val Lys Gln Arg Ser Leu Glu Asp Phe Gly Lys Leu Thr Ile Ser
    50                  55                  60

<210> 28201
<211> 258
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (36)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28201
Glu Arg Ser Thr Asp Ala Ser Ser Lys Arg Arg Arg Ser Ile Gln Ser
1               5                   10                  15
Lys Pro Leu Thr Asn Ser Ala Ala Pro Ala Glu Asp Val Glu Gln Asp
            20                  25                  30
```

```
Asp Arg Ala Xaa Glu Pro Ser Gly Pro Thr Tyr Arg Asn Arg Asp Pro
        35                  40                  45
Phe Asp Ala Phe Leu Glu Pro Phe Tyr Tyr Asn Lys Ser Leu Thr Asp
    50                  55                  60
Pro Ile Asn Thr Ala Lys Asp Lys Trp Asn Leu Leu Pro Ala Phe Leu
65                  70                  75                  80
Lys Val Lys Gly Leu Val Lys Gln His Ile Asp Ser Tyr Asn Tyr Phe
                85                  90                  95
Ile Glu Val Gln Leu Lys Lys Ile Val Glu Ser Ser Ser Thr Ile Arg
            100                 105                 110
Ser Asp Ile Asp His Thr Phe Tyr Ile Lys Phe Thr Asp Ile Tyr Val
        115                 120                 125
Gly Ser Pro Cys Arg Ala Asp Glu Pro Gln Asp Val Thr Pro Asp Ala
    130                 135                 140
Thr Pro Ser Asp Val Ser Pro His Glu Cys Arg Leu Arg Asp Thr Thr
145                 150                 155                 160
Tyr Ala Ala Pro Ile Leu Val Asn Phe Glu Tyr Ile Arg Gly Arg Gln
                165                 170                 175
Arg Val Thr Arg Lys Gly Val Ser Ile Gly Arg Met Pro Ile Met Leu
            180                 185                 190
Arg Ser Ser Lys Cys Val Leu Ala Asn Lys Thr Pro Ser Glu Met Thr
        195                 200                 205
Val Leu Asn Glu Cys Pro Leu Asp Pro Gly Gly Tyr Phe Ile Val Asn
    210                 215                 220
Gly Thr Glu Lys Val Ile Leu Val Gln Glu Gln Leu Ser Lys Asn Arg
225                 230                 235                 240
Ile Ile Val Glu Thr Asp Pro Lys Lys Glu Ile Val Gln Ala Ser Val
                245                 250                 255
Thr Arg
```

<210> 28202
<211> 112
<212> PRT
<213> A.fumigatus

<400> 28202

```
Asp Ser Leu Ser Ser Ser Arg Gly Cys Glu Asp Val Glu Tyr Arg Ala
1               5                   10                  15
Lys Tyr Tyr Glu Tyr Thr Ile Arg Ala Met Leu Gln Ala Val Gly Val
            20                  25                  30
Ser Thr Glu Lys Leu Arg Phe Val Leu Gly Ser Ser Tyr Gln Lys Ser
        35                  40                  45
Pro Glu Tyr Val Met Asp Val Tyr Lys Leu Cys Ser Leu Val Ser Glu
    50                  55                  60
His Asp Ala Lys Lys Ala Gly Ala Glu Val Val Lys Gln Ser Asn Asn
65                  70                  75                  80
Ser Pro Leu Ser Gly Leu Leu Tyr Pro Ile Leu Gln Val Leu Asp Glu
                85                  90                  95
Gln His Leu Asp Cys Asp Val Gln Phe Gly Gly Ala Leu Pro Arg Leu
            100                 105                 110
```

<210> 28203
<211> 126
<212> PRT
<213> A.fumigatus

<400> 28203
Ala Arg Arg Pro Gly Ala Ser Arg Leu Pro Arg Tyr Gln Ala Asp Ala
1 5 10 15
Arg Arg Leu Gln Glu Arg Tyr Cys Met Tyr Arg Ser Asn Leu Gln Arg
20 25 30
Lys Gly Leu Ser Gly Pro Val Leu Thr Ser Leu Gln Leu Thr Pro Gln
35 40 45
Leu Leu Lys Pro Ala Val Ala Glu Ala Leu Val Glu Leu Met Ala Pro
50 55 60
Ile Ile Thr Ala Phe Glu Ala Ser Lys Glu Trp Gln Glu Ile Thr Leu
65 70 75 80
Lys Ala Tyr Pro Pro Pro Glu Lys Lys Lys Lys Glu Lys Lys Gln Lys
85 90 95
Asp Lys Gly Asn Arg Tyr Pro Gly Ala Lys Thr Ala Glu Thr Ala Glu
100 105 110
Leu Pro Leu Arg Glu Ile Gly Val Gln Glu Pro Thr Ala Asp
115 120 125

<210> 28204
<211> 100
<212> PRT
<213> A.fumigatus

<400> 28204
Ser Pro Val Glu Ser Lys Ile Asp Leu Leu Glu Ala Ala Asp Thr Val
1 5 10 15
Arg Lys Lys Ile Arg Lys Ala Gln Ala Ala Pro Lys Glu Val Glu Asn
20 25 30
Asn Gly Val Leu Ser Phe Ala Glu Phe Val Leu Leu Pro Ala Ser Ala
35 40 45
Leu Lys Thr Gly Arg Pro Glu Phe Arg Val Ser Arg Glu Arg Asp Gly
50 55 60
Leu Glu Pro Leu Val Tyr His Asp Ile Lys Gln Met Gln Glu Asp Tyr
65 70 75 80
Lys Asn Asp Ile Val Cys Thr Gly Ala Ile Cys Ser Ala Arg Gly Tyr
85 90 95
Leu Ala Arg Tyr
100

<210> 28205
<211> 238
<212> PRT
<213> A.fumigatus

<400> 28205
Lys Asn Trp Arg Ser Phe Phe Arg Pro Arg Gly Glu Asp Glu Arg Gly
1 5 10 15
Trp Val Val Tyr Ser Asn Trp Gly Ser Arg Glu Gly Lys Gly Gly Gln
20 25 30
Val Phe Gly Val Asn Ala Gly Gly Gly Asp Phe Pro Gly Ala Met Pro
35 40 45
Arg Pro Asp Glu Asp Glu Ser Leu Leu Gln Asp Val Gln Gly Gly Asn
50 55 60
Arg Trp Ala Ala Leu Thr Phe Cys Trp Ser Ala Leu Glu Arg Gln Val
65 70 75 80

```
Arg Ile Glu Gly Leu Val Glu Pro Leu Ser Arg Glu Glu Ser Glu Leu
                85                  90                  95
Tyr Trp Asn Thr Arg Glu Arg Gly Ser Gln Ile Gly Ala Trp Ala Ser
            100                 105                 110
Trp Gln Ser Lys Val Leu Trp Ser Ala Glu Pro Glu Thr Leu Val Asp
        115                 120                 125
Arg Arg Arg Lys Ser Val Ala Ala Ala Ala His Val Gln Gly Ser Thr
    130                 135                 140
Pro Thr Ser Gly Cys Pro Glu Ile Pro Ala Asp Ile Asp Glu Thr Asp
145                 150                 155                 160
Ile Asp Asp Gly Arg Ala Leu Leu Glu Lys Arg Val Gln Glu Met Glu
                165                 170                 175
Ala Arg Phe Ala Gly Val Glu Lys Ile Pro Leu Pro Pro Phe Trp Gly
            180                 185                 190
Gly Val Arg Leu Val Pro Glu Ser Val Glu Phe Trp Gln Gly Arg Arg
        195                 200                 205
Ser Arg Leu His Asp Arg Phe Arg Tyr Val Arg Val Lys Glu Ser Asp
    210                 215                 220
Asp Asp Ser Ser Phe Gln Trp Gln Ile Gln Arg Leu Ser Pro
225                 230                 235
```

<210> 28206
<211> 86
<212> PRT
<213> A.fumigatus

<400> 28206

```
Arg Arg Ser Met Lys Met Ala Thr Ser Val Ala Ala Gly Ser Gly Thr
1               5                  10                  15
Glu Asn Ser Gly Gly Phe Asn Thr Phe Gly Asn Ala Lys Val Gly Asn
            20                  25                  30
Leu Asp Thr Ala Leu Val Ile His Gln Asn Val Gly Thr Leu Asp Ile
        35                  40                  45
Thr Val Asp Asp Val Ser Ala Met Glu Val Gly Lys Thr Phe Gln Tyr
    50                  55                  60
Leu Thr Tyr Lys Ile Leu Asp Gln Arg Leu Leu Glu Gly Val Val Leu
65                  70                  75                  80
Phe Glu His Arg Ser Asn
                85
```

<210> 28207
<211> 287
<212> PRT
<213> A.fumigatus

<400> 28207

```
Phe Trp Thr Pro Lys Asn Trp Met Glu Asp Ser Leu Ile Gly Gly Gly
1               5                  10                  15
Ser Ser Val Arg Phe Phe Leu Ala Ile Gln Pro Ile Thr Gly Glu Leu
            20                  25                  30
Met Ala Phe Lys Gln Val Glu Ile Leu Ser Gly Thr Lys Gly Thr Glu
        35                  40                  45
Phe Asp Lys Arg Lys Asn Ser Met Val Thr Ala Leu Lys His Glu Ile
    50                  55                  60
Glu Leu Leu Gln Gly Leu His His Pro Asn Ile Val Gln Tyr Leu Gly
65                  70                  75                  80
```

```
Thr Ser Ala Asp Asp Gln Tyr Leu Asn Ile Phe Leu Glu Tyr Val Pro
                85                  90                  95
Gly Gly Ser Ile Ala Thr Met Leu Lys Gln Tyr Asn Thr Phe Gln Glu
            100                 105                 110
Pro Leu Ile Lys Asn Phe Val Arg Gln Ile Leu Glu Gly Leu Ser Tyr
        115                 120                 125
Leu His Ser Arg Asp Ile Ile His Arg Asp Ile Lys Gly Ala Asn Ile
    130                 135                 140
Leu Val Asp Asn Lys Gly Gly Ile Lys Ile Ser Asp Phe Gly Ile Ser
145                 150                 155                 160
Lys Arg Val Glu Ala Ser Thr Val Leu Gly Ala Arg Ala Ser Gly Asn
                165                 170                 175
Gly Gly Gly His Leu His Arg Pro Ser Leu Gln Gly Ser Val Tyr Trp
            180                 185                 190
Met Ala Pro Glu Val Val Arg Gln Thr Ala His Thr Lys Lys Ala Asp
        195                 200                 205
Ile Trp Ser Leu Gly Cys Leu Val Val Glu Met Phe Ile Gly Ala His
    210                 215                 220
Pro Phe Pro Asp Cys Ser Gln Leu Gln Ala Ile Phe Ala Ile Gly Ser
225                 230                 235                 240
Asn Ser Ala Arg Pro Pro Ala Pro Glu His Ala Ser Lys Glu Ala Met
                245                 250                 255
Ala Phe Leu Asp Met Thr Phe Gln Val Asp Tyr Glu Lys Arg Pro Ser
            260                 265                 270
Ala Asp Glu Leu Leu Gln Ser Pro Phe Leu Ser Ala Pro Leu Ala
        275                 280                 285
```

<210> 28208
<211> 87
<212> PRT
<213> A.fumigatus

<400> 28208

```
Tyr Gly Ser Phe Gln Arg Pro Pro Phe Phe Asp Leu His Pro Ile Thr
1               5                   10                  15
Leu Arg Arg Pro Ser Phe Pro Trp Phe Phe Ile Ile Ile Val Ala Ser
            20                  25                  30
Leu Leu Ser Phe Asn Asn Pro Phe Leu Leu Leu Ile Leu Asn Asn Phe
        35                  40                  45
Pro Phe Ile Val Leu Tyr Phe Pro Arg Ile Val Ile Cys Leu Pro Phe
    50                  55                  60
Phe Thr Pro Pro Leu Ser Leu Leu Gly Ile Ile Tyr Arg Gly Leu Gly
65                  70                  75                  80
His Pro Leu Leu Val Val Asp
                85
```

<210> 28209
<211> 74
<212> PRT
<213> A.fumigatus

<400> 28209

```
Ser Ile Ile Gly Asp Pro Ala Ser Leu Val Leu Ile Gly Ser Tyr Leu
1               5                   10                  15
Ser Phe Asn Phe Arg Met Phe His Leu Gln Phe Lys Phe Gly Leu Leu
            20                  25                  30
```

```
Ile Phe Val Trp Val Ile Phe Ala Val Met Asn Thr Lys Tyr Val Arg
        35                  40                  45
Ser Thr Glu Tyr Cys Val Gln Arg Lys Leu Pro Gln Pro Pro Leu Tyr
    50                  55                  60
Gln Pro Leu Leu Leu Leu Ser Asn Ala Pro
65                  70
```

<210> 28210
<211> 487
<212> PRT
<213> A.fumigatus

<400> 28210

```
Arg Gly Ser Gly Thr Ser Arg Glu Tyr Arg Asp Gly Arg Tyr Tyr Glu
1               5                   10                  15
Glu Arg Lys Pro Ala Asp Ala Ala Phe Phe Glu Asp Asp Tyr Arg Tyr
            20                  25                  30
Thr Glu Glu Pro Arg Pro Met Ser Arg Lys Tyr Asp Glu Phe Glu Arg
        35                  40                  45
Arg Arg Pro Arg Thr Lys Pro Thr Glu Glu Lys Lys Lys Ser Lys Ala
    50                  55                  60
Val Pro Leu Asp His Leu Arg Thr Gly Lys Asp Thr Ala Arg Glu Ser
65                  70                  75                  80
Val Lys Ser Thr His Thr Ser Arg Ala Lys Tyr Arg Thr Lys Glu Arg
                85                  90                  95
Arg Arg Glu Ala Tyr Glu Lys Leu Glu Arg Ala Gly Pro Tyr Tyr Asp
            100                 105                 110
Ser Glu Asp Asp Tyr Ser Asp Ala Ser Thr Ser Ser Ala Ser Ser Ile
        115                 120                 125
Tyr Val Lys Val Lys Val Lys Arg Pro Ser Glu Ser Arg Arg Ser Arg
    130                 135                 140
Asp Ser Thr Ser Arg Lys Thr Lys Ser Thr Asp Ser Ser Arg Arg Ser
145                 150                 155                 160
Glu Arg Ala Arg Tyr Asp Asp Asp Asp Asp Tyr Ser Asp Glu Trp Asp
                165                 170                 175
Ser Lys His Glu Lys Leu His Thr Thr Ala Gln Asp Tyr Ile Leu Arg
            180                 185                 190
Ser Lys Ala Ala Pro Val Glu Ser Asp Arg Arg Arg Arg Ser Ser Arg
        195                 200                 205
Ser Pro Val Arg His His Gly Tyr Glu Cys Ala Glu Pro Glu Pro Ser
    210                 215                 220
Thr Ser Arg Arg Pro Val Arg Ser Ser Arg Ser Ser Arg Lys Asp Val
225                 230                 235                 240
Arg Pro Ala Ala Ser Arg Asn Gly Ser Tyr Glu His Leu Glu Ser Gln
                245                 250                 255
Ser Arg Ser Tyr Glu Thr Lys Arg Pro Ser Met Pro Thr Ala Ala Thr
            260                 265                 270
Ser Pro Ser Ile Lys Val Ser Ser Ser Thr Val Arg Pro Ser Leu Gln
        275                 280                 285
Ser Ser Arg Ser Ala Ser Ser Ala Gln Ser Gln Ser Arg Ser Arg Arg
    290                 295                 300
Glu Pro Pro Ser Arg Val Glu Gln Val Leu Leu Asn Met Val Arg Ser
305                 310                 315                 320
Ser Val Lys Pro Arg Gly Val Glu Arg Tyr Asp Ser Gly Tyr Ser Ser
                325                 330                 335
Pro Gly Thr Pro Glu Met Ala Ser Gly Asp Ser Pro Thr Lys Thr Ser
```

```
            340                 345                 350
Thr Arg Tyr Lys Ile Lys Glu Gln Asp Ala Thr Val Val Glu Pro Val
        355                 360                 365
Met Pro Pro Ala Pro Thr Ser Ser Ser Arg His Thr Arg Ala Tyr Ser
    370                 375                 380
Pro Pro Arg Ala Glu Arg Pro Ser Thr Ser Thr Arg Ser Ala Pro Lys
385                 390                 395                 400
Pro Val Arg Ser Ser Thr Thr Tyr Ala Tyr Pro Ser Glu Pro Ser Ser
                405                 410                 415
Arg His Glu Ser Thr Arg Pro Ser Ala Ser Arg Gln Ser Ser Ser Arg
            420                 425                 430
Leu Phe Gly Glu Val Glu Tyr Ser Ala Gln Phe Lys Glu Lys Asp Ile
        435                 440                 445
Lys Tyr Val Arg Glu Ile Arg Pro Glu His Ile Val Tyr Thr Arg Asp
    450                 455                 460
Ala Tyr Pro Arg Gln His Tyr Asp Glu Tyr Arg Gln Pro Pro Ala Pro
465                 470                 475                 480
Arg Arg Gln Ser Thr Tyr Ala
                485
```

<210> 28211
<211> 89
<212> PRT
<213> A.fumigatus

<400> 28211

```
Ser Ser Ser Arg Val Ser His Ile Arg Pro Leu Gly Lys Ala Trp Arg
1               5                   10                  15
Gln Ala Thr Met Lys Val Pro Pro Phe Ser His Leu Arg Phe Asp Leu
            20                  25                  30
Thr Leu Pro Lys Ala Thr Glu Gly Arg Asn His Ser Phe Gln Lys Val
        35                  40                  45
Tyr Trp Asp Ile Gly Asn Pro Gln Gly Asp Thr Leu Ser Val Glu Ala
    50                  55                  60
Arg Val Val Met Asn Leu Val Val Thr Ile Ala Thr Val Phe Thr Arg
65                  70                  75                  80
Gly Leu Gln Gly Ala Ala Leu Leu Leu
                85
```

<210> 28212
<211> 68
<212> PRT
<213> A.fumigatus

<400> 28212

```
Leu Ile Ser Gly Pro Arg Thr Ser Leu Ala Pro Leu Gln Ser Ile Pro
1               5                   10                  15
Tyr Ala Leu Ala Ala Gly His Gly Gln His Pro His Ser Leu Thr Gly
            20                  25                  30
Leu Gly Thr Thr Thr Ser His Cys Gln Glu Leu Asn Thr Thr Arg Arg
        35                  40                  45
Ile Lys Gly Val Val Met Thr Thr Glu Val Ile Val Asn Arg Thr Leu
    50                  55                  60
Ser Phe Gly Val
65
```

<210> 28213
<211> 87
<212> PRT
<213> A.fumigatus

<400> 28213
Thr Ala Ile Leu Glu Leu Val Ala Trp Leu Gly Thr Phe Ile Asn Gly
1 5 10 15
Tyr Leu Ala Asp Ala Thr Gly Arg Arg Val Thr Val Val Ile Ala Val
20 25 30
Val Val Phe Cys Val Gly Val Ile Val Gln Ala Cys Thr Lys Asn Pro
35 40 45
Glu Tyr Ile Tyr Ala Gly Arg Phe Val Thr Gly Leu Gly Val Gly Asn
50 55 60
Leu Ser Met Ile Val Pro Leu Tyr Asn Ala Glu Leu Val Cys Ser Lys
65 70 75 80
Asp Arg Tyr Glu Asp His Ala
85

<210> 28214
<211> 106
<212> PRT
<213> A.fumigatus

<400> 28214
Ile Gly Tyr Gly Thr Asn Tyr Ile Gly Gly Thr Gly Glu Gly Gln Ser
1 5 10 15
Ile Ala Ala Trp Glu Ile Pro Val Cys Ile Gln Ile Leu Pro Ala Leu
20 25 30
Val Leu Ala Ala Gly Met Leu Leu Phe Met Pro Gln Ser Pro Arg His
35 40 45
Leu Met Asn Gln Gly Arg Glu Glu Glu Cys Leu Gln Thr Leu Ala Arg
50 55 60
Leu Arg Asp Thr Ser Val Asp Asp Ile Ser Val Arg Ile Glu Phe Leu
65 70 75 80
Glu Ile Lys Ala Leu Arg Met Phe Glu Asp Glu Val Ala Arg Lys Ile
85 90 95
Phe Thr Arg Gly Leu Glu Gly Ser Thr Ile
100 105

<210> 28215
<211> 110
<212> PRT
<213> A.fumigatus

<400> 28215
Ile Thr Ser Lys Leu Trp Asn Thr His His Glu Pro Glu His Val Glu
1 5 10 15
Gly Ala Leu Asp Gln Thr Leu Arg Asp Leu Gln Val Asp Tyr Ile Asn
20 25 30
Leu Tyr Leu Ile His Trp Pro Val Ser Phe Arg Tyr Ser Thr Thr Thr
35 40 45
Asn Gln Pro Val Asp Ala Glu Thr Gly Leu Val Asp Val Ile Asp Val
50 55 60
Pro Leu Lys Asp Thr Trp Ala Ala Met Glu Lys Leu Val Asp Lys Gly
65 70 75 80

```
Lys Val Arg Ser Ile Gly Val Ser Asn Phe Thr Arg Gln Arg Ile Glu
                85                  90                  95
Glu Leu Met Thr Thr Tyr Val Phe Arg Asn Phe Val Ala Arg
            100                 105                 110

<210> 28216
<211> 81
<212> PRT
<213> A.fumigatus

<400> 28216
Leu Gln Val Arg Arg Ala Arg Ile Pro Pro Ala Val Asn Gln Ile Glu
1               5                   10                  15
Ala His Pro Tyr Leu Gln Gln Arg Asp Leu Leu Glu Trp Ser Lys Gln
            20                  25                  30
Gln Val Cys Leu Cys Leu His Ala Ala Lys His Gly Val Tyr Ile Ala
        35                  40                  45
Asp Gly Val Gly Asn Arg His His Arg Leu Leu Ala Ser Arg Glu Gln
    50                  55                  60
Tyr Leu Gln His Pro Ser Val Ser Ile Arg Gln Pro His Asn Ala Pro
65                  70                  75                  80
Ser


<210> 28217
<211> 63
<212> PRT
<213> A.fumigatus

<400> 28217
Arg Pro Arg Ala Val Asp Asp Pro Thr Val Ile Gln Val Ala Lys Glu
1               5                   10                  15
Leu Gly Lys Thr Pro Ala Gln Val Leu Ile Ser Trp Ala Ile Gln Arg
            20                  25                  30
Gly Thr Ser Val Val Pro Lys Ser Val Thr Ala Glu Arg Ile Lys Ser
        35                  40                  45
Asn Leu Glu Gly Lys Cys Gly Pro Asp Ser Met Lys Val His His
    50                  55                  60

<210> 28218
<211> 114
<212> PRT
<213> A.fumigatus

<400> 28218
Asn Lys Gly Arg Val Ser Gln Pro Cys Gly Val Glu Gln Cys Gln Ser
1               5                   10                  15
Ser Pro Thr Lys Val Lys Lys Pro Val Gly Thr Ala Leu Lys Ala Glu
            20                  25                  30
Tyr Gly His Ile Asp Ala Ala Ala Val Tyr Gly Asn Glu Lys Glu Val
        35                  40                  45
Gly Glu Gly Ile Lys Leu Ser Gly Val Pro Arg Glu Glu Ile Phe Val
    50                  55                  60
Trp Gly Pro Ser Gln Phe Leu Leu Thr Ala Leu Thr Ala Ile Ala Arg
65                  70                  75                  80
Ser Pro Val Asn Tyr Gly Thr His Thr Thr Asn Pro Asn Thr Ser Arg
```

```
                85                  90                  95
Gly Arg Ser Ile Lys His Ser Ala Ile Ser Lys Ser Thr Ile Ser Ile
            100                 105                 110
Ser Thr
```

<210> 28219
<211> 339
<212> PRT
<213> A.fumigatus

<400> 28219

```
Arg Lys Glu Phe Val Lys Asn Ser Pro Ala Phe Gln Val His Lys Gly
1               5                  10                  15
Val Phe Asp Val Cys Lys Thr Ile Ala Glu Ile Thr Ile Tyr Thr Ala
            20                  25                  30
Ser Arg Ser Leu Gln Gly Lys Glu Val Arg Ser Lys Phe Asp Ser Thr
        35                  40                  45
Phe Ala Glu Leu Tyr His Asn Leu Asp Met Gly Phe Ala Pro Ile Asn
    50                  55                  60
Phe Met Leu Pro Trp Ala Pro Leu Pro His Asn Arg Lys Arg Asp Ala
65                  70                  75                  80
Ala Gln Arg Lys Leu Thr Glu Thr Tyr Met Glu Ile Ile Lys Ala Arg
                85                  90                  95
Arg Gln Ala Gly Ser Lys Lys Asp Ser Glu Asp Met Val Trp Asn Leu
            100                 105                 110
Met Ser Cys Val Tyr Lys Asn Gly Thr Pro Val Pro Asp Glu Glu Ile
        115                 120                 125
Ala His Met Met Ile Ala Leu Leu Met Ala Gly Gln His Ser Ser Ser
    130                 135                 140
Ser Thr Ala Ser Trp Ile Val Leu Arg Leu Ala Thr Arg Pro Asp Ile
145                 150                 155                 160
Met Glu Glu Leu Tyr Gln Glu Gln Ile Arg Val Leu Gly Ser Asp Leu
                165                 170                 175
Pro Pro Leu Thr Tyr Asp Asn Leu Gln Lys Leu Asp Leu His Ala Lys
            180                 185                 190
Val Ile Lys Glu Thr Leu Arg Leu His Ala Pro Ile His Ser Ile Ile
        195                 200                 205
Arg Ala Val Lys Asn Pro Met Ala Val Asp Gly Thr Ser Tyr Val Ile
    210                 215                 220
Pro Thr Ser His Asn Val Leu Ser Ser Pro Gly Val Thr Ala Arg Ser
225                 230                 235                 240
Glu Glu His Phe Pro Asn Pro Leu Glu Trp Asn Pro His Arg Trp Asp
                245                 250                 255
Glu Asn Ile Ala Ala Ser Ala Glu Asp Asp Glu Lys Val Asp Tyr Gly
            260                 265                 270
Tyr Gly Leu Val Ser Lys Gly Thr Asn Ser Pro Tyr Leu Pro Phe Gly
        275                 280                 285
Ala Gly Arg His Arg Cys Ile Gly Glu Gln Phe Ala Tyr Leu Gln Leu
    290                 295                 300
Gly Thr Ile Thr Ala Val Leu Val Arg Leu Phe Arg Phe Arg Asn Leu
305                 310                 315                 320
Pro Gly Val Asp Gly Ile Pro Asp Thr Asp Tyr Ser Val Ser Tyr Pro
                325                 330                 335
Cys Pro Ile
```

<210> 28220
<211> 72
<212> PRT
<213> A.fumigatus

<400> 28220
Leu Val Leu Phe Thr Leu Cys Ser Gln Ala Leu Arg Tyr Ile Ile Arg
1 5 10 15
Asn Thr Thr Leu Pro Gln Arg Val Arg Ala Gln Ala Gln Leu Gln Leu
20 25 30
Ser Gln Met His Ala Tyr Thr Arg Pro Thr Gln Ile Lys Asn Arg Cys
35 40 45
Val Ala Gly Gly Ile Ala Arg Ser Val Ile Arg Asp Phe Arg Ile Ala
50 55 60
Arg Val Ser Asp Phe Ile Ala Cys
65 70

<210> 28221
<211> 160
<212> PRT
<213> A.fumigatus

<400> 28221
Trp Arg Ala Leu Lys Leu Lys Thr Tyr Leu Glu Ser Gly Arg Tyr Asp
1 5 10 15
Ser Phe Ser Asn Ile Thr Arg Asn Ser Leu Arg His Ala Leu Ala Glu
20 25 30
His Gly Glu Lys Pro Glu Lys Asp Val Ile Asp Glu Ile Leu Arg Ala
35 40 45
Tyr Asp Ser Leu Ser Thr Phe Pro Asp Val Pro Ser Ala Leu Gly Gln
50 55 60
Leu Ala His Arg Pro Glu Ile Thr Ala Val Val Phe Ser Asn Gly Thr
65 70 75 80
Gln Asp Thr Val Thr Asn Ser Val His His Ser Pro Asp Leu Ser Pro
85 90 95
His Arg Ala Val Phe Lys Glu Ile Ile Thr Val Asp Glu Val Arg Gln
100 105 110
Phe Lys Pro Ala Pro Ala Val Tyr Ala His Leu Ala Gln Thr Ile Gly
115 120 125
Lys Leu Pro Ser Ser Gln Met Ala Asp Leu Trp Leu Val Ser Gly Asn
130 135 140
Pro Phe Asp Val Ile Ala Leu Gly Val Val Val Cys Thr Pro Ser Gly
145 150 155 160

<210> 28222
<211> 159
<212> PRT
<213> A.fumigatus

<400> 28222
Val Phe Arg Ser Lys Lys Gln Gln Ser Ser Pro Leu Val Asn Leu Pro
1 5 10 15
Thr Glu Ile Leu Val Gln Ile Phe Ser Tyr Ile Asn Leu His Asp Thr
20 25 30
Ile Ala Leu Ser Thr Ser Cys Lys Tyr Leu Leu Ser Ile Leu Ser Phe

```
        35                  40                  45
Ala Ala Phe Pro Gly Asp Phe Leu Phe Lys Lys Leu Pro Asp Leu Ala
    50                  55                  60
Pro Ile Lys Leu Ile Leu Phe Leu Leu Gly Leu Leu Trp Pro Arg Glu
65                  70                  75                  80
Met Asn Gly Arg Pro Lys Lys Gly Leu Arg Tyr Cys Asn Ala Cys Arg
                85                  90                  95
Arg Ile Tyr Pro Glu Lys Arg Gln Tyr Trp Glu Glu Lys Leu Ser Met
            100                 105                 110
Lys Ile Ser Arg Asp Phe Leu Asn Arg Asp Cys Pro Lys Cys Tyr Leu
        115                 120                 125
Gly His Lys Arg Thr Tyr Met Cys Leu Cys His Ala Ala Phe Ile Lys
    130                 135                 140
Arg Trp Glu Gln Ile Cys Ala Glu His Ile Gly Trp Phe Gly Asn
145                 150                 155

<210> 28223
<211> 522
<212> PRT
<213> A.fumigatus

<400> 28223
Gln Cys Val Ser Phe Gln Pro Arg Gly Glu Asp Ser Ser Trp Ile Ser
1               5                   10                  15
Ile Asn Tyr Leu Pro Leu Val Asn Ala Pro Pro Leu Gln Leu Val Ile
            20                  25                  30
Leu Leu Gly Lys Asp Ser Asp Gly Thr Phe Asp Ala Val Pro Glu Arg
        35                  40                  45
Gln Gln Arg Glu Gly Asn Gly Leu Glu Thr Ala Ile Arg Lys Phe Arg
    50                  55                  60
Thr Ala Ala Tyr Leu Trp Gln Ala Phe Thr Ala Glu Gln Met Phe Arg
65                  70                  75                  80
Asn Asn Phe Gly Arg Arg Cys Phe Arg Phe Glu Glu Glu Trp Gln Thr
                85                  90                  95
Gly Thr Leu Ser Arg Arg Asp Ala Thr Asp Gly Leu Met Arg Asn Glu
            100                 105                 110
Ala Lys Val His Val Ile Arg Thr Asp Lys Thr Val Ala Glu Leu Arg
        115                 120                 125
Ala Leu Asp Ile Ala Gln Gln His Gly Pro Ala Thr Arg Lys Asp Glu
    130                 135                 140
Leu Phe Asn Ile Ala Lys Glu Ala Val Lys Asn Tyr Phe Arg Pro Lys
145                 150                 155                 160
Glu Gly Gln Lys Gln Tyr Val Ser Val Leu Leu Leu Asp Ser His Trp
                165                 170                 175
Asp Lys Thr Ser Lys Thr Ile Thr Gly His Ala Ala Leu Gly Ser Ser
            180                 185                 190
Gly Asp Asn Ile Lys Met Ala Ile Phe Gly Ser His Cys Leu Gln Ser
        195                 200                 205
Tyr Pro Ser Cys Leu Glu Glu Val Val Glu Ala Phe Ser Asp Cys Thr
    210                 215                 220
Arg Thr Asn Thr Asp Phe Val Ala Asn Asp Cys Gly Glu Ala Gly Ser
225                 230                 235                 240
Ser Trp Glu Ala Ala Asn Ile Gly Ile Gly Ala His Leu His Glu Val
                245                 250                 255
Gly His Leu Phe Gly Cys Pro His Gln Glu Ser Gly Ile Met Leu Arg
            260                 265                 270
```

```
Asp Tyr Val Arg Leu Asn Arg Ser Phe Thr Thr Arg Glu Pro Phe Ser
        275                 280                 285
Thr Arg Thr Lys Thr Gln Gly Leu Lys Leu Cys Leu Pro Gln Asp Glu
    290                 295                 300
Cys Gly Trp His Arg Leu Asp Ala Leu Arg Phe Arg Phe His Pro Cys
305                 310                 315                 320
Phe Arg Leu Pro Ser Asp Ala Pro Val Ser Ser Asp Asp Ser Val Gln
                325                 330                 335
Val Trp Pro Val Glu Asn Gly Lys Ile Leu Phe Thr Ala Pro Ser Gly
            340                 345                 350
Ile Ala Phe Ile Glu Leu Tyr Ala Glu Gly Glu Asp Val Cys His Asn
        355                 360                 365
Phe Ile Glu Tyr Leu Asn Ser Glu Ser Ser Ser Asn Gly Leu Pro Lys
    370                 375                 380
Gln Val Ile Val Thr Glu Ser Glu Leu Arg Gln Arg Leu Phe Gly Asn
385                 390                 395                 400
Glu Lys Glu Asn Lys Lys Asn Val Lys Leu Ala Val Phe Ser Gly Ala
                405                 410                 415
Leu Gly Ser Tyr Thr Val Glu Ser Ile Ala Ser Leu Lys Ser Lys Leu
            420                 425                 430
Ser Leu Val Lys Leu Pro Lys Gly Gln Ser Gly Tyr Lys Ser Gly Lys
        435                 440                 445
Leu Gly Phe Ser Gln Met Asp Gly Ser Gln Pro Glu Gln Leu Leu Leu
    450                 455                 460
Asp Cys Ala Phe Val Ser Thr Lys Leu Leu Thr Ser Ile Lys Ile Tyr
465                 470                 475                 480
His Gly Leu Ala Leu Asp Gly Leu Glu Phe Cys Tyr Glu Asp Ser Thr
                485                 490                 495
Ser Gln Leu Phe Gly Lys Arg Gly Gly Lys Pro Gly Gly Asp Glu Phe
            500                 505                 510
Val Leu Gly Arg His Asn His Ser Pro Val
        515                 520
```

<210> 28224
<211> 119
<212> PRT
<213> A.fumigatus

<400> 28224

```
Pro Arg Ser Arg Ser Ile Met Asp Trp Pro Ser Thr Asp Ser Asn Ser
1               5                   10                  15
Val Thr Lys Thr Leu Leu Ala Ser Ser Ser Gly Ser Glu Gly Glu Ser
            20                  25                  30
Pro Val Val Met Ser Leu Tyr Leu Val Gly Thr Thr Ile Pro Gln Cys
        35                  40                  45
Asp Asn Gln Ser Leu Thr Leu Ser Ser Asp Thr Arg Arg Gly Glu Ile
    50                  55                  60
Leu Leu Gly Phe Tyr Val Arg Ala Gly Ala Trp Ile Asp Gly Ile Glu
65                  70                  75                  80
Ile Leu Thr Ser Leu Gly Arg Arg Ser Gly Ile Phe Gly Asn Ala Arg
                85                  90                  95
Gly Gly Ser Gly Tyr Leu Leu His Leu Phe Pro Ser Ser Asn Phe Arg
            100                 105                 110
Lys Thr Arg Ala Ser Trp Val
        115
```

<210> 28225
<211> 68
<212> PRT
<213> A.fumigatus

<400> 28225
Asn Ile Leu Leu Leu Pro Leu Leu Trp Ser Glu Ile Val Leu His Gly
1 5 10 15
Phe Leu Arg Asn Ile Glu Gln Phe Ile Phe Pro Ser Gly Arg Thr Met
20 25 30
Leu Leu Ser Asp Ile Lys Arg Thr Glu Phe Cys Tyr Cys Leu Ile Gly
35 40 45
Thr Asp Asn Met Asn Leu Gly Leu Ile Pro His Gln Ala Ile Gly Arg
50 55 60
Ile Thr Thr Ala
65

<210> 28226
<211> 503
<212> PRT
<213> A.fumigatus

<400> 28226
Ala Ala Trp Arg Phe Ile Met Asn Gly Pro Phe Ile Pro Thr Lys Asn
1 5 10 15
Pro Ser Gln Pro Lys Gly Ser Gly Pro Ser Leu Leu Ala Cys Leu Leu
20 25 30
Cys Arg His Lys His Leu Lys Cys Asp Gly Val Thr Pro Val Cys Gly
35 40 45
Arg Cys Ala Ala Thr Gly Ala Glu Cys Gln Tyr Thr Pro Ser Arg Arg
50 55 60
Gly Tyr Lys Gly Pro Ser Lys Lys Arg Arg Ala Asn Pro Ser Ser Pro
65 70 75 80
Glu Arg Thr Pro Ser Asp Gln Ser Ser Ser Phe Asp Phe Gln Ser Val
85 90 95
Ala Leu Leu Asp Thr Pro Gln Asp Trp Ser Val Pro Asp Gly Leu Ser
100 105 110
Tyr Ile Phe Pro Asn Gly Phe Ala Ser Ser Gly Ser Asn Gly Ser Ile
115 120 125
Leu Asn Asn Asp Lys Ala Leu Val Ser Asp Ser Ala Pro Val Ser Asn
130 135 140
Gly Cys Pro Leu Thr Pro Asp Ser Val Asn Ser Val Ala Gly Asp Gly
145 150 155 160
Tyr Leu Ile Asp Ile Tyr Tyr Thr Tyr Phe His Pro Ser His Pro Ile
165 170 175
Leu Pro Pro Leu Arg Ile Leu Tyr Arg Ser His Val Pro Pro Phe Leu
180 185 190
Glu His Val Ile Lys Phe Ile Gly Ser His Phe Thr Pro Ala Ala Asn
195 200 205
Ser Glu Val Tyr Arg Pro Ser Val Met Ser Ser Ala Met Glu Gln Glu
210 215 220
Ser Ser Val Glu Lys Leu Gln Ala Leu Leu Leu Leu Ala Val Val Leu
225 230 235 240
His Ser Arg Asn Glu Arg Ala Glu Ala Gly Gln Cys Leu Ala Thr Ala
245 250 255
Val Asp Leu Ala Phe Glu Leu Gly Leu His Arg Gln Asp Phe Ala Ile

```
            260                 265                 270
Ser Met Gly Arg Gly Asp Pro Ile Arg Glu Glu Ser Leu Arg Arg Thr
        275                 280                 285
Trp Trp Glu Leu Phe Ile Val Glu Gly Met Leu Thr Ala Leu Gly Val
    290                 295                 300
Gln Arg Thr Phe Arg Thr Ser Leu Val Pro Leu Glu Val Gly Leu Pro
305                 310                 315                 320
Cys Glu Glu Arg Ile Phe Gln Asp Gly Leu Ala Ala Pro Pro Pro Pro
                325                 330                 335
Thr Ile Ala Gln Phe Asp Asp His Ile Phe Ala Asp Glu Glu Arg Asp
            340                 345                 350
Phe Ser Ser Tyr Thr Tyr Arg Ile Glu Ala Val Arg Ile Leu Gly Arg
        355                 360                 365
Val Val Ala Ile Gln Glu Met Leu Glu Gly Gln Glu Asp His Val Glu
    370                 375                 380
Ala Val Asp Ala Arg Ile Asn Ser Phe Phe His His Leu Pro Glu Ser
385                 390                 395                 400
Lys Ala Glu Leu Leu Arg Pro Asp Gly Ser Val Asp Glu Met Met Phe
                405                 410                 415
Gln Ala Lys Met Ile Ala Asn Gly Ala Ser Val Tyr Leu Asn Phe Pro
            420                 425                 430
Arg Ser Asp Leu Leu Ser Ser Pro Ala Val Ala Ala Glu Val Ile Cys
        435                 440                 445
Gly His His Gly Pro Cys Ser Ile Pro Ala Phe Thr His Asn Asp His
    450                 455                 460
Ala Met Lys Ala Leu Lys Ala Ala Lys Asp Ile Ser Gln Leu Ala Ser
465                 470                 475                 480
Ile Arg Leu Pro Val Val Lys His Thr Pro Val Phe Thr Thr Gly Arg
                485                 490                 495
Arg Arg Ile Arg Asp Met Arg
            500
```

<210> 28227
<211> 92
<212> PRT
<213> A.fumigatus

```
<400> 28227
Ala Gly Thr Glu Gly Thr Leu Asp Thr Gln Gly Ser Gln His Ala Phe
1               5                   10                  15
Tyr Tyr Glu Gln Leu Pro Pro Ser Ala Ser Gln Thr Phe Phe Pro Tyr
            20                  25                  30
Arg Ile Thr Ser Ala His Gly Asn Gly Glu Ile Leu Thr Met Lys Ser
        35                  40                  45
Glu Phe Glu Ser Gln Ile Asp Gly Gly Ser Glu Ala Leu Pro Gly Phe
    50                  55                  60
Cys Pro Leu Val Ser Arg Met Gln His Asn Ser Gln Gln Gln Gln Arg
65                  70                  75                  80
Leu Gln Leu Leu His Gly Ala Phe Leu Leu His Arg
                85                  90
```

<210> 28228
<211> 154
<212> PRT
<213> A.fumigatus

<400> 28228
Arg Arg Ala Pro Ser Ala Ala Leu Lys Phe Phe Arg Thr Leu Val Ser
1 5 10 15
Leu Gln Asp Thr Phe Tyr Gln Ala Leu Met Thr His Asn Asn Thr Phe
20 25 30
Gly Leu Ile Leu Asp Ile Val Tyr Glu Thr Met Pro Arg Asp Asn Leu
35 40 45
Leu Asn Ser Ala Cys Leu Glu Leu Phe Glu Phe Ile Lys Arg Glu Asn
50 55 60
Ile Lys Pro Ile Val Leu His Ile Val Glu Lys Tyr Arg Glu Lys Ile
65 70 75 80
Lys Asp Ile Thr Tyr Val Asp Thr Phe Gln Asn Leu Ile Leu Arg Tyr
85 90 95
Glu Gln Met Gln Gly Tyr Gly Ala Glu Ala Asp Ser Thr Leu Phe Ser
100 105 110
Gln Glu Glu Glu Ala Arg Lys Leu Gln Ala Asn Gly Gln Arg Trp Gln
115 120 125
Gly Val Lys Glu Met Asp Ala Ala Glu Glu Glu Tyr Phe Asn Thr Ser
130 135 140
Asp Asp Glu Asp Glu Val Arg Cys Ala Gln
145 150

<210> 28229
<211> 73
<212> PRT
<213> A.fumigatus

<400> 28229
Gln Gly Ser Cys Leu Lys Phe Asn Lys Cys Gly Glu Leu Ala Gln Ala
1 5 10 15
His Ala Ile Glu Thr Gln Leu Asn Phe Ser Gln Glu Trp Thr Gly His
20 25 30
Glu Arg Thr Gln Gly Thr Gly Leu Gly Ile Phe Ile Ile Arg Val Glu
35 40 45
Gln Leu Leu Asp Ala Leu Ser Trp Thr Ser Thr Gly Val Val His Ile
50 55 60
Ile Thr Leu Ile Ser Leu Ala Asn Val
65 70

<210> 28230
<211> 72
<212> PRT
<213> A.fumigatus

<400> 28230
Pro Thr Arg Cys Tyr Arg Ile Phe Arg Ser Leu Ser Lys Leu Arg Ala
1 5 10 15
Thr Ile Ser Val Asn Ser His Pro Leu Val Thr Glu Gln Val Gly Cys
20 25 30
His His Pro Met Ser Asp Ser Gln Ser Ser Pro Tyr Thr Cys Gln Lys
35 40 45
Lys Val Lys Leu Ser Lys Cys Met Pro Thr His Tyr Gly Ile Ala Ser
50 55 60
Tyr Ala Thr Thr Ala Glu Ile Val
65 70

<210> 28231
<211> 120
<212> PRT
<213> A.fumigatus

<400> 28231
Ser Leu Thr Ile Cys Ser Ile Ile Phe Ile Arg Asp Ser Tyr Ala Arg
1 5 10 15
Ile Ser Gly Leu Phe Thr Leu Thr Leu Gly Gln Lys Val Lys Gly Ser
20 25 30
Phe Lys Ser Ser Ser Leu Val Ala Leu Lys Arg Ser Arg Asp Gln Gln
35 40 45
Thr Gly His Gly Arg Ile Leu Ser Ala Ile Ser Gly Asn Asp Ile Thr
50 55 60
Gly Thr Gly Ile Ser Ser Trp Gln Ala Ala Thr Lys Tyr Ile Ala Thr
65 70 75 80
Gly Cys Arg Ser Arg Arg Gln Lys Tyr Thr Phe Leu Arg Val Ile Tyr
85 90 95
Phe Pro Ile Phe Arg Lys Arg Ser Phe Leu Arg Ser Asp Val Phe Ile
100 105 110
Ser Glu Ile Ser Gln Thr Glu Gln
115 120

<210> 28232
<211> 80
<212> PRT
<213> A.fumigatus

<400> 28232
Ser His Ser Trp Met Asp Leu Gln Ser Ser Ala Asn Thr Cys Phe Glu
1 5 10 15
Gln Ile Phe Tyr Thr Ala Gln Thr Ala Leu Ala Tyr Ser Val Gly Arg
20 25 30
Val Ala His Gly Leu Ala Asn Asn Ser Leu Thr Asp Ala Gln Arg Ala
35 40 45
Ala Leu Ser Pro Asp Asp Pro Glu Tyr Arg Ala Ala Tyr Val Asp Leu
50 55 60
Leu Val Gln Gly Thr Glu Val Asp Glu Arg Ala His Thr Ser Thr Gly
65 70 75 80

<210> 28233
<211> 88
<212> PRT
<213> A.fumigatus

<400> 28233
Gln Ser His Ser Pro Asp Ala Cys Gln Ala Ala Val Ser Asp Pro Ile
1 5 10 15
Ile Trp Ala Ser Phe Ala Ser Asn Val Ser Thr Asp Ile Tyr Leu Ile
20 25 30
Leu Ile Pro Ile Pro Met Leu Trp Lys Ser Arg Leu Lys Leu Ile Lys
35 40 45
Lys Ile Ala Ala Thr Val Val Phe Gly Ala Gly Leu Phe Val Leu Val
50 55 60
Cys Ala Ile Leu Lys Ser Val Phe Val Leu Val Val Ser Arg Asp Val
65 70 75 80

Thr Phe Ala Thr Ser Ala Gly Ser
85

<210> 28234
<211> 269
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (120)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28234
Arg Val Pro Trp Phe Arg Val Ala Ala Val Glu Ala Cys Arg Trp Ala
1 5 10 15
Thr Arg Cys Ile Pro Arg Ala Pro Tyr Val Thr Ser Leu Ser Trp Val
20 25 30
Ser His Tyr Gly Cys Lys Tyr Val Val His Gly Asp Asp Ile Thr Ser
35 40 45
Asp Ser Asn Gly Glu Asp Cys Tyr Arg Phe Val Lys Ala Ala Gly Arg
50 55 60
Phe Arg Val Val Lys Arg Thr Pro Gly Ile Ser Thr Thr Asp Leu Val
65 70 75 80
Gly Arg Met Leu Leu Cys Thr Lys Gly His Phe Ile Lys Ser Val Lys
85 90 95
Asp Thr Leu Ala Gly Val Glu Gly Ser Asp Asn Gln Glu Glu Arg Lys
100 105 110
Gln Phe Gly Val Glu Leu Met Xaa Arg Ile Arg Asp Tyr Ala Thr Asp
115 120 125
Glu Ser Gly Leu Arg Pro Gly Pro Gln Val Trp Thr Trp Thr Gly Ser
130 135 140
Arg Pro Ala Lys Val Ser Asp Thr Val Glu Glu Ala Gly Thr Phe Glu
145 150 155 160
Thr Leu Val Asn Gly Lys Ala Ile Lys Pro Gly Gln Arg Val Val Tyr
165 170 175
Val Asp Gly Gly Phe Asp Leu Phe Ser Ser Gly His Ile Glu Phe Leu
180 185 190
Arg Gln Val Leu Glu Leu Glu Glu Leu Glu Gly Arg Gln Arg Gly Trp
195 200 205
Tyr Asp Ser Glu Gln Val Glu Lys Arg Leu His Glu Phe Gly Glu Asp
210 215 220
Tyr Ser Pro Ala Tyr Val Val Ala Gly Ile His Asp Asp Asp Val Ile
225 230 235 240
Asn His Trp Lys Gly Phe Asn Tyr Pro Ile Met Asn Ile Phe Glu Arg
245 250 255
Gly Leu Cys Val Leu Gln Cys Arg Val Cys Pro Phe Ser
260 265

<210> 28235
<211> 61
<212> PRT
<213> A.fumigatus

<400> 28235
Ile Pro Cys Gln Gly Ile Thr Gly Val Leu Leu Ala Asn Arg Ser Thr

```
1               5                   10                  15
Pro Leu Tyr Leu Trp Lys Val Glu Arg Phe Ser Gln Thr Glu Thr Pro
            20                  25                  30
Thr Gln Ile Tyr Thr Thr Gly Phe Phe Pro Ser Lys Lys Lys Gly Tyr
        35                  40                  45
Tyr Thr Tyr Pro Asp Ala Ala Arg Asp Pro Pro Thr Arg
    50                  55                  60

<210> 28236
<211> 114
<212> PRT
<213> A.fumigatus

<400> 28236
Arg Phe Ser Gln Tyr Ile His Ala Val Ile Phe Ser Ala Pro Phe Ser
1               5                   10                  15
Pro Ser Gln Pro Tyr Leu Glu Ala Met Pro Phe Gly Val Pro Asp Val
            20                  25                  30
Val Tyr His Gly Pro Thr Thr Phe Ile Pro Leu Thr Tyr Asp Pro Tyr
        35                  40                  45
Thr Ala Pro Lys Arg Met Gly Ile Phe Arg Gln Ile Asn Asp His Pro
    50                  55                  60
Phe Gln His Val Asn Ala Gly Glu Ile Val Asp Arg Ile Leu Arg Ser
65                  70                  75                  80
Arg Glu Ala Tyr Glu Glu Arg Gln Arg Ala Lys Leu Gln Lys Ala Ile
                85                  90                  95
Ile Glu Glu Gln Val Lys Ser Glu Glu Lys Ser Leu Ala Gly Glu Leu
            100                 105                 110
Gly Ala


<210> 28237
<211> 85
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (6),(9)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28237
Thr Ala Phe Gln Leu Xaa His Ala Xaa His Ala Arg Phe Leu Ser Glu
1               5                   10                  15
Gln Thr Arg Ser Ala Ile Asp Lys Ala Ile Ala Ser Ala Pro Val Val
            20                  25                  30
Leu Phe Met Lys Gly Thr Pro Glu Thr Pro Gln Cys Gly Phe Ser Arg
        35                  40                  45
Ala Ser Ile Gln Ile Leu Gly Leu Gln Gly Val Asp Pro Lys Lys Phe
    50                  55                  60
Val Ala Phe Asn Val Leu Glu Asp Pro Glu Leu Arg Gln Gly Thr Tyr
65                  70                  75                  80
Ser Asn Pro Phe Phe
                85

<210> 28238
```

<211> 159
<212> PRT
<213> A.fumigatus

<400> 28238
Arg Ala Gln Cys Gly Ser Phe Gln Pro Arg Gly Glu Asp Leu Ala Asp
1 5 10 15
Leu Arg Val Val Glu Glu Asp Ala Val Leu Gly Val Phe Cys Arg Arg
20 25 30
Trp Gly Val Pro Leu Ile Asp Gly Gly Thr Val Arg Leu Gln Ala Ile
35 40 45
Val Gly Leu Gly Arg Ala Leu Asp Leu Ile Leu Thr Gly Arg Gly Val
50 55 60
Gly Ala Arg Glu Ala Leu Asp Met Gly Leu Val Ser Arg Val Val Ala
65 70 75 80
Arg Gly Lys Ala Val Glu Glu Ala Met Val Leu Ala Arg Asp Leu Met
85 90 95
Arg Phe Pro Glu Arg Cys Met Asn Val Asp Arg Gly Ser Cys Tyr Tyr
100 105 110
Ser Ala Tyr Ala Ala Gly Ser Met Glu Asp Ala Leu Arg Arg Glu Phe
115 120 125
Glu Met Gly Ser Lys Val Leu Ala Thr Glu Ser Val Arg Gly Ala Thr
130 135 140
Arg Phe Arg Asp Gly Glu Gly Arg His Gly Arg Phe Glu Lys Leu
145 150 155

<210> 28239
<211> 73
<212> PRT
<213> A.fumigatus

<400> 28239
Ile Ser Leu Gln Ile Ser Ala Asn Ser Ser Asp Thr Asp Ala Ile Trp
1 5 10 15
Asn Gln Gln Arg Leu Met Leu Asp Leu Ser His Arg Ser Thr Ala Gly
20 25 30
Pro Asn Ala Asn Thr Ala Ser Met Ala Gly Ala Ser Leu Val Glu Ile
35 40 45
Phe Lys His Tyr Ala Ser Ile Ile Met Thr Met Ile Asp Glu Ser Glu
50 55 60
Thr Ser Trp Thr Leu Ile Val Ser Cys
65 70

<210> 28240
<211> 162
<212> PRT
<213> A.fumigatus

<400> 28240
Glu Leu Leu Gln Leu Leu Lys Ala Pro Met Ser Pro Leu Pro Ile Pro
1 5 10 15
Lys Pro Arg Arg Pro Pro His Thr Leu Arg Arg Gln His Leu Gly Pro
20 25 30
His Leu Lys Leu Pro Pro Gln Arg Ile Leu His Arg Ser Arg Gly Ile
35 40 45
Arg Thr Ile Ile Ala Ala Pro Pro Val Asn Ile His Thr Pro Leu Arg

```
    50                  55                  60
Lys Pro His Gln Val Pro Arg Gln His His Arg Leu Leu His Arg Leu
65                  70                  75                  80
Pro Pro Arg Asn Asp Pro Thr His Gln Pro His Val Gln Arg Leu Ala
                85                  90                  95
Arg Pro Asp Pro Pro Pro Ser Glu Asn Gln Ile Gln Ser Ser Ser Gln
            100                 105                 110
Pro His Asn Arg Leu Gln Pro Tyr Arg Pro Ala Val Asp Glu Arg Asp
        115                 120                 125
Thr Pro Pro Pro Thr Glu Asp Thr Glu Asp Gly Ile Leu Leu Asp Asp
    130                 135                 140
Ala Gln Val Ser Gln Val Phe Thr Thr Gly Leu Glu Gly Thr Ala Leu
145                 150                 155                 160
Cys Pro
```

<210> 28241
<211> 69
<212> PRT
<213> A.fumigatus

<400> 28241

```
Thr Ser Pro Leu Tyr Cys Arg Met Gly Ile Asp Ala Thr Thr Val Leu
1               5                   10                  15
Glu Asp Lys Asn Ser Tyr Asn Phe Ser Lys Arg Pro Cys Arg Pro Ser
            20                  25                  30
Pro Ser Leu Asn Leu Val Ala Pro Arg Thr Leu Ser Val Ala Asn Thr
        35                  40                  45
Leu Asp Pro Ile Ser Asn Ser Leu Arg Ser Ala Ser Ser Ile Asp Pro
    50                  55                  60
Ala Ala Tyr Ala Leu
65
```

<210> 28242
<211> 270
<212> PRT
<213> A.fumigatus

<400> 28242

```
Ser Ser Thr Met Ala Pro Lys Leu Asn Ile Thr His Ile Gly Thr Ala
1               5                   10                  15
Thr Ala Val Leu Glu Ile Asp Gly Val Asn Met Leu Thr Asp Pro Phe
            20                  25                  30
Phe Ser Pro Ala Gly Ser Ser Trp Pro Val Thr Glu Thr Ile Thr Leu
        35                  40                  45
Gln Val Ser Asp Asp Pro Ala Leu Arg Leu Asp Gln Leu Pro Val Ile
    50                  55                  60
Asp Ala Val Leu Leu Ser His Glu Asp His Val Asp Asn Leu Asp Glu
65                  70                  75                  80
Leu Gly Arg Arg Leu Leu Asp Gly Arg Arg Val Phe Thr Thr Val Asp
                85                  90                  95
Gly Ala Lys Asn Leu Ser Pro Arg Pro Gly Val His Gly Leu Lys Pro
            100                 105                 110
Trp Glu Lys Ile Asp Thr Val Ile Ala Gly Lys Lys Phe Gln Ile Ile
        115                 120                 125
Ala Thr Pro Thr Gln His Ile Ala Gly Asp Glu Cys Thr Gly Phe Ile
```

```
    130                 135                 140
Ile Thr Asn Glu Glu Phe Gly Arg Gly Arg Asp Gly Leu Pro Asn Ala
145                 150                 155                 160
Ile Trp Phe Thr Gly Asp Thr Val Tyr Ile Asp Glu Leu Lys Lys Val
                165                 170                 175
Gly Glu Gln Tyr His Val Leu Ala Ala Ile Met Asn Leu Gly Asn Ala
            180                 185                 190
Tyr Gly Pro Val Asp Lys Thr Asp Pro Ser Lys Gly Ala Cys Gln Ile
        195                 200                 205
Thr Met Asp Gly Lys Ser Gly Ala Arg Leu Leu Arg Asp Val Lys Ala
    210                 215                 220
Asp Val Leu Val Pro Met His Tyr Glu Ser Trp Gly His Phe Thr Gln
225                 230                 235                 240
Phe Gly Lys Glu Leu Arg Arg Asp Phe Glu Glu Glu Gly Ile Leu Asp
                245                 250                 255
Lys Val Cys Trp Leu Thr Pro Gly Lys Pro Val Ser Val Leu
            260                 265                 270
```

<210> 28243
<211> 98
<212> PRT
<213> A.fumigatus

<400> 28243

```
Phe Gln Asn Phe Cys Leu Leu Leu Glu Lys Lys Ala Val Ile Asn Ile
1               5                   10                  15
Pro Val Pro Thr Val Gly Phe Leu Phe Phe Leu Phe His Phe Glu Thr
            20                  25                  30
Glu Phe His Ser Cys His Pro Gly Trp Ser Ala Val Val Gln Ser Gln
        35                  40                  45
Leu Thr Ala Thr Ser Ala Ser Gln Val Gln Val Ile Leu Leu Pro Gln
    50                  55                  60
Thr Leu Pro Ser Ser Trp Asp Tyr Arg His Pro Pro Pro Cys Pro Ala
65                  70                  75                  80
Asn Phe Cys Ile Phe Ser Arg Asp Gly Val Ser Pro Ser Trp Pro Gly
                85                  90                  95
Trp Ser
```

<210> 28244
<211> 69
<212> PRT
<213> A.fumigatus

<400> 28244

```
Phe Ser Cys Leu Arg Leu Ser Arg Val Ala Gly Ile Thr Gly Thr Arg
1               5                   10                  15
His His Ala Arg Leu Ile Phe Val Phe Leu Val Glu Met Gly Phe His
            20                  25                  30
His Leu Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro
        35                  40                  45
Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Val Val Ser His Arg Ala
    50                  55                  60
Gly Trp Val Phe Leu
65
```

<210> 28245
<211> 72
<212> PRT
<213> A.fumigatus

<400> 28245
Ile Ile Ile Ile Ala Ile Phe Lys Thr Gly Ser Phe Ser Val Thr Gln
1 5 10 15
Ala Gly Met Gln Trp Gly Asn Leu Ser Ser Leu Gln Pro Leu Pro Thr
20 25 30
Trp Phe Lys Arg Phe Ser Cys Leu Ser Leu Pro Ile Ala Gly Ile Thr
35 40 45
Gly Pro Arg His His Thr Trp Leu Ile Phe Phe Phe Phe Cys Ile Phe
50 55 60
Ser Arg Asp Glu Val Ser Pro Cys
65 70

<210> 28246
<211> 110
<212> PRT
<213> A.fumigatus

<400> 28246
His Gly Glu Thr Ser Ser Leu Leu Lys Ile Gln Lys Lys Lys Lys Ile
1 5 10 15
Ser Gln Val Trp Trp Arg Gly Pro Val Ile Pro Ala Ile Gly Arg Leu
20 25 30
Arg Gln Glu Asn Arg Leu Asn Gln Val Gly Arg Gly Cys Ser Glu Leu
35 40 45
Arg Leu Pro His Cys Ile Pro Ala Trp Val Thr Glu Lys Asp Pro Val
50 55 60
Leu Lys Ile Ala Ile Ile Ile Ile His Lys Lys Thr Gln Pro Ala Arg
65 70 75 80
Trp Leu Thr Thr Val Ile Pro Ala Leu Trp Glu Ala Glu Ala Gly Gly
85 90 95
Ser Pro Glu Val Arg Ser Ser Arg Pro Ala Trp Pro Arg Trp
100 105 110

<210> 28247
<211> 84
<212> PRT
<213> A.fumigatus

<400> 28247
Asn Pro Ile Ser Thr Lys Asn Thr Lys Ile Ser Arg Ala Trp Trp Arg
1 5 10 15
Val Pro Val Ile Pro Ala Thr Arg Glu Ser Leu Arg Gln Glu Asn His
20 25 30
Leu Asn Leu Gly Gly Gly Gly Cys Ser Glu Leu Arg Leu His His Cys
35 40 45
Thr Pro Ala Trp Val Thr Arg Val Lys Leu Arg Leu Lys Met Lys Lys
50 55 60
Lys Glu Lys Lys Thr His Cys Arg Tyr Arg Asp Val Asp Tyr Ser Phe
65 70 75 80
Phe Phe Gln Gln

<210> 28248
<211> 438
<212> PRT
<213> A.fumigatus

<400> 28248
Val Lys Thr Ser Gly Ile Asp Val Lys Ala Ile His Lys Ala Ala Tyr
1 5 10 15
Gly Tyr Pro Glu Ile Glu Glu Ala Val Val Gly Leu Arg Thr Leu Tyr
20 25 30
Ala Gly Lys Lys Ile Ile Val Gly Arg Asp Arg Leu Asp Ser Val Arg
35 40 45
Gly Val Ala Gln Lys Leu Gln Ala Phe Glu Gln Phe Leu Glu Arg Tyr
50 55 60
Pro Glu Trp Arg Glu Lys Val Val Leu Ile Gln Val Thr Ser Pro Thr
65 70 75 80
Ser Val Glu Glu Glu Lys Glu Asp Pro Glu Asn Lys Ile Ala Ser Gln
85 90 95
Ile Ser Asn Leu Val Ser Thr Ile Asn Gly Arg Phe Gly Ser Ile Ser
100 105 110
Phe Ser Pro Val Lys Tyr Tyr Pro Gln Tyr Leu Ser Gln His Glu Tyr
115 120 125
Phe Ala Leu Leu Arg Val Ala Asp Val Gly Leu Ile Thr Thr Val Arg
130 135 140
Asp Gly Met Asn Thr Thr Ser Leu Glu Tyr Ile Leu Cys Gln His Asn
145 150 155 160
Thr His Gly Pro Leu Ile Leu Ser Glu Phe Ser Gly Thr Ala Gly Thr
165 170 175
Leu Ser Ser Ala Ile His Ile Asn Pro Trp Asp Thr Thr Gly Val Ala
180 185 190
Glu Ala Ile Asn Arg Ala Leu Thr Met Ser Pro Glu Glu Lys Lys Ala
195 200 205
Gln His Val Lys Leu Tyr Lys His Val Thr Thr Asn Thr Ile Ser Thr
210 215 220
Trp Ser Asn His Phe Val Thr Arg Leu Leu Thr Asn Leu Ser Ser Phe
225 230 235 240
Asp Gln Ser Val Ala Thr Pro Ala Leu Asp Arg Ala Lys Leu Leu Lys
245 250 255
Gln Tyr Arg Lys Ala Arg Lys Arg Leu Phe Met Phe Asp Tyr Asp Gly
260 265 270
Thr Leu Thr Pro Ile Val Lys Asp Pro Gln Ala Ala Ile Pro Ser Asp
275 280 285
Arg Val Leu Arg Thr Leu Lys Thr Leu Ala Ala Asp Pro Arg Asn Ala
290 295 300
Val Trp Ile Ile Ser Gly Arg Asp Gln Thr Phe Leu Asp Glu Trp Met
305 310 315 320
Gly His Ile Pro Glu Leu Gly Leu Ser Ala Glu His Gly Cys Phe Ile
325 330 335
Arg Gln Pro Arg Ser Asp Asp Trp Glu Asn Leu Ala Glu Ser Ser Asp
340 345 350
Met Gly Trp Gln Lys Glu Val Met Glu Val Phe Gln His Phe Thr Glu
355 360 365
Arg Thr Gln Gly Ser Phe Ile Glu Arg Lys Arg Val Ala Leu Thr Trp
370 375 380
His Tyr Arg Arg Ala Asp Pro Glu Tyr Gly Ala Phe Gln Ala Arg Glu

385 390 395 400
Cys Arg Lys Met Leu Glu Asp Thr Val Ala Lys Arg Trp Glu Val Glu
405 410 415
Val Met Ala Gly Lys Ala Asn Leu Glu Val Arg Pro Thr Phe Val Asn
420 425 430
Lys Gly Phe Ile Ala Pro
435

<210> 28249
<211> 788
<212> PRT
<213> A.fumigatus

<400> 28249
Phe Ile Thr Ala Thr Arg Asn Met Ser Ala Phe Ile Leu Arg Asp Ile
1 5 10 15
Glu Ile Lys Ala Ala Leu Val Leu Gln Glu Asn Ser Ala Ala Glu Val
20 25 30
Met Thr Ser Leu Arg Ala Trp Gln Gly Ser Thr Lys Ala Ser Glu Arg
35 40 45
Leu Tyr Glu Phe Asn Val Tyr Ser Val Thr Ala Glu Asn Arg Trp Thr
50 55 60
Glu His Cys Arg Gly Leu Val Gly Gly Ser Asp Leu Ser Leu Asp Thr
65 70 75 80
Glu Tyr Glu Ile Ser Ser Gln Val Pro Lys Gln Ala Ser Asp Leu Ser
85 90 95
Val Ile Asp Thr Ser Thr Phe Tyr Glu Lys Leu Ala Ser Ile Gly Leu
100 105 110
Glu Tyr Gly Pro Cys Phe Ala Asn Leu Thr His Ala Asn Gln Thr Gly
115 120 125
Asn Leu Cys Phe Ala Glu Val Thr Ile Pro Asp Thr Ala Ala Val Met
130 135 140
Pro Met Asn Phe Gln Tyr Pro His Leu Ile His Pro Cys Thr Leu Asp
145 150 155 160
Ser Ile Phe His Thr Val Phe Val Gln Thr Asn Val Gly Asp Asp Pro
165 170 175
Ala Ile Pro Val His Ile Asp Gln Leu Ser Val Ser Arg Ser Ala Glu
180 185 190
His Ser Pro Gly Thr Lys Met His Ile Glu Thr His Ile Glu Lys Arg
195 200 205
Thr Arg Lys Ser Ile Val Ala Ser Ile Thr Val Ile Asn Ser Asn Asp
210 215 220
Thr Ile Ala Met Ser Ile Lys Gly Leu Arg Cys Lys His Leu Lys Asn
225 230 235 240
Ser Asp Pro Lys Asp Met Val Asn Pro Thr Glu Arg Leu Gly Tyr Met
245 250 255
Leu Thr Trp Lys Ala Asp Ser Asp Leu Leu Ser Lys Gln Asp Phe Ser
260 265 270
Thr Val Phe Thr Glu Asp Asn His His Thr Gln Glu Ser Ala Lys Arg
275 280 285
Gln Leu Leu Glu Gly Cys Ala Phe Ser Tyr Ile Arg Lys Ala Ile Gln
290 295 300
Asp Leu Glu Pro Ala Asn Lys Glu Gly Leu His Pro Arg Arg Arg Glu
305 310 315 320
Gln Leu Asp Phe Phe Val Asp Arg Thr Gln Asn Ser Arg Leu Val Ala
325 330 335

```
Ser Ser Val Thr Asn Asn Ala Asp Ile Gln Ala Leu Ser Ala Ser Gly
            340                 345                 350
Pro Glu Gly Arg Leu Leu Thr Ala Val Gly Glu Gln Leu Ser Thr Ile
        355                 360                 365
Leu Lys Asp Ser Lys Phe Ser Asn Ile Asp Met Asp Leu Ser Ile Trp
    370                 375                 380
Glu Gln Tyr Trp Asp Thr Ile Arg Leu Ser Pro Val Tyr Glu Lys Leu
385                 390                 395                 400
Ala Ser Tyr Leu Glu Leu Val Gly His Lys Asn Pro Met Ile Ser Ile
                405                 410                 415
Leu Glu Val Glu Gly Thr Phe Gly Gln Ala Ser Gln Asp His Leu Glu
            420                 425                 430
Arg Leu Leu Gly Asn Asn Gly His Gly Pro Leu Cys Arg Glu Tyr Thr
        435                 440                 445
Ile Thr His Glu Gly Gln Ser Ile Pro Glu His Phe Ser Pro Val Val
    450                 455                 460
Ser Lys Trp Lys Pro Leu Leu Lys Val Lys Glu Leu Asn Leu Asn Gln
465                 470                 475                 480
Ser Pro Glu Ala Gln Gly Phe Ser Lys Tyr Gln Tyr Asp Val Val Leu
                485                 490                 495
Ala Pro Leu Gly Leu Cys Thr Val Pro Ala Lys Leu Gln Ala Leu Arg
            500                 505                 510
Asn Ile His Ala Leu Leu Lys Pro Gln Gly His Leu Ile Val Val Asp
        515                 520                 525
Pro Ile Ala Gly His Asp Asn Leu Thr Glu Ser Val Ile Phe Ala Asn
    530                 535                 540
Ser Leu Gly Cys Trp Ser Glu Gly Arg Phe Gly Tyr Thr Leu Glu Gly
545                 550                 555                 560
Trp Asn Leu Val Leu Ser Ala Ala Gly Phe Ser Glu Ala Glu Asp Ala
                565                 570                 575
Ser Ile Pro Arg Glu Gly Arg Phe Met Ile Ile Thr Arg Pro Leu His
            580                 585                 590
Gly Gln Ser Ile Pro Lys Gln Ser Ile Leu Ile Ile Ser Glu Asp Asp
        595                 600                 605
Asp Asn Gly Ile Asp Leu Ser Ala Leu Gln Asp Ser Leu Ser Pro Met
    610                 615                 620
Ser Ser Asp Ile Glu Ile Ala Asp Phe Thr His Ala Lys Pro Lys Gly
625                 630                 635                 640
Arg Val Cys Ile Ile Leu Ser Ala Leu Ser Arg His Leu Met Ala Asp
                645                 650                 655
Pro Thr Pro Asp Glu Leu Glu Val Ser Lys Gln Ile Phe Leu Lys Ala
            660                 665                 670
Ser Gly Val Leu Trp Val Thr Arg Gly Ala Thr Ile Ser Pro Val Thr
        675                 680                 685
Pro Asp Gly Ala Leu Ala Thr Gly Phe Val Arg Thr Ser Arg Ser Glu
    690                 695                 700
Ser Gly Ile Glu Arg Ile Val Thr Leu Asp Leu Asp Gly Arg Lys Pro
705                 710                 715                 720
Leu Ser Ser His Arg Ala Ala Glu Ile Ile Cys Lys Val Val Arg Glu
                725                 730                 735
Arg Ile Leu Thr Asp Gly Asn Gly Gln Ser Asp Thr Glu Tyr Ala Glu
            740                 745                 750
Arg Asn Gly Val Leu Leu Ile Pro Arg Val Ala Glu Asn Gln Ala Phe
        755                 760                 765
Asn Arg Cys Pro Ala Ala Leu Phe Phe Thr Thr Ala Ala Gly Pro Ile
    770                 775                 780
```

Arg Ala Met His
785

<210> 28250
<211> 101
<212> PRT
<213> A.fumigatus

<400> 28250
Asp Phe Ala Ser Asn Pro Trp Arg Gly Gly Val Ser Asn Arg Val Thr
1 5 10 15
Gly Val Asp Leu Gln Pro Tyr Phe Arg Ile Phe Asn Pro Leu Phe Gln
20 25 30
Ser Asp Arg Phe Asp Pro Asp Gly Glu Tyr Ile Arg Lys Trp Val Pro
35 40 45
Glu Leu Arg Asp Ile Gln Gly Ala Ala Ile His Glu Pro Asn Ala Arg
50 55 60
Gly Gly Gly Ala Ile Ala Ala Lys Asn Gly Tyr Pro Arg Pro Met Leu
65 70 75 80
Asn His Ser Gln Ser Arg Asp Leu Ala Leu His Arg Tyr Lys Arg Ala
85 90 95
Ser Glu Ser Gly Arg
100

<210> 28251
<211> 183
<212> PRT
<213> A.fumigatus

<400> 28251
Thr Ser His Arg Thr Pro Phe Val Pro Arg Tyr His Leu Arg Gln Thr
1 5 10 15
Pro Gly Ala Asp Ile Phe Asp Pro Pro Leu Thr Pro Cys Pro Leu Ser
20 25 30
Phe Phe Leu Asp Arg Pro Tyr Pro Arg Ser Arg Tyr Ser Thr Gln Cys
35 40 45
Arg Pro Glu Met Asp Leu Ala Gln Pro Gly Asp Ala Pro Pro Thr Ser
50 55 60
Thr Asn Thr Ala Gly Thr Leu Glu Asp Ser Ser Ser Thr Ala Lys Arg
65 70 75 80
Arg Trp Arg Arg Asn Arg Ile Ala Cys Asp Ser Cys His Ser Arg Arg
85 90 95
Val Arg Cys Asp Arg Ala Phe Pro Cys Ser Arg Cys Leu Arg Ser Glu
100 105 110
Ile Arg Cys Glu Phe Thr Arg Glu Arg Arg Lys Arg Gly Arg Ile Ala
115 120 125
Arg Ser Lys Gln Thr Ala Thr Val Pro Asn Gly Gly Ser Met Glu Lys
130 135 140
Leu Pro Lys Ala Pro Asn Val Gln Pro Pro Val Pro Ala Ala Val Pro
145 150 155 160
Ala Asp Ala Ala Pro Thr Pro Leu Pro Asn His Ala Ser Pro Thr Thr
165 170 175
Ser Phe Gln His Arg Ser Pro
180

<210> 28252

<211> 210
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (96),(100)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28252
Leu Ala Ala Thr Leu Ala Ser Ser Leu Leu Ser Ser Ala Ile Phe Phe
1 5 10 15
Leu Ser Leu Asn Ser Ala Pro Thr Val Ser Ile Phe Phe Leu Leu Ser
20 25 30
Trp Leu Gly Pro Thr Ser Leu Leu Ser Val Tyr Leu Ser Leu Glu Phe
35 40 45
Ile Ser Val Met Ser Lys Ala Thr Ile Ala Ala Ile Ala Ala Ala Ser
50 55 60
Ala Ala Thr Gly Ala Gly Ile Thr Ala Leu Leu Tyr Ser Ser Ser Ser
65 70 75 80
Phe Arg Pro Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Leu Xaa
85 90 95
Pro Pro His Xaa Pro Ser Gln Pro Ala Ala Ile Ser Pro Pro Ala Thr
100 105 110
Ile Pro Pro Pro Ser Leu Ala Lys Thr Ala Ala Ser Lys Pro Ser Gly
115 120 125
Gly Ser Pro Val Asp Pro Ala Gly Ile Tyr Gln Tyr Gly Phe Pro Gly
130 135 140
Pro Ile Ala Asp Thr Ile Thr Ser Leu Pro Leu Thr Gly Ala Tyr Asp
145 150 155 160
Arg Arg Thr Arg Asn Pro Ala Trp Val Ala Glu His Ile Thr Pro Tyr
165 170 175
Ser Leu Ser Leu Lys Asn Ala Asp Arg Lys His Ser Ala Phe Val Glu
180 185 190
Asp Ala Ser Ile Pro Ala Ile Val Leu His Arg Arg Gly Trp Lys Asp
195 200 205
Thr Arg
210

<210> 28253
<211> 144
<212> PRT
<213> A.fumigatus

<400> 28253
Val Asn Gly Ile Thr Phe Ile Asn Tyr Glu Asn Leu His Gln Gln Leu
1 5 10 15
Leu Arg Glu Thr Ile Gly Leu His Thr Cys Asp Ser Arg Ser Ser Lys
20 25 30
Ala Ala Ile Gln Ala Glu Tyr Pro Glu Tyr Ile Ile Glu Asp Gly Phe
35 40 45
Ala Glu Glu Asp Pro Leu Tyr Asp Pro Lys Leu Arg Glu Ser Asp Thr
50 55 60
Ala Arg Asp Ala Arg Leu Arg Asp Leu Leu Gln Asn Ile Phe Thr His
65 70 75 80
Asp Lys Asn Thr Phe Ile Ser Leu Thr Ala His Ser Gly Ala Ile Thr

```
                85                  90                  95
Ser Ile Leu Gln Val Thr Gly His Arg Lys Phe Ala Leu Ala Thr Gly
            100                 105                 110
Ala Val Ile Pro Val Leu Val Lys Val Glu Arg Val Ala Gly Pro Leu
        115                 120                 125
Pro Lys Met His Ile Asp Pro Pro Thr Thr Ala Pro Val Cys Lys Asn
    130                 135                 140
```

<210> 28254
<211> 143
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (46),(50),(85),(117)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28254

```
Gln Gly Asp Arg Val Ile Gln Pro Ser Gly Ala Gln Arg Met Ile Pro
1               5                   10                  15
Thr Thr Phe Asp Tyr Val Ser Cys Gly Glu Thr Cys Pro Ser Pro Thr
            20                  25                  30
Asp Ile Val Asp Thr Asp Gln Leu Pro Ser Asn Phe Gly Xaa Ile Pro
        35                  40                  45
Arg Xaa Tyr Asp Ser Asp Ala Glu Phe Asp Pro Asp Gly Arg Arg Thr
    50                  55                  60
Gln Trp Glu Arg Phe Glu Tyr Gln Ile Asn Lys Leu Asn Glu Glu Ser
65                  70                  75                  80
Gly Pro Asp Thr Xaa Tyr Arg Leu Leu Phe Leu Gly Arg His Gly Glu
                85                  90                  95
Gly Tyr His Asn Val Ala Glu Arg Arg Tyr Gly Arg Glu Ala Trp Asp
            100                 105                 110
Val Ser Ile Ser Xaa Asn Ala Leu Tyr Pro Arg Leu Leu Ile Trp Ala
        115                 120                 125
Gln Leu Thr Val Thr Val Leu Leu Val Pro Ser Arg Arg Arg Arg
    130                 135                 140
```

<210> 28255
<211> 94
<212> PRT
<213> A.fumigatus

<400> 28255

```
Leu Leu Gln Cys Tyr Trp Ser Leu Leu Asp Gly Asp Asp Asn Gly Thr
1               5                   10                  15
Trp Val Asp Ala Arg Leu Thr Pro Val Gly Ile Ala Gln Ala Glu Thr
            20                  25                  30
Ala His Arg Ala Trp Glu Thr Gln Ile Glu Ser Lys Ile Pro Ser Pro
        35                  40                  45
Gln Ser Tyr Tyr Val Ser Pro Leu Asn Arg Cys Leu Ala Thr Ala Asn
    50                  55                  60
Ile Thr Phe Arg Gly Leu Lys Met Pro His Thr Glu Pro Phe Arg Pro
65                  70                  75                  80
Val Val Lys Glu Val Ser Gln Arg Tyr His Leu His Gln Leu
                85                  90
```

<210> 28256
<211> 205
<212> PRT
<213> A.fumigatus

<400> 28256
Ile Lys Ile Thr Ser Arg Cys Ser Asn Ala Ala Leu Pro Met Asp Pro
1 5 10 15
Ser Ser Leu Gln Ser Ser Ala Gly Pro Arg Ala Arg Gln Thr Pro Arg
20 25 30
Pro Tyr Arg His Ser His Ser Ser Pro Thr Ala Asp Gln Thr Ser Thr
35 40 45
Pro Ser His Ser Ala His Pro Val Ala Pro Asp Leu Pro Pro Ala Thr
50 55 60
Ser Pro Thr Ala Asp Pro Pro Ser His Gly Ala Gly Arg Thr Leu Asp
65 70 75 80
Pro Ala Pro Thr Lys Thr His Arg Pro Ser Trp Gly Pro Ala Gln His
85 90 95
Gly Pro Arg His Ala Arg Pro Thr Gly Pro Ala Val Leu Gly Ser Ser
100 105 110
Thr Ala Arg Asn Ser Trp Ile Val Cys Ala Ala Arg Ile Arg Cys Thr
115 120 125
Ala Ala Ala Pro Ala Asn Arg Cys Ser Gly Arg Ala Leu Lys Leu Arg
130 135 140
Ser Arg Gln Arg Gly Leu Tyr Arg Lys Ala Asp Arg Ser Ser Gly Arg
145 150 155 160
Phe Arg Ser Ser Arg Ser Trp Thr Tyr Arg Gly Pro Ile Gly Gly Glu
165 170 175
Arg Met Gly Pro Thr Arg Arg Ser His Arg Ser Asp Pro Ala Leu Arg
180 185 190
Gly Ile Ala Thr Ser Gly Gly Leu Gln Gly Ala Thr Val
195 200 205

<210> 28257
<211> 376
<212> PRT
<213> A.fumigatus

<400> 28257
Pro Val Val Lys Thr Val Gln Arg Leu Leu Pro Val Ser Ala Thr Lys
1 5 10 15
Asn His Ala His Ile Lys Met Lys Leu Ser Leu Leu Leu Leu Leu Ser
20 25 30
Ala Val Tyr Thr Ala Thr Gly Thr Ala Ala Thr Thr Thr Thr Ala Thr
35 40 45
Ala Ala Thr His Val Ile Tyr Ser Tyr Pro Gly Val Ser Pro Pro Ala
50 55 60
Ser Leu Leu Ser Leu Ile Ala Ala Gly Lys Val Gly Gly Leu Ile Leu
65 70 75 80
Phe Gly Glu Asn Ile Asp Asp Asn Leu Pro Ala Thr Ile Ala Thr Ile
85 90 95
Gln Lys Thr Tyr Ala Ser Ser Pro Asp Tyr Asn Gly Thr Pro Leu Leu
100 105 110
Ile Met Thr Asp Gln Glu Gly Gly Lys Val Arg Arg Leu Pro Gly Gly
115 120 125

```
Pro Thr Leu Ser Ala Lys Gln Val Gly Leu Ser Ser Asp Pro Ala Ala
    130                 135                 140
Thr Ala Gly Glu Thr Gly Thr Glu Ala Ala Thr Thr Leu Ala Gln Tyr
145                 150                 155                 160
Gly Val Asn Ala Asn Leu Ala Pro Val Leu Gly Val Tyr Arg Ser Ala
                165                 170                 175
Gly Asp Phe Leu Asp Glu Tyr Gly Arg Ser Tyr Gly Asn Ser Ser Glu
            180                 185                 190
Leu Val Ala Ser Cys Ala Glu Ala Phe Ile Arg Asn Gln Gln Ala Arg
        195                 200                 205
Lys Val Ile Ala Thr Ala Lys His Phe Pro Gly Leu Gly Ala Ala Gly
    210                 215                 220
Ala Asp Ala Asn Thr Asp Leu Val Pro Val Gln Ile Asp Leu Gly Leu
225                 230                 235                 240
Glu Glu Leu Arg Arg Val Asp Glu Ala Pro Tyr Arg Ala Ala Ile Ala
                245                 250                 255
Ala Gly Val Glu Met Val Met Ala Ser Trp Ala Val Tyr Pro Ala Leu
            260                 265                 270
Asp Ala Lys Pro Ala Gly Leu Ser Glu Lys Trp Ile Arg Gly Glu Leu
        275                 280                 285
Arg Gln Arg His Gly Phe Gln Gly Val Thr Ile Thr Asp Ala Ile Glu
    290                 295                 300
Ala Gly Ala Leu Arg Ala Tyr Gly Asp Asp Ala Ala Arg Gly Val Arg
305                 310                 315                 320
Ala Ala Gln Ala Gly Met Asp Leu Leu Leu Ala Ser Ala Arg Asn Val
                325                 330                 335
Thr Gln Gly Glu Ala Ile Val Asp Ala Leu Thr Ala Ala Leu Glu His
            340                 345                 350
Gly Glu Leu Asp Thr Glu Glu Phe Ala Ala Ala Thr Ala Arg Ile Met
        355                 360                 365
Ala Leu Arg Arg Thr Leu His Val
    370                 375

<210> 28258
<211> 144
<212> PRT
<213> A.fumigatus

<400> 28258
Ile Gly Thr Arg Ser Arg Ser Arg Val Asp Val Ala Met Leu Pro Cys
1               5                   10                  15
Gln Trp Ile His Gln Val Cys Asn Leu Pro Arg Ala Pro Glu His Ala
            20                  25                  30
Lys Leu His Asp Arg Ile Asp Thr His Ile Arg Arg Pro Arg Arg Ile
        35                  40                  45
Lys His Pro Arg Arg Pro Ile Gln Arg Ile Pro Ser Pro Arg Thr Cys
    50                  55                  60
Leu Leu Pro His Pro Pro Gln Pro Ile His His Arg Met Val Gln Glu
65                  70                  75                  80
Glu Arg Trp Ile Leu His Arg Arg Lys His Ile Ala His Arg Gly Ala
                85                  90                  95
Gln Arg Asn Met Asp Arg Gly Met Arg Ala Gln Pro Ala Pro Arg Cys
            100                 105                 110
Ser Gly Pro Ala Pro Arg Glu Thr Pro Gly Ser Ser Ala Pro Pro Gly
        115                 120                 125
Ser Ala Ala Arg Arg Arg Arg Arg Arg Thr Gly Ala Ala Asp Glu Arg
```

130 135 140

<210> 28259
<211> 226
<212> PRT
<213> A.fumigatus

<400> 28259
Trp Ile His Trp Gln Gly Ser Ile Ala Thr Ser Thr Arg Asp Leu Asp
1 5 10 15
Leu Val Pro Ile Tyr Gly Tyr Thr Cys Asn Val Arg Leu Asn Ala Met
20 25 30
Ile Arg Ala Val Ala Ala Ala Asn Ser Ser Val Ser Ser Ser Pro Cys
35 40 45
Ser Ser Ala Ala Val Ser Ala Ser Thr Ile Ala Ser Pro Cys Val Thr
50 55 60
Phe Leu Ala Asp Ala Arg Ser Arg Ser Ile Pro Ala Cys Ala Ala Arg
65 70 75 80
Thr Pro Leu Ala Ala Ser Ser Pro Tyr Ala Arg Asn Ala Pro Ala Ser
85 90 95
Ile Ala Ser Val Met Val Thr Pro Trp Asn Pro Cys Arg Cys Arg Ser
100 105 110
Ser Pro Arg Ile His Phe Ser Leu Ser Pro Ala Gly Phe Ala Ser Asn
115 120 125
Ala Gly Tyr Thr Ala His Asp Ala Ile Thr Ile Ser Thr Pro Ala Ala
130 135 140
Ile Ala Ala Arg Tyr Gly Ala Ser Ser Thr Arg Arg Asn Ser Ser Ser
145 150 155 160
Pro Arg Ser Ile Cys Thr Gly Thr Arg Ser Val Phe Ala Ser Ala Pro
165 170 175
Ala Ala Pro Ser Pro Gly Lys Cys Phe Ala Val Ala Ile Thr Phe Arg
180 185 190
Ala Cys Trp Leu Arg Met Lys Ala Ser Ala His Glu Ala Thr Ser Ser
195 200 205
Glu Leu Phe Pro Tyr Asp Arg Pro Tyr Ser Ser Arg Lys Ser Pro Ala
210 215 220
Glu Arg
225

<210> 28260
<211> 157
<212> PRT
<213> A.fumigatus

<400> 28260
Thr Ala Arg Ser Ile Cys Arg Pro Phe Asp Thr Thr Arg Ala Val Ser
1 5 10 15
Ser Ala Ala Leu Thr Leu Val Arg Cys Thr Gly Ser Pro Ala Pro Pro
20 25 30
Pro Cys Ser Gly Ser Trp Arg Arg Arg Arg Ser Arg Ser Phe Ser Arg
35 40 45
Cys Trp Thr Arg Ala Pro Arg Gly Arg Leu Gly Ala His Ala Ala Val
50 55 60
His Val Ala Leu Gly Pro Thr Met Gly Asp Val Phe Ser Ser Val Gln
65 70 75 80
Asp Pro Ala Phe Phe Leu His His Ala Met Val Asp Arg Leu Trp Gly

```
                85                  90                  95
Met Trp Gln Glu Ala Gly Pro Gly Arg Arg Asp Ala Leu Asn Gly Thr
            100                 105                 110
Ala Trp Met Phe Asp Pro Pro Trp Ala Thr Asn Val Ser Val Asp Thr
        115                 120                 125
Val Val Glu Phe Gly Val Leu Gly Gly Pro Arg Lys Ile Ala Asp Leu
    130                 135                 140
Met Asp Pro Leu Ala Gly Gln His Cys Tyr Ile Tyr Ser
145                 150                 155
```

<210> 28261
<211> 499
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (486)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28261

```
Asn Arg Ser Thr Gly Asp Ile Leu Val Thr Asn Asp Gly Ala Thr Ile
1               5                   10                  15
Leu Lys Ser Ile Ala Phe Asp Asn Ala Ala Ala Lys Val Leu Val Asn
            20                  25                  30
Ile Ser Lys Val Gln Asp Asp Glu Val Gly Asp Gly Thr Thr Ser Val
        35                  40                  45
Thr Val Leu Ala Ala Glu Leu Leu Arg Glu Ala Glu Lys Leu Val Asn
    50                  55                  60
Arg Lys Ile His Pro Gln Thr Ile Ile Glu Gly Tyr Arg Ile Ala Ser
65                  70                  75                  80
Lys Ala Ala Leu Glu Ala Leu Glu Lys Ala Ala Val Asp Arg Ser Lys
                85                  90                  95
Asp Met Glu Ala Phe Arg Lys Asp Leu His Ala Ile Ala Arg Thr Thr
            100                 105                 110
Leu Ser Ser Lys Val Leu Ala Gln Asp Arg Glu His Phe Ala Ala Leu
        115                 120                 125
Ala Cys Asp Ala Val Leu Arg Leu Lys Gly Ser Thr Asp Leu Ser His
    130                 135                 140
Ile Gln Ile Ile Lys Lys Ala Gly Gly Lys Leu Ser Asp Ser Tyr Leu
145                 150                 155                 160
Asp Glu Gly Phe Ile Leu Asp Lys Lys Ile Gly Val Asn Gln Pro Lys
                165                 170                 175
Arg Leu Glu Asn Ala Lys Ile Leu Val Ala Asn Thr Ala Met Asp Thr
            180                 185                 190
Asp Lys Val Lys Ile Phe Gly Ala Arg Val Lys Val Glu Ser Thr Gly
        195                 200                 205
Lys Leu Ala Glu Leu Glu Lys Ala Glu Arg Glu Lys Met Arg Ala Lys
    210                 215                 220
Val Glu Arg Ile Lys Ser His Gly Ile Asn Cys Phe Val Asn Arg Gln
225                 230                 235                 240
Leu Ile Tyr Asn Trp Pro Glu Gln Leu Phe Thr Glu Ala Gly Ile Met
                245                 250                 255
Ser Ile Glu His Ala Asp Phe Asp Gly Ile Glu Arg Leu Ala Leu Val
            260                 265                 270
Thr Gly Gly Glu Ile Ala Ser Thr Phe Asp His Pro Glu Gln Val Lys
```

```
        275                 280                 285
Leu Gly His Cys Asp Val Ile Glu Glu Val Ile Ile Gly Glu Asp Thr
    290                 295                 300
Leu Ile Lys Phe Ser Gly Val Ala Ala Gly Gln Ala Cys Thr Ile Val
305                 310                 315                 320
Leu Arg Gly Ala Thr Glu Gln Leu Leu Asp Glu Ala Glu Arg Ser Leu
                325                 330                 335
His Asp Ala Leu Ala Val Leu Ser Gln Thr Val Lys Asp Pro Arg Val
            340                 345                 350
Thr Leu Gly Gly Gly Cys Ala Glu Met Val Met Ser Lys Ala Val Glu
        355                 360                 365
Gln Ala Ala Gln Asn Thr Thr Gly Lys Lys Gln Leu Ala Val Asp Ala
    370                 375                 380
Phe Ser Tyr Ala Leu Arg Gln Leu Pro Thr Ile Leu Ala Asp Asn Ala
385                 390                 395                 400
Gly Leu Asp Ser Ser Asp Leu Val Thr Arg Leu Arg Gln Ala Ile Asn
                405                 410                 415
Asn Gly Met Thr Ser Ser Gly Leu Asp Leu Leu Thr Pro Gly Gly Gly
            420                 425                 430
Ile Ala Asp Met Arg Glu Leu Gly Val Val Glu Ser Tyr Lys Leu Lys
        435                 440                 445
Arg Ala Val Val Ser Ser Ala Ser Glu Ala Ala Glu Val Ser Met Val
    450                 455                 460
Val Asp Leu Leu Leu His Lys Arg Leu Ala Asn Tyr Val Arg Leu Gln
465                 470                 475                 480
Leu Leu Leu Arg Val Xaa Asn Ile Ile Arg Ala Ala Pro Arg Lys Arg
                485                 490                 495
Glu Arg Met
```

<210> 28262
<211> 154
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (24),(28),(34),(40),(45),(72),(77)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28262

```
Gly Gly Ser Gly Arg Lys Pro Trp Ser Leu Ala Gln Ile Arg Gly Ile
1               5                   10                  15
Phe Gly Asp Val Pro Pro Leu Xaa Gly Ile Leu Xaa Gln Gly Phe Glu
            20                  25                  30
Thr Xaa Phe Pro Pro Leu Glu Xaa Leu Pro Phe Phe Xaa Ala Gly Arg
        35                  40                  45
Tyr Phe Leu Thr Ile Tyr Tyr Pro Ser Trp Phe Val Ile Ser Gln Ile
    50                  55                  60
Asn Phe Leu Lys Asp Lys Met Xaa Thr Thr Ser Arg Xaa Leu Arg Pro
65                  70                  75                  80
Ile Pro Thr Gln Ile Phe Ala Asp Asp Val Val Glu Glu Lys Gly Glu
                85                  90                  95
Asn Ala Gly Leu Ser Ala Phe Val Gly Pro Ile Ala Val Gly Asp Leu
            100                 105                 110
Val Lys Ser Thr Leu Gly Pro Lys Gly Met Asp Lys Ile Leu Gln Ser
```

```
        115                 120                 125
Ala Asn Val Gly Trp Phe Ser Gly Asn Ala Gly Val Cys Trp Lys Thr
    130                 135                 140
Ser Leu Pro Glu Leu Thr Leu Gly Leu Lys
145                 150
```

<210> 28263
<211> 321
<212> PRT
<213> A.fumigatus

<400> 28263

```
Gln Gly Pro Phe Leu Phe Gln Val Glu Thr Ser Gln Gln Leu Lys Glu
1               5                   10                  15
Arg Thr Ser Ala Cys Glu Ser Arg Leu Leu Pro Leu Ala Pro Asn Ala
            20                  25                  30
Gly Gln Glu Thr Thr Thr Thr Thr Thr Thr Val Asp Asp Lys Glu Lys
        35                  40                  45
Lys Ser Ile Ala Ser Glu Val Leu Gln Glu Leu Asp Gln Ile Ala Lys
    50                  55                  60
Glu Val Ser Glu Leu Gln Lys Tyr Ser Arg Ile Asn Phe Thr Gly Phe
65                  70                  75                  80
Leu Lys Ala Ala Lys Lys His Asp Arg Lys Arg Gly Ala Arg Tyr Arg
                85                  90                  95
Val Arg Pro Leu Leu Gln Val Arg Leu Ser Gln Leu Pro Phe Asn Ser
            100                 105                 110
Glu Asp Tyr Ser Pro Leu Val His Arg Ile Ser Val Met Tyr Ser Phe
        115                 120                 125
Val Arg Gln Ile Leu Ser Glu Gly Ala Val Glu Ser Lys Asp Ala Ser
    130                 135                 140
Glu Pro Arg Ser Gly Gln Asp Ala Tyr Ser Ser Tyr Lys Phe Trp Val
145                 150                 155                 160
His Glu Asp Asn Ile Leu Glu Val Lys Thr Tyr Ile Leu Arg Arg Leu
                165                 170                 175
Pro Val Leu Ile Tyr Asn Pro Lys Ser Ser Arg Asp Phe Glu Ser Leu
            180                 185                 190
Pro Glu Asp Pro Thr Ile Thr Ser Leu Tyr Phe Asp Asn Pro Gln Phe
        195                 200                 205
Asp Leu Tyr Asn Gln Lys Val Ala Lys Ala Pro Glu Ala Gly Ser Ile
    210                 215                 220
Arg Leu Arg Trp Thr Gly Asp Leu Lys Asp Thr Pro Ala Ile Phe Leu
225                 230                 235                 240
Glu Lys Lys Ile Val Thr Ser Asp Asp Tyr Ser Lys Glu Val Lys Val
                245                 250                 255
Gln Leu Lys Lys Lys His Val Gln Glu Phe Leu Glu Gly Lys Tyr Thr
            260                 265                 270
Phe Glu Lys Gln Leu His Arg Met Glu Gly Leu Asn Asn Gly Glu Ser
        275                 280                 285
Ala Glu Ala Glu Thr Leu Lys Lys Asp Val Glu Glu Leu Gln Ser Phe
    290                 295                 300
Ile Pro Glu Thr Tyr Ser Leu Gln Gly Ser Lys Asn Ala Arg Asp Phe
305                 310                 315                 320
Phe
```

<210> 28264

<211> 361
<212> PRT
<213> A.fumigatus

<400> 28264
Ala Pro Tyr Phe Ser Thr Arg Leu Pro Phe His Pro Gly Pro Ser Pro
1 5 10 15
Val Glu Phe Arg Arg Leu Leu Arg Lys Ser Leu Lys Asp Ile Gln Ala
20 25 30
Leu Asn Asp Val Lys Gly Ala Tyr Arg Thr Lys Tyr Asn Leu Phe Asp
35 40 45
Ser Ile Thr Leu Pro Leu Ala Asp Phe Leu Lys Gly Glu Gly Val Asp
50 55 60
Phe Arg Phe Asn Val Asp Val Thr Asp Leu Leu Leu Tyr Pro Glu Ser
65 70 75 80
Asp Pro Thr Thr Val Ser Glu Ile Lys Leu Ile Lys Glu Gly Asp Glu
85 90 95
Cys Leu Ile Thr Leu Asp Pro Glu Asp Ile Cys Ile Val Asp Pro Gly
100 105 110
Tyr Ser Arg Ser Gly Ala Asp Phe Gly Thr Asp Thr Ala Pro Pro Pro
115 120 125
Phe Leu Thr Ser Asn Trp Glu Asp Leu Met Met Lys Glu Trp Lys Leu
130 135 140
Trp Gln Lys Leu Ser Asp Lys Cys Pro Lys Phe Gly Asn Pro Ser Asn
145 150 155 160
Phe Leu Ser Arg Ala Leu Glu Ser Gly Val Glu Thr Phe Thr Thr Thr
165 170 175
Leu Trp Gly Pro Gln Phe Met Asn Leu Tyr Glu Lys Leu Thr His Asp
180 185 190
Gln Pro Arg Thr Asp Ala Leu Leu Ser Leu Thr Glu Ser Lys Trp Ser
195 200 205
Ile Thr Leu Ser Ile Pro His Gln Pro Ile Leu Pro Gly Gln Pro Pro
210 215 220
Asp Ala His Ile Val Cys Gly Tyr Ala Leu Ser Pro Trp Asn Glu Gly
225 230 235 240
Asp Phe Val Lys Lys Pro Met Phe Ala Cys Ser Gly Lys Glu Ile Phe
245 250 255
Thr Glu Val Leu Ser His Leu Gly Phe Pro Val Gln Ser Ile Leu Asp
260 265 270
Ala Ala Thr Thr Ile Pro Cys Gly Leu Pro Leu Gly Thr Ala Pro Phe
275 280 285
Leu Thr Arg Gly Asn Arg Asp Arg Pro His Val Ile Pro Pro Tyr Thr
290 295 300
Thr Asn Ile Ala Cys Val Gly Gln Phe Ala Glu Leu Pro Glu Asp Thr
305 310 315 320
Thr Leu Ser Met Glu Tyr Ser Val Arg Ser Ala Gln Met Ala Val Tyr
325 330 335
Gln Leu Met Asp Leu Gln Lys Glu Pro Ala Lys Leu Lys Lys Asn Ile
340 345 350
Leu Leu Glu Leu Phe Asp Leu Leu Ile
355 360

<210> 28265
<211> 378
<212> PRT
<213> A.fumigatus

<400> 28265
Pro Val Ile Glu Pro Thr Asn Leu Leu Lys Gly Ala Gly Pro Arg Ser
1 5 10 15
Gly Phe Leu Arg Ile Asp Lys Val Leu Val Thr Ile Ala Ala Met Glu
20 25 30
Thr Lys Gly Asn Pro Lys Asp Ser Met Lys Ser Thr Trp Arg Thr Ala
35 40 45
Ser Arg Asp Thr Trp Ser Leu Gly His Trp Leu Ile His Ile Leu Asn
50 55 60
Ala Tyr Pro Leu Glu Leu Asp Lys Glu Val Pro Val His Ser Lys Asp
65 70 75 80
Glu Pro Ile Pro Phe Met Pro Gln Trp Ser Leu Asn Leu Trp Val Ile
85 90 95
Phe Tyr Ser Ser Leu Pro Leu Leu Phe His Gln Ala Tyr Ala Trp Tyr
100 105 110
Thr Glu Arg Asn Leu Gly Pro Leu Ala Thr Phe Asn Leu Tyr Met Phe
115 120 125
Ala Phe Asn Ala Ile Val Ile Tyr Gln Val His Ile Leu Arg Arg Leu
130 135 140
Gly His Ile Tyr Gly Phe Leu Asp Gly Asp Lys His Glu Arg Asp Gly
145 150 155 160
Ile Pro Asp Val Gly Val Gly Lys Val Val Ala Ser Val Tyr Lys Thr
165 170 175
Thr Gly Ser Arg Leu Ala Leu Ser Val Tyr Phe Ser Tyr Gln Thr Ser
180 185 190
Gln Leu Pro Ala Gln Met Asn Trp Tyr Trp Leu Pro Val Glu Val Gly
195 200 205
Leu Tyr Gly Ile Val Leu Asp Phe Trp Phe Tyr Trp Tyr His Arg Leu
210 215 220
Met His Asp Val Ser Phe Leu Trp Lys Tyr His Arg Thr His His Leu
225 230 235 240
Thr Lys His Pro Asn Pro Leu Leu Thr Ala Tyr Ala Asp His Glu Gln
245 250 255
Glu Phe Gly Asp Met Val Gly Val Pro Met Met Thr Tyr Phe Thr Leu
260 265 270
Arg Leu Leu Gly Leu Pro Met Gly Phe Tyr Glu Trp Trp Ile Cys His
275 280 285
Glu Tyr Val Val Phe Ala Glu Val Phe Gly His Ser Gly Leu Arg Leu
290 295 300
His Leu Thr Val Pro Ser Pro Leu Ser Trp Leu Met Gln Trp Leu Asp
305 310 315 320
Ala Glu Ile Val Ile Glu Asp His Asp Leu His His Arg Lys Gly Trp
325 330 335
Arg Lys Ser His Asn Tyr Gly Lys Gln Thr Arg Leu Trp Asp Arg Ile
340 345 350
Phe Gly Thr Cys His Glu Arg Ile Glu Ser Ala Pro Glu Asn Val Asp
355 360 365
Tyr Val Asn Thr Ala Arg Met Pro Leu Phe
370 375

<210> 28266
<211> 197
<212> PRT
<213> A.fumigatus

<400> 28266
Pro Ser Asn Gln Val Thr Lys Tyr Thr Met Asp Ser Val Lys Asn Lys
1 5 10 15
Val Tyr Ala Val Thr Gly Val Ala Gly Ile Gly Leu Ala Val Ala Gln
20 25 30
Gln Leu His Ala Arg Gly Ala Arg Leu Ser Leu Ala Asp Ile Asp Ala
35 40 45
Asn Ala Leu Thr Ser Ala Phe Ala Lys Leu Gly Ser Asp Ser Glu Thr
50 55 60
Val Leu Thr Thr Val Val Asp Val Gly Ser Ser Thr Ser Val Asp Ala
65 70 75 80
Trp Ile Glu Ala Thr Val Gln Lys Phe Gly Arg Leu Asp Gly Ala Ala
85 90 95
Asn Met Ala Gly Thr Ile Gly Arg Lys His Gly Val Gly Lys Leu Val
100 105 110
Glu Gln Asp Asp Glu Glu Trp Asp Phe Leu Leu Arg Val Asn Leu Thr
115 120 125
Gly Thr Met Tyr Cys Leu Arg Ala Glu Val Arg Ser Ile Ala Ala Thr
130 135 140
Ala Gly Glu Gly Ser Ile Val Asn Ala Ala Ser Ile Gln Gly Val Arg
145 150 155 160
Gly Phe Ala Leu His Ala Ala Tyr Ser Thr Thr Lys His Gly Val Val
165 170 175
Gly Leu Thr Lys Ser Val Ala Lys Glu Val Gly Pro Ala Ile Arg Val
180 185 190
Asn Ala Ile Ala Pro
195

<210> 28267
<211> 211
<212> PRT
<213> A.fumigatus

<400> 28267
Arg Leu Leu Leu His Ser Phe Tyr Leu Pro Arg Pro Ser Leu Leu Tyr
1 5 10 15
Ile Lys Met Lys Leu Ser Ile Ala Ala Thr Leu Gly Phe Leu Gly Cys
20 25 30
Ala Leu Ala Leu Pro Ala Pro Ala Ala Arg Glu Thr Asp Leu Pro Phe
35 40 45
Pro Phe Pro Ala Gly Gly Ser Gly Thr Gly Pro Gly Ser Leu Pro Phe
50 55 60
Pro Ile Pro Ser Gly Ala Pro Ser Gly Phe Pro Phe Pro Ile Pro Ser
65 70 75 80
Gly Leu Pro His Gly Phe Pro Thr Asp Phe Pro Phe Pro Ile Pro Ser
85 90 95
Gly Leu Pro Thr Gly Phe Pro Phe Pro Ile Pro Ser Gly Phe Pro Thr
100 105 110
Gly Ser Gly Ser Gly Gly Phe Pro Gly Phe Pro Gly Leu Gly Gly Ser
115 120 125
Gly Asp Tyr Glu Lys Arg Glu Glu Ala His His Ser Arg Pro Lys Pro
130 135 140
Ser Gly Val Phe Pro Gly Trp Pro Trp Ala Met Ala Met Ala Arg Ser
145 150 155 160
Pro Thr Gly Gly Phe Pro Gly Trp Pro Lys Pro Thr Gly Thr Pro Ser
165 170 175

```
Phe Pro Pro Gly Gly Ser Pro Thr Gly Gly Phe Pro Gly Phe Pro Ser
            180                 185                 190
Ile Ile Pro Thr Ala Tyr Ala Gln Arg Asn Ser Phe Arg Leu Pro Pro
        195                 200                 205
Ser Arg Gly
    210
```

<210> 28268
<211> 73
<212> PRT
<213> A.fumigatus

<400> 28268

```
Leu Ser Ser Gly Met Leu Leu Thr Ser Cys Ser Gly Ser Ile Gln Thr
1               5                   10                  15
Pro Leu Leu Asp Lys Ala Arg Asp Ile Gln Gly Thr Leu Asn Ala Met
            20                  25                  30
Pro Thr Ile Ile Pro Arg Ile Gly Thr Ala Asp Glu Val Ala Gln Ser
        35                  40                  45
Val Leu Phe Leu Leu Ser Asp Ala Ser Ser Tyr Thr Thr Gly Leu Val
    50                  55                  60
Leu Asn Val Asp Gly Gly Trp Asp Pro
65                  70
```

<210> 28269
<211> 536
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (516)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28269

```
Leu Gln Thr Thr Leu Ala Pro Cys Glu Leu Ser Thr His Cys Ile Ile
1               5                   10                  15
Lys Leu Ser Arg Met Ser Glu Gln Thr Lys Lys Thr Pro Gln Arg Val
            20                  25                  30
Arg Lys Phe Leu Pro Asn Val Ile Glu Ser Ser Ser Arg Ser Ser Arg
        35                  40                  45
Asn Arg Gln Ser Thr Pro Ser Val Gln Ala Ser Ser Met Glu Leu Glu
    50                  55                  60
Phe Gln Ser Gly Lys Pro Ala Gly Thr Leu Ile Ala Asp Thr Arg Pro
65                  70                  75                  80
Val Pro Pro Gly Asp Leu Thr Ser Ser Gln Arg Gln Gln Asp Asp Ser
                85                  90                  95
Trp Thr Leu Asn Asp Ile Lys Glu Val Ser Asp Asn Arg Ala Phe Gly
            100                 105                 110
Leu Pro Gln Arg Gln Pro Ile Arg Glu Glu Val Leu His Asn Ser Val
        115                 120                 125
Asp Thr Lys Thr Asn Gly Asp Arg Leu Ser Tyr Pro Val Ser Ser Ser
    130                 135                 140
Ala Thr Glu Lys Val Val Leu Gln Met Arg Ser Cys Pro Arg Lys Phe
145                 150                 155                 160
Ala Pro Gln Leu Val Glu Thr Asn Lys Arg Ser Phe Arg Arg Lys Glu
```

```
                165                 170                 175
Thr Ser His Thr Leu Ser Gly Ala Pro Val Gln Gly Tyr Asp Asn Val
            180                 185                 190
Ser Arg Thr Gln Ser Gly Thr Ser Thr Cys Ala Asn Ser Asn Ala Phe
        195                 200                 205
Ser Ala Thr Ile Glu Ser Lys Phe Ser Tyr Ser Ser Leu Gln Gln Arg
    210                 215                 220
Gln Glu Ser Arg Ser His Ser Phe Arg Val Pro Asp Leu Pro Ala Ile
225                 230                 235                 240
Pro Ser Ser Cys Ser Asp Ala Ser Glu Gly Ser Asp Thr Pro Ser Phe
                245                 250                 255
Ser Ala Ser Pro Ser Ile Ser Ser Asn Val Ser Ala His His Ser Lys
            260                 265                 270
Ala Glu Asn Gly Cys Lys Thr Gly Arg Asp Gly His Met Ala Glu Tyr
        275                 280                 285
Phe Leu Ser Leu Ala Gly Gln Ser Val Glu Ser Gln Leu Lys Glu Gln
    290                 295                 300
Ala Leu Ala Ala Phe Pro Asn Glu Gln Val Tyr Glu Pro Val Asp His
305                 310                 315                 320
Phe Ala Ile Asp Lys Asp Glu Asp Glu Cys Ser Glu Glu Asp Ser Lys
                325                 330                 335
Asn Gly His Leu His Val Ser Arg Arg Glu Ser Ser Ala Asp Leu Pro
            340                 345                 350
Trp Glu Leu Glu His Met Arg Arg His Lys Glu Asp Ala Glu Met Arg
        355                 360                 365
Asp Arg Ala Met Ala Gly Thr Lys Gly Arg Arg Leu Ser Ser Ala Ile
    370                 375                 380
Phe Asn Pro Arg Gln Phe Tyr Ser Gly Ile Asp Asn Asp Cys Trp Arg
385                 390                 395                 400
Gly Lys Tyr Glu Pro Asp Leu Ser Arg His Leu Ala Arg Pro Pro Met
                405                 410                 415
Leu Gly Asp Asp Leu Val Phe Pro Gln Ser Leu Ser Pro Glu Ala Thr
            420                 425                 430
Ile Cys Glu Ser Gly Ser Val Arg Asp Cys Ala Thr Asp Ser Arg His
        435                 440                 445
Arg Val Arg Asn Asp Phe Gly Leu Trp Cys Thr Lys Pro Gly His Val
    450                 455                 460
Gln Asp Asp Ala Thr Thr Gly Leu Trp Lys Gly Thr Cys Cys Asn Tyr
465                 470                 475                 480
Lys His Thr Gln Gln Ser Lys Arg Ser Leu Pro Cys Val Thr Asp Asn
                485                 490                 495
Ser Arg His Ser Asn Asn Asn Glu Cys Gln Ser Lys Val Cys Ser Asp
            500                 505                 510
Glu Gln Asp Xaa Glu Gln Ser Thr Ser Asn Ser Tyr His Leu Gly Leu
        515                 520                 525
Asp Val Arg Glu Leu Ser Arg His
    530                 535
```

<210> 28270
<211> 115
<212> PRT
<213> A.fumigatus

<400> 28270

```
Gly Gly Ser Arg Thr Met Val Trp Arg Asp Phe Gly Val Lys Leu Arg
1               5                   10                  15
```

```
Arg Asp Phe Thr Met Val Arg Ala Ser Ala Pro Pro Lys His Ile Lys
            20                  25                  30
Thr Met Glu Lys Glu Thr Ala Val Asn Pro Ala Asp Arg Val Ile Gly
        35                  40                  45
Ala Leu Lys Asp Arg Lys Leu Pro Ile Asn Arg His Glu Ile Glu Ser
    50                  55                  60
Ala Leu Ile Asp Ile Asp Asn Lys Asn Val Glu Ser Ile Gln Trp Leu
65                  70                  75                  80
Glu Glu His Leu Arg Pro Asp Thr Leu Leu Ser Gln Glu Glu Leu Thr
                85                  90                  95
Leu Tyr Val Ser His Ser Ser Pro Arg Trp Ile Pro Phe Leu Ser Ile
            100                 105                 110
Ser Lys Arg
        115
```

<210> 28271
<211> 60
<212> PRT
<213> A.fumigatus

<400> 28271

```
Arg Ala Pro Pro Glu Ser Arg Ile Ile Leu Arg Asp Ser Arg Gly Ser
1               5                   10                  15
Tyr Ser Cys Leu Gln Asp Gly Asn Arg Gln Ser Val Phe Arg Lys Ala
            20                  25                  30
Phe Phe Lys Ala Arg Asp Ile Glu Tyr Glu Glu Ala Phe Tyr Ser Val
        35                  40                  45
Ala Ile His Pro Tyr Arg Ser Arg Lys Ala His Gly
    50                  55                  60
```

<210> 28272
<211> 64
<212> PRT
<213> A.fumigatus

<400> 28272

```
Arg Arg Val Ala Tyr Phe Thr His Ser Val Arg Lys Tyr Gly Val Glu
1               5                   10                  15
Gly Gly Ser Lys Val Leu Leu Phe Gly Ala Leu Pro Pro Pro Val Leu
            20                  25                  30
Ala Leu Leu Arg Ser Gly Tyr Ser Thr Ala Ser Gln Glu Ser Gln Leu
        35                  40                  45
Arg Leu Ile Gly Phe Glu Leu Gly Val Ile Asp Ala Leu Ala Gln Val
    50                  55                  60
```

<210> 28273
<211> 440
<212> PRT
<213> A.fumigatus

<400> 28273

```
Gln Gln Arg Gly Ser Leu Ile Ser Gly Asn Asn Leu Val Ser Asn Asn
1               5                   10                  15
Ala Ser Val Leu Asp Leu Leu Val Val Asp Asn Ala His Ala Ala Pro
            20                  25                  30
Cys Ile Ser Pro Ala Thr Pro Val Lys Met Pro Thr Thr Thr Ser Ala
```

```
        35                  40                  45
Ser Asp Lys Ser Arg Gln Thr Ser Ala Gly Lys Gly Phe Phe Gly Arg
    50                  55                  60
Lys Leu His Lys Glu Lys Pro Val Asp Asp Arg Tyr Glu Gly Tyr Gly
65                  70                  75                  80
Gly Ser Glu Asn Leu Ala Pro Pro Gly Asn Ala Thr Gly Ser Arg Ser
                85                  90                  95
Ser Arg His Ser Lys Arg Ser Ser Val Gln Ser Val Asp Tyr Ser His
            100                 105                 110
Asp Phe Asp Pro Ser Gly Ile Ser Met Thr Ala Gly Val Ile Thr Ser
        115                 120                 125
Ile Pro Tyr Glu Ser Leu Thr Thr Asp Thr Arg Ser Pro Ile Pro Val
    130                 135                 140
Asp Tyr Leu Ser Arg Ala Glu Thr Ser Pro Arg Lys Glu Pro Ser Pro
145                 150                 155                 160
Asn His Leu Ala Lys Gly Gly Gly Asp Phe His Gln Tyr Pro Ala Trp
                165                 170                 175
Asn Pro Thr Gly Leu Arg Glu Asn Asn Ala Phe Ser His Pro Thr Gly
            180                 185                 190
Pro Arg Pro Pro Pro His Ala Ser Asn Val Ser Met Val Gly Ser Thr
        195                 200                 205
Ala Gly Asp Lys Ser Ala Arg His Gln Gln Trp Ala Arg Pro Gly Ser
    210                 215                 220
Ser Ala Thr Asn Ala Gly Phe Ser His Asn Ser Ser Ser Thr Val Asp
225                 230                 235                 240
Ser Ser Ser Thr Ser Arg Met Ser Phe Asp Gln Thr Ser Ile His Ser
                245                 250                 255
Ser Leu Ser Ser Asn Thr Arg Gly Ser Ser Tyr Ile Ser Ser Asp Gly
            260                 265                 270
Ser Ala Arg Thr Leu Thr Thr Ser His Ser Gly Asp Arg Gly Thr Leu
        275                 280                 285
Phe Pro Ser Ser Gly Asn Ser Asn Arg Phe Ser Thr Ala Gln Ala Ala
    290                 295                 300
Trp Gln Ala Ala Gln Leu Ala Thr His Ser Ala Ala Pro Val Leu Asn
305                 310                 315                 320
Pro Glu Gln Tyr Leu Thr Arg Pro Arg Asp Asp Arg Val Val Asp Gln
                325                 330                 335
Leu Phe Leu Asp Leu Met Gln Lys Arg Gly Trp Gln Asn Leu Pro Glu
            340                 345                 350
Gln Ala Lys Arg Gln Lys Leu Ala Tyr Pro Ala Ser Lys Lys Trp Thr
        355                 360                 365
Leu Val His Gln Asp Arg Leu Thr Asp Leu Gln Gly Glu Gln Lys Arg
    370                 375                 380
Arg Gln Asn Ala Arg Gln Thr His Gly His Asp Gly Pro Ala Gly Ile
385                 390                 395                 400
Leu Glu Arg Ala Asp Glu Glu Gly Ser Pro Glu Trp Tyr Val Lys Lys
                405                 410                 415
Val Met Asp Asp Ser Ile Thr Ser Lys Gln Leu Ala Ser Leu Ser Val
            420                 425                 430
Ser Leu Arg Thr Gln Pro Ile Lys
        435                 440
```

<210> 28274
<211> 166
<212> PRT
<213> A.fumigatus

<400> 28274
Asp Asp Ser Trp Val Arg Ala Phe Val Glu Ala Gln Gly Gln Ile Ala
1 5 10 15
Leu Thr Asn Val Leu Ser Lys Ile Asn Arg Arg Lys Ala Ser Gly Pro
20 25 30
Val Pro Ala Pro Pro Thr Gly Asp Arg Asp Leu Asp Arg Glu Tyr Asp
35 40 45
Ile Val Lys Cys Leu Lys Ala Leu Met Asn Asn Lys Tyr Gly Ala Asp
50 55 60
Asp Ala Ile Gly His Gln Gln Val Ile Ile Ala Leu Val Ser Ser Leu
65 70 75 80
Leu Ser Pro Arg Leu Asn Thr Arg Lys Leu Val Ser Glu Val Leu Thr
85 90 95
Phe Leu Cys His Trp Ala Glu Gly Glu Gly His Gln Lys Val Leu Gln
100 105 110
Ala Met Asp His Val Lys Asn Gln His Gly Glu Thr Gly Arg Phe Asp
115 120 125
Ala Trp Met Arg Ile Val Glu Val Thr Ile Asp Gly Arg Gly Lys Met
130 135 140
Gly Ser Leu Val Gly Ala Ser Asp Glu Tyr Arg Ser Gly Ser Tyr Pro
145 150 155 160
Ser Gly Ala Glu Ile Arg
165

<210> 28275
<211> 182
<212> PRT
<213> A.fumigatus

<400> 28275
Gly Ile Gln Ala Val Ser Phe Asp Val Asp Tyr Leu Asn Ala Asn Leu
1 5 10 15
Ala Tyr Ala Asp Ser Ile Ile Val Glu Glu Val Val Val Pro Leu Ala
20 25 30
Leu Lys Tyr Leu Ala Arg Ala Gly Lys Leu Ser Ala Leu Thr Met Pro
35 40 45
Thr Ala Ser Phe Leu Val Ile Phe Pro Arg Ala Asp Lys Ser Ser Tyr
50 55 60
Ala Asp Thr Val Thr Leu Thr Val Thr Glu Thr Val Cys Asp Phe Ser
65 70 75 80
Ser Thr Thr Leu Ser Lys Pro Ser Thr Thr Ile Trp Ile Pro Pro Ile
85 90 95
Pro Thr Met Val Thr Thr Ala Ser Met Pro Thr Ser Gln Thr Ser Val
100 105 110
Ser Thr Ser Glu Ser Ser Thr Thr Ser Ser Val Glu Gln Thr Ala Ser
115 120 125
Arg Arg Thr Ser Ser Thr Ser Ser Ser Asp Ala Ser Ala Pro Val Pro
130 135 140
Ser Ser Ser Glu Pro Pro Phe Ala Pro Pro Leu Ser Asp Ser Ala Thr
145 150 155 160
Gly Gln Gly Lys Ile His Phe Ala Ser Leu Val Trp Thr Leu Val Met
165 170 175
Thr Ser Phe Met Asn Val
180

<210> 28276
<211> 68
<212> PRT
<213> A.fumigatus

<400> 28276
Ala Thr Lys Asp Ser Pro Ile Ser Phe Pro Ala Tyr Ile Thr Ser Pro
1 5 10 15
His Gly Thr Ser Lys Leu Val Asn Gln Tyr Glu Ser Val Leu Ala Ile
20 25 30
Thr Thr Asn Phe Gly Val Ala Ala Val Ile Leu Tyr Phe Arg Lys Leu
35 40 45
Ile Asn Asn Tyr Asn Lys Ser Val Ala His Ala Tyr Arg Leu His Phe
50 55 60
Ile Trp Gln Val
65

<210> 28277
<211> 110
<212> PRT
<213> A.fumigatus

<400> 28277
Leu Ser Arg Gln Val Gly Trp Tyr Ala Ser Ala Phe Phe Leu Thr Ile
1 5 10 15
Ala Ser Phe Gln Ser Thr Trp Gly Lys Gly Tyr Lys Tyr Phe Pro Leu
20 25 30
Lys Thr Thr Phe Leu Gly Ala Ile Ser Thr Phe Glu Ile Gly Ser Leu
35 40 45
Ile Cys Ala Val Ala Gln Asn Ser Thr Thr Leu Ile Val Gly Arg Ala
50 55 60
Val Ala Gly Met Gly Ala Ala Gly Ile Ala Ser Gly Ala Tyr Thr Ile
65 70 75 80
Ile Ala Phe Leu Ala Pro Pro Arg Gln Arg Pro Ala Phe Thr Gly Leu
85 90 95
Leu Gly Phe His His Gly Gly Arg Ser Thr Ala Leu Ser Asn
100 105 110

<210> 28278
<211> 75
<212> PRT
<213> A.fumigatus

<400> 28278
Ile Leu Ile Ile Ser Leu Phe Val Lys Ser Gly Pro Ala Glu Asn Ile
1 5 10 15
Leu Phe Leu Gly Asp Tyr Lys His Ala Phe Ile His Cys Lys Glu Leu
20 25 30
Asn Tyr Tyr Lys Ile Ile Lys Ala Lys Ala Ser Gly Gln Tyr Ile Thr
35 40 45
Arg Leu Ser Asn Ser Lys Glu Ala Arg Gly Lys Ser Leu Ile Met Gly
50 55 60
Glu Leu Leu Gln Leu Cys Leu Glu Leu Ser Tyr
65 70 75

<210> 28279

<211> 141
<212> PRT
<213> A.fumigatus

<400> 28279
Leu Leu Gln Trp Ile Ala Arg Leu Ser Ile Asn Ser Thr Phe Gly Ala
1 5 10 15
Ser Val Leu Glu Pro Ala Val Thr Asp Val Met Ala Asp Phe Cys Val
20 25 30
Gly Arg Thr Gln Ala Thr Leu Cys Ile Thr Leu Tyr Thr Leu Gly Leu
35 40 45
Ala Thr Gly Pro Leu Val Leu Ala Pro Ile Ser Glu Ala Tyr Gly Arg
50 55 60
Arg Trp Val Tyr Ile Pro Ala Ile Ser Phe Val Leu Ala Phe Ser Ala
65 70 75 80
Gly Ala Ala Ala Ala Lys Ser Phe Ala Ile Leu Leu Thr Cys Arg Phe
85 90 95
Phe Ser Gly Phe Phe Cys Ser Val Gly Ile Ala Val Gly Gly Gly Thr
100 105 110
Val Ala Asp Ile Trp Pro Arg Gly Lys Gln Arg Ala Thr Ala Ser Leu
115 120 125
Ser Ser Thr Arg Gly Trp Asn Glu Pro Phe Val Gly Val
130 135 140

<210> 28280
<211> 388
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (358)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28280
Arg Arg Glu Glu Asp Leu Ala Ala Asp Arg Cys Ser Gln Ser Leu Ser
1 5 10 15
Ser Leu Phe Lys Asn Leu Pro Glu Leu Leu Lys Asn Arg Gln Ser Ser
20 25 30
Val Lys Pro Val Asn Leu Lys Arg Pro Ala Pro Ala Ala Val Ser Arg
35 40 45
His Ala Ala Asn Val Lys Asn Gln Gln Ser Ala Pro Glu Ile Thr Pro
50 55 60
Pro Gln Arg Ala Ser Thr Phe Pro Val Gln Leu Leu Ser Arg Gln Ser
65 70 75 80
Lys Ala Glu Ala Ser Asn Thr Pro Lys Ser Leu Asp Asp Ser His Asn
85 90 95
Phe Gly Ser Gly Lys Met Tyr Gln Ser Pro Val Asn Thr Gln Val Ser
100 105 110
Thr Pro Lys Trp Thr Pro Ser Thr Pro Glu Ala Pro Thr Asp Thr Thr
115 120 125
Thr Thr Thr Pro Glu Pro Phe Ile Ala Asp Gln Ala Arg Pro Ser Thr
130 135 140
Thr Ala Ser Pro Met Pro Gly Met His Ser Arg Glu Pro Ser Ser Gly
145 150 155 160
Gln Phe Ser Ala Gln Gln Leu Ala Asn Ala Gly Asn Leu Pro Asp Leu

```
                165                 170                 175
Met Pro Ile Met Phe Pro Ser Asp Asp Pro Phe Ala Tyr Pro Thr Gln
            180                 185                 190
Pro Met Ser Thr Leu Glu Asp Asp His Phe Arg Val Asp Gly Leu Gly
        195                 200                 205
Leu Gln Ser Ala Asn Gln Phe Ala Phe Asp Pro Ser Ser Gln Gly Leu
    210                 215                 220
Pro Ser Ser Ala Ser Asn Asp Ser Ala Ile Gly Ala Ala Ser Thr Pro
225                 230                 235                 240
Thr Phe Asp Asn Phe Gly Thr Phe Pro Leu Phe Asn Asn Gly Thr Ser
                245                 250                 255
Ala Gly Ile Asn Ala Thr Leu Pro Tyr Arg Val Ala Pro Gln Lys Gln
            260                 265                 270
Gln Ala Met Ser Gln Ala Arg Leu Gln Ser Pro Gly Ser His Ser Ser
        275                 280                 285
Thr Pro Gly Ser Gly Thr Glu Ala Val Asn Ser Pro Asp Leu Val Ser
    290                 295                 300
Ile Pro Asn Gln Asn Phe Met Trp Gln Gly Tyr Asn Phe Gln Pro Gln
305                 310                 315                 320
Ala Ile Pro Pro Glu Ser Ser Gly Pro Gln Gln Ala Pro Thr Thr Thr
                325                 330                 335
Glu Ser Gln Gly Phe Ser Met Gly Thr Asn Glu Asn Asn Tyr Met Gly
            340                 345                 350
Val Gly Ile Asp Leu Xaa Phe Leu Pro Leu Asp Asp Ile Phe Gly Asp
        355                 360                 365
Pro Cys Arg Pro Asn Thr Leu Ala Asn Asp Asp Trp Ile Gln Trp Met
    370                 375                 380
Asn Val Gly Asn
385
```

<210> 28281
<211> 111
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (1)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 28281
Xaa Thr Ser Gln Ala Arg Ser Leu Val Asp Asp Thr Phe Ile Ile Ile
1               5                   10                  15
Asp Asp Gly Ile Thr Pro Glu Cys Pro Leu Asp Pro Thr Tyr Arg Ile
            20                  25                  30
His Phe Leu Ser Arg Thr Pro Leu Val Ile Tyr Ile Glu Gly Phe Leu
        35                  40                  45
Thr Thr Pro Glu Ala Asp His Leu Val Asp Ile Arg Tyr Leu Phe Ala
    50                  55                  60
Phe Asp Pro Gln Val His Thr Thr Pro Ser Leu Thr Phe Thr Glu Lys
65                  70                  75                  80
Arg Arg Lys Ile His Pro Gln His Asn Leu Gln Arg His His Arg Ala
                85                  90                  95
Arg Arg Pro Leu His Ala Ala Leu Arg Ala Cys Pro Ala Arg Pro
            100                 105                 110
```

<210> 28282
<211> 209
<212> PRT
<213> A.fumigatus

<400> 28282
His Leu Pro Lys Ser Val Gly Lys Tyr Thr Pro Ser Ile Ile Tyr Asn
1 5 10 15
Gly Ile Thr Glu Arg Val Asp Pro Ser Thr Arg Leu Ser Glu Arg Ala
20 25 30
Leu Leu Asp Arg Asp His Thr Val Arg Cys Ile Glu Asp Arg Ala Arg
35 40 45
Ala Phe Gln Gly Trp Arg Pro His Leu Tyr Ile Glu Arg Met Trp Ala
50 55 60
Gln Arg Tyr Asn Ala Ser Gly His Tyr Arg His His Tyr Asp Trp Ala
65 70 75 80
Gly Ser Val Ala Arg Gly Gly Asp Arg Ala Ser Thr Phe Met Val Tyr
85 90 95
Leu Asp Asp Asn Cys Thr Gly Gly Gly Thr Asn Phe Pro Arg Leu Arg
100 105 110
Met Pro Val Asp Arg Arg Trp Cys Arg Phe Leu Glu Cys His Gly Asp
115 120 125
Glu Glu Thr Leu Glu Val Gly Asp Gly Ala Lys Asp Thr Ala Pro Arg
130 135 140
Lys Glu Thr Ala Arg Ala Arg Gly Thr Gly Glu Gly Ile Thr Phe Lys
145 150 155 160
Pro Ile Lys Gly Asn Ala Ile Phe Trp Glu Asn Leu Arg Pro Asp Gly
165 170 175
Thr Gly Tyr Pro Glu Thr Trp His Ala Ala Leu Pro Val Thr Ser Gly
180 185 190
Thr Lys Val Gly Leu Asn Ile Trp Ser Trp Tyr Gln Pro Pro Arg Arg
195 200 205
Gly

<210> 28283
<211> 158
<212> PRT
<213> A.fumigatus

<400> 28283
Ser Thr Thr Ala Ser Pro Ser Ala Ser Thr Pro Pro Arg Gly Ser Pro
1 5 10 15
Ser Val Pro Cys Ser Thr Val Thr Thr Pro Ser Gly Val Ser Arg Thr
20 25 30
Ala Arg Ala Pro Ser Arg Gly Gly Val His Thr Cys Thr Ser Ser Val
35 40 45
Cys Gly Pro Ser Ala Thr Thr Pro Pro Ala Thr Thr Gly Thr Thr Thr
50 55 60
Thr Gly Arg Ala Pro Ser Arg Ala Ala Ala Thr Ala Pro Ala Arg Ser
65 70 75 80
Trp Phe Ile Trp Met Ile Thr Val Pro Val Gly Ala Arg Ile Ser Arg
85 90 95
Ala Cys Ala Cys Arg Ser Ile Gly Gly Gly Val Gly Phe Trp Ser Val
100 105 110
Met Glu Met Lys Arg Arg Trp Arg Trp Glu Met Gly Pro Arg Thr Gln

```
        115                 120                 125
Arg Arg Glu Lys Lys Arg Arg Gly Pro Glu Gly Arg Gly Lys Ala Ser
    130                 135                 140
Arg Ser Ser Leu Ser Arg Glu Met Gln Phe Ser Gly Arg Ile
145                 150                 155

<210> 28284
<211> 578
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (27),(32),(44),(71)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28284
Gln Glu Gln Cys Ser Thr His Leu Phe Pro Trp Ser Asp Ser Thr Thr
1               5                   10                  15
Cys Ser Leu Glu Leu Trp Leu Arg Gly Ile Xaa Trp Gly Gln Asp Xaa
            20                  25                  30
Trp Glu Arg Pro Pro Pro Glu Gly Asn Gly Gly Xaa Asn Phe Ser Ser
        35                  40                  45
Trp Thr Asn Asp Glu Val Gly Trp Leu His Thr Gly Ser Asn Asp Gly
    50                  55                  60
Ser Tyr Ala Arg Val Asn Xaa Tyr Val Asp Ala Gln Gly Thr Gly Pro
65                  70                  75                  80
Glu Ala His Ser Ile Ile Ala Arg Lys Val Ala Ala Glu Gly Thr Val
                85                  90                  95
Leu Leu Lys Asn Val Asp Arg Thr Leu Pro Leu Ser Arg Asn Ala Ser
            100                 105                 110
Ser Pro Ser Gly Gly Ile Leu Arg Val Gly Ile Tyr Gly Asp Asp Ala
        115                 120                 125
Gly Pro Ala Leu Gly Pro Asn Ala Cys Pro Asp Arg Gly Cys Asn Gln
    130                 135                 140
Gly Thr Leu Ala Thr Gly Trp Gly Ser Gly Thr Val Glu Phe Pro Tyr
145                 150                 155                 160
Leu Val Ser Pro Ile Glu Ala Leu Glu Ser Ala Trp Ser Thr Glu Ile
                165                 170                 175
Glu Ser Thr Ala Tyr Leu Arg Asn Ala Val Met Pro Ala Asp Ala Val
            180                 185                 190
Asp Lys Asp Leu Cys Leu Val Phe Val Asn Ala Asp Ser Gly Glu Gly
        195                 200                 205
Tyr Ile Ser Ala Gly Gly Ile His Gly Asp Arg Asn Asp Leu Phe Leu
    210                 215                 220
Gln Lys Gly Gly Asp Thr Leu Val Arg Thr Val Ser Ser Asn Cys Gly
225                 230                 235                 240
Gly Gly Gln Gly Lys Thr Val Val Val Ile His Ala Val Gly Pro Val
                245                 250                 255
Val Met Glu Ser Trp Ile Asp Leu Pro Gly Val His Ala Val Leu Leu
            260                 265                 270
Ala Asn Leu Pro Gly Gln Glu Ser Gly Asn Ala Leu Val Asp Val Leu
        275                 280                 285
Phe Gly Glu Val Asp Ala Ser Gly Arg Leu Pro Tyr Thr Ile Gly Lys
    290                 295                 300
Ser Leu Glu Asp Tyr Gly Pro Gly Ala Gln Val Leu Tyr Glu Pro Asn
```

```
305                 310                 315                 320
Ala Pro Val Pro Gln Val Asp Phe Leu Asp Ala Leu Tyr Ile Asp Tyr
                325                 330                 335
Arg His Phe Asp Arg His Asn Ile Thr Pro Arg Phe Glu Phe Gly Phe
            340                 345                 350
Gly Leu Ser Tyr Thr Thr Phe Glu Leu Leu Asp Leu Ser Ile Ser Pro
        355                 360                 365
Leu Gln Gln Lys Ser Arg Ser Val Pro Pro Arg Pro Thr Asp Ala Val
    370                 375                 380
Ala Pro Pro Val Tyr Asp Ile Ser Leu Pro Asp Pro Ala Ser Ala Leu
385                 390                 395                 400
Phe Pro Ala Gly Phe Gln Pro Val Phe Lys Tyr Ile Tyr Pro Tyr Leu
                405                 410                 415
Ser Asn Leu Asp Gly Thr Ala Pro His Asn Tyr Ser Phe Tyr Pro Lys
            420                 425                 430
Gly Tyr Asn Glu Thr Gln Arg Pro Ser Pro Ala Gly Gly Gly Ala Gly
        435                 440                 445
Gly His Pro Ala Leu Tyr Glu Glu Met Val Ser Val Lys Leu Gln Val
    450                 455                 460
Ser Asn Thr Gly Asp Arg Lys Gly Gln Glu Val Val Gln Val Tyr Val
465                 470                 475                 480
Ser Phe Pro Pro Asp Val Thr Glu Glu Gly Asp Trp Val Glu Val Asp
                485                 490                 495
Ser Asp Ala Asp Lys Thr Gly Glu Lys Pro Arg Glu Arg Val Lys Ile
            500                 505                 510
Glu Phe Pro Glu Arg Val Leu Arg Asn Phe Thr Lys Ile Glu Leu Glu
        515                 520                 525
Pro Ser Glu Arg Arg Glu Val Gln Met Thr Leu Ser Arg Lys Asp Leu
    530                 535                 540
Ser Tyr Trp Ser Thr Arg Glu Gln Asn Trp Val Met Pro Glu Gly Lys
545                 550                 555                 560
Phe Gln Ile Trp Val Gly Arg Ser Ser Arg Asp Leu Pro Leu Met Gly
                565                 570                 575
Glu Tyr
```

<210> 28285
<211> 265
<212> PRT
<213> A.fumigatus

<400> 28285

```
Leu Ser Cys Leu Leu Asp Leu Leu Lys Leu Ala Ser Phe Val Gln Gln
1               5                   10                  15
Ser Met Leu Ser Ser Arg Arg Asn His Pro Ile Pro Gln Asp Phe Glu
            20                  25                  30
Leu Ala Phe Lys Arg His His Leu His Val Asp Asp Leu Leu Pro His
        35                  40                  45
Leu Lys Pro Leu Pro Asn Ile Glu Pro Val Pro Thr Leu Leu Pro Ser
    50                  55                  60
Pro Pro Pro Glu Glu Val Ala Trp Leu Asp Leu Pro Phe Leu Gly Ser
65                  70                  75                  80
Glu Leu Ser Gly Glu Ser Asp Arg Val Arg Ser Ala Tyr Ile Pro Lys
                85                  90                  95
His Phe Pro Gln Phe Pro Ser Lys His Thr Tyr Arg His Thr Pro Val
            100                 105                 110
```

```
Phe Thr Gln Arg Glu Gln Asp Pro Arg Lys Ile Arg Glu Arg Ala Thr
        115                 120                 125
Glu Glu Gly Arg His Gly Glu Glu Ala Leu Arg Lys Leu Ala Arg Ala
    130                 135                 140
Ser Phe Lys Asp Asn Gln Leu Gly Trp Ala Gly Arg Glu Lys Arg Leu
145                 150                 155                 160
Trp Gly Arg Arg Met Glu Ser Leu Asp Ser Met Phe Glu Lys Thr Val
                165                 170                 175
Lys Gly Ile Ala Lys Lys Met His Lys Asp Val Thr Ala Pro Gly Thr
            180                 185                 190
Val Ala Ala Met Asp Ile Asp Ser Gly Val Ala Val Asp Pro Glu Leu
        195                 200                 205
Lys Ala Thr Arg Pro Lys Leu Pro Phe Ser Leu Glu Leu Pro Pro Val
    210                 215                 220
Ile Asn Cys Glu Arg Gly Leu Trp Arg Arg Thr Ala Ala Pro Ser Asn
225                 230                 235                 240
Arg Lys Ala Glu Glu Lys Pro Ala Gly Thr Lys Asp Pro Thr Ser Val
                245                 250                 255
Ser Arg Val Glu Ser Trp Met Ser Thr
            260                 265
```

<210> 28286
<211> 67
<212> PRT
<213> A.fumigatus

<400> 28286

```
Gln Leu Pro Arg Pro Arg Pro Pro Ser Ala Met Ser Pro Pro Ala Thr
1               5                   10                  15
Asp Ala Gly Cys Ala Arg Thr Ala Ala Thr Ser Asp Ser Pro Gly Val
            20                  25                  30
Ser Pro Val Arg Lys Pro Val Ser Val Val Ser Gly Met Ile Leu Ser
        35                  40                  45
Leu Asn Glu Arg Ser Arg Ala Val Met Ser Ile Phe Ser Lys Arg Ala
    50                  55                  60
Leu Leu Thr
65
```

<210> 28287
<211> 495
<212> PRT
<213> A.fumigatus

<400> 28287

```
Phe Val Ser Lys Phe Ser Ala Asn Tyr Pro Leu Val Pro Leu Asp Leu
1               5                   10                  15
Arg Gln Thr Ser Ile Leu Glu Thr Trp Leu Ser His Leu Gly Thr Pro
            20                  25                  30
Ser Pro Arg Leu Ala Phe Pro Val Met Leu Asn Thr Ser Pro Ala Ser
        35                  40                  45
Pro Thr Ser Leu Gly Arg Lys Arg Pro His Pro Pro Ala Glu Pro Ser
    50                  55                  60
Leu Thr Gln Ser Gln Pro Ala Ala Gln Thr Gln Gln Gln Thr Ala Gly
65                  70                  75                  80
Asp Gly Thr Ala Lys Pro Pro Pro Pro Ala Val Thr Thr Ser Ser Thr
                85                  90                  95
```

```
Ser Ser Thr Phe Arg Asn Val Ser Ala Cys Asn Arg Cys Arg Leu Arg
            100                 105                 110
Lys Asn Arg Cys Asp Gln Arg Leu Pro Arg Cys Gln Ser Cys Glu Lys
        115                 120                 125
Ala Gly Val Arg Cys Val Gly Tyr Asp Pro Ile Thr Lys Arg Glu Ile
    130                 135                 140
Pro Arg Ser Tyr Val Tyr Phe Leu Glu Ala Arg Val Ala Tyr Leu Glu
145                 150                 155                 160
Lys Thr Leu Arg Asp His Gln Ile Glu Phe Lys Glu Ala Val Ala Phe
                165                 170                 175
Asp Glu Glu Glu Ala Ile Lys Val Glu Ala Gly Tyr Asp Gln Asp Arg
            180                 185                 190
Pro Gln Met Ala Gly Ser Glu Ala Ser Ala Gly Ala Glu Thr Leu Ser
        195                 200                 205
Thr Thr Val Val Glu Ser Asp Arg Leu Thr Arg Gln Lys Ala Asp Lys
    210                 215                 220
Ala Ala Gln Val Pro Arg Ser Gly Arg Asn Pro Glu Ser Glu Gln Asp
225                 230                 235                 240
Ala Glu Asn Ser Arg Asp Tyr Glu Lys Glu Asp Asn Trp Arg Ile His
                245                 250                 255
Asn Leu Val Ser Asn Ile Gly Met Val Ser Val Gln Gly Thr Ser Asp
            260                 265                 270
Pro Arg Tyr Leu Gly Ser Thr Ser Gly Ile Ser Phe Ala Arg Val Val
        275                 280                 285
Phe Ala Ala Val Lys Ser Ser Val Ala Gly Asn Val Gly Glu Arg Gly
    290                 295                 300
Pro Met Arg Pro Ser Glu Arg Leu Pro His Ser Ala Thr Gly Thr Ala
305                 310                 315                 320
Gly Ser Gly Ser Thr Met Arg Asp Ser Phe Phe Gly Leu Gln Thr Arg
                325                 330                 335
Pro Thr Met Lys Cys Ala Ala Phe Pro Asp Arg Glu Leu Ala Glu Lys
            340                 345                 350
Leu Val Asn Leu Tyr Phe Glu His Ala Asn Pro Gln Met Pro Ile Leu
        355                 360                 365
His Arg Glu Asp Phe Met Glu Leu Leu Asp Arg Thr Tyr Ser Val Glu
    370                 375                 380
Glu Lys Asp Arg Ser Pro Arg Ser Leu Tyr Thr Leu Asn Ile Val Phe
385                 390                 395                 400
Ala Ile Gly Ala Gly Ile Ile Phe Glu Asp Lys Thr Ser Ser Asp Asp
                405                 410                 415
Glu Asp Asn Thr Leu Ser Asn Ser Ser Arg Ser Thr Ser Ser Ser Thr
            420                 425                 430
Ala Lys Met Pro Arg Leu Ser Thr Arg Gln Tyr Gln Pro Glu Glu Tyr
        435                 440                 445
His Ala Ser Ala Ile Ile His Leu Glu Ser Phe Leu Gly Ala Ser Ser
    450                 455                 460
Ser Asn Glu Arg Phe Gly Ala Leu Asp Glu Leu Gln Ala Val Leu Leu
465                 470                 475                 480
Leu Ala Ser Phe Ala Leu Leu Arg Pro Val Ala Pro Gly Leu Trp
                485                 490                 495
```

<210> 28288
<211> 105
<212> PRT
<213> A.fumigatus

<400> 28288
Gln Arg Arg Arg Arg Ile Asn Arg Gln Lys Gln His Lys Val Ser Ala
1 5 10 15
Arg Ser Gln Thr Thr Asp Gly Ala Tyr Thr Asn Ile Tyr Arg Thr Gly
20 25 30
Leu Met Phe Tyr Glu Leu Asn Thr Trp Asp Leu Leu Gly Gly Ser Pro
35 40 45
Trp Lys Arg Ser Asp Asn Gln Pro Phe Glu Gly Thr Phe Glu Gly Thr
50 55 60
Val Asn Lys Phe Ala Gln Ile Thr Arg Leu Ile Asp Pro Asp Ala Lys
65 70 75 80
Phe Thr Glu Gln Ala Phe Ile Ser Asp Ala Gly Thr Ala Ser Val Ala
85 90 95
Ser Phe Asn Arg Thr Ser Arg Trp Cys
100 105

<210> 28289
<211> 74
<212> PRT
<213> A.fumigatus

<400> 28289
Gln Glu Gly Glu Lys Lys Lys Thr Asn Leu Ile Leu Leu Arg Leu Glu
1 5 10 15
Gln Ile Ala Leu Ala Ser Tyr Val Asn Pro Leu Ala Asp Pro Val Ala
20 25 30
Trp Asp Arg Met Ile Ala Tyr Pro Ser Asn Lys Val Ser Val Leu Val
35 40 45
Ala Asn Val Leu Asn Gly Pro Asp Thr Thr Val Asn Glu Asp Trp Ala
50 55 60
Lys Val Ile Asp Arg Ala His Ala Ser Gly
65 70

<210> 28290
<211> 61
<212> PRT
<213> A.fumigatus

<400> 28290
His Ser Leu Gln Gly Val Met Thr Ala Leu Leu Gln Glu Ile Ile Ser
1 5 10 15
Val Tyr Pro Leu Leu Asn Pro Ser Gln Leu Thr Ala Ala Ala Ser Asn
20 25 30
Arg Val Cys Asn Ala Leu Ala Leu Leu Gln Cys Val Ala Ser His Asn
35 40 45
Glu Thr Arg Thr Leu Phe Leu Asn Gly Ile Phe Pro Leu
50 55 60

<210> 28291
<211> 138
<212> PRT
<213> A.fumigatus

<400> 28291
Glu Thr Ala Leu Leu Met Ser Thr Leu Leu Ser Leu Ala His Ile Pro
1 5 10 15

```
Leu Phe Leu Tyr Pro Phe Leu Asn Thr Thr Ser Lys Ser Arg Pro Phe
            20                  25                  30
Glu Tyr Leu Arg Leu Thr Ser Leu Gly Val Ile Gly Ala Leu Val Lys
        35                  40                  45
Asn Asp Ser Ser Asp Val Ile Asn Phe Leu Leu Thr Thr Glu Ile Ile
    50                  55                  60
Pro Leu Cys Leu Arg Ile Met Glu Thr Gly Ser Glu Leu Ser Lys Thr
65                  70                  75                  80
Val Ala Ile Phe Ile Val Gln Lys Ile Leu Leu Asp Asp Ile Gly Leu
                85                  90                  95
Ala Tyr Ile Cys Ala Thr Tyr Glu Arg Phe Tyr Ala Val Gly Thr Val
            100                 105                 110
Leu Ser Asn Met Val Thr Gln Leu Val Glu Gln Gln Thr Val Arg Leu
        115                 120                 125
Leu Lys His Val Val Arg Cys Phe Leu Arg
    130                 135
```

<210> 28292
<211> 62
<212> PRT
<213> A.fumigatus

<400> 28292

```
Tyr Arg Ile Arg Leu Ser Asp Asn Ser Arg Ala Arg Glu Ala Leu Arg
1               5                   10                  15
Gln Cys Leu Pro Glu Pro Leu Arg Asp Ala Thr Phe Ser Ser Val Leu
            20                  25                  30
Arg Asp Asp Ala Ala Thr Lys Arg Cys Leu Ala Gln Leu Leu Ile Asn
        35                  40                  45
Leu Ser Asp Asn Val Ser Asp Gly Ala Ser Gly Val Thr Met
    50                  55                  60
```

<210> 28293
<211> 113
<212> PRT
<213> A.fumigatus

<400> 28293

```
Arg Leu Gln Ala Ser Leu Ala Ile Val Ser Asp Ile Leu Ala Leu Phe
1               5                   10                  15
Leu His Phe Gln Tyr Ile Gly Phe Ile Thr Ala Thr Ala Val Leu Asp
            20                  25                  30
Ile Leu Val Ile Ile Leu Cys Ala Ile Gly Val Gly Thr Ile Ser Thr
        35                  40                  45
Gly Asp Phe Val Ser Tyr Leu Gly Leu Tyr Tyr Tyr Asp Tyr Pro Ser
    50                  55                  60
Val Leu Ala Gln Ala Glu Ile Val Val Phe Ala Leu Asn Leu Leu Val
65                  70                  75                  80
Ala Tyr Val Cys Gln Ser Ser Arg Trp Gly Tyr Met Arg Leu Met Arg
                85                  90                  95
Leu Leu Lys Val Gly Glu Ile Pro Phe Asp Tyr Phe Met Leu Cys Phe
            100                 105                 110
Val
```

<210> 28294

<211> 84
<212> PRT
<213> A.fumigatus

<400> 28294
Lys Thr Lys Gly Thr Met Val Met Phe Ser Ala Met Ala Ser Asn Phe
1 5 10 15
Tyr Arg Ala Gln Asp Ala Pro Arg Tyr Ile Leu Gly His Ser Leu Glu
20 25 30
Leu Gly Phe Ala Val Val Gly Ile Ile Ala Val Val Ile Leu Arg Phe
35 40 45
Ser Tyr Gln Arg Ile Asn Lys Lys Arg Asp Gln Met Asp Val Ser Gly
50 55 60
Tyr Asp Asn Ala Gln Leu Ala Arg Met Gly Asp Arg Ser Pro Leu Phe
65 70 75 80
Arg Tyr Met Leu

<210> 28295
<211> 90
<212> PRT
<213> A.fumigatus

<400> 28295
Leu Leu Gly Gln Leu Ser Met Ser Ser Leu Pro Glu Arg His Trp Gln
1 5 10 15
Gln Arg Phe Pro Thr Phe Gln Gln Val Leu Leu Arg Lys Asn Ile Ala
20 25 30
Ala Leu Asp Asn Leu Leu Gln Gln Arg Leu Gln Asp Pro Gly Leu Ile
35 40 45
Thr Phe Glu Ile Asp Gln Leu Ala Lys Pro Asp Asp Ile Ala Ala His
50 55 60
Gln His Phe Gln Leu Gly Gly Val Leu Asp Pro Leu Phe Pro Phe Pro
65 70 75 80
Arg Arg Asp Leu Asp Val Glu Thr Ala Pro
85 90

<210> 28296
<211> 348
<212> PRT
<213> A.fumigatus

<400> 28296
Val Val Leu Val Ile Thr Lys Val Phe Pro Asp Glu Phe His Leu His
1 5 10 15
Thr Leu Asp Leu Leu Leu Ser Ala Ile Ser Arg Leu Asn Pro His Val
20 25 30
Asp Leu Lys Lys Ile Val Ile Gly Leu Met Asp Arg Leu Ser Ala Tyr
35 40 45
Ala Ala Arg Glu Thr Glu Ser Thr Thr Asp Pro Glu Ile Arg Lys Gln
50 55 60
Asn Glu Glu Glu Ala Val Thr Lys Phe Leu Glu Asn Leu Lys Ile Ala
65 70 75 80
Glu Glu Asn Lys Thr Gln Glu Ala Pro Thr Gly Thr Ala His Glu Asn
85 90 95
Gly Val Glu His Leu Ser Thr Glu Pro Ser Lys Glu Pro Ser Lys Asp

```
            100                 105                 110
Thr Asp Lys Pro Glu Ala Glu Thr Pro Lys Gly Glu Gln Glu Ser Asn
        115                 120                 125
Ala Asn Gly Glu Asn Asp Ala Lys Pro Gly Val Pro Ala Asp Val Lys
    130                 135                 140
Leu Tyr Ala Ile Phe Tyr Asp Gln Val Val Asn Leu Ile Lys Thr Arg
145                 150                 155                 160
Gly Leu Pro Ile Gln Asp Thr Met Ala Leu Leu Val Ser Leu Val Asn
                165                 170                 175
Leu Ala Leu Asn Thr Tyr Pro Asp Arg Leu Glu Tyr Val Asp Gln Val
            180                 185                 190
Leu Asp Phe Ala Thr Arg Glu Thr Ala Glu Tyr Ala Asp His Ala Asp
        195                 200                 205
Leu His Ala Ala Pro Thr Gln Gln Asn Leu Leu His Leu Leu Leu Ala
    210                 215                 220
Pro Leu Arg Ser Tyr Val Ser Ile Phe Thr Ala Leu Ala Leu Pro His
225                 230                 235                 240
Tyr Leu Pro Leu Leu Thr Ser Gln Ser Tyr Pro Thr Arg Arg Ser Val
                245                 250                 255
Ala Gly Glu Ile Val Arg Ser Leu Leu Lys Asn Arg Thr Leu Ile Thr
            260                 265                 270
Thr Ala Glu Asn Leu Asp Arg Val Leu Gly Ala Leu Arg Val Leu Ile
        275                 280                 285
Lys Glu Gly Leu Gln Gln Ala Val Gly Tyr Pro Gly Ser Gln Arg Arg
    290                 295                 300
Gly Gly Glu Thr Asp Glu Thr Ile Glu Glu Gln Gly Trp Leu Ala Arg
305                 310                 315                 320
Leu Val His Leu Ile Gln Ala Pro Glu Asn Asp Val Gln Leu Lys Val
                325                 330                 335
Arg Phe Leu Gly Arg Asn Arg Asp Gln Ile His Arg
            340                 345
```

<210> 28297
<211> 81
<212> PRT
<213> A.fumigatus

<400> 28297

```
Gly Cys Gly Phe Asn Ile Lys Val Pro Ser Arg Glu Arg Glu Lys Arg
1               5                   10                  15
Ile Gln Asp Pro Pro Glu Leu Glu Met Leu Val Gly Ser Asn Ile Val
            20                  25                  30
Arg Leu Ser Gln Leu Val Asp Leu Glu Arg Tyr Lys Ser Gly Ile Leu
        35                  40                  45
Gln Ala Leu Leu Glu Gln Val Val Gln Cys Arg Asp Val Leu Ala Gln
    50                  55                  60
Glu Tyr Leu Leu Glu Gly Arg Glu Ser Leu Leu Pro Val Ser Phe Gly
65                  70                  75                  80
Glu
```

<210> 28298
<211> 197
<212> PRT
<213> A.fumigatus

<400> 28298
Leu Leu Gln Ala Thr Arg Lys Ala Tyr Ala Asp Gly Asn Glu Arg Ile
1 5 10 15
Arg Tyr Thr Thr Pro Ala Ile Ile Thr Ala Ser Ile Arg Leu Ala Arg
20 25 30
Lys Leu Lys Ser Arg Glu His Tyr Asp Asp Asn Trp Gln Ser Gln Ser
35 40 45
Ser Ala Leu Tyr Arg Phe Met His Gln Cys Val Asn Thr Leu Tyr Gln
50 55 60
Arg Ala Asn Pro Gly Cys Ala Asp Leu Ala Leu Arg Leu Phe Val Met
65 70 75 80
Cys Gly Glu Val Ala Asp Gln Thr Gly Phe Glu Glu Phe Ser Tyr Glu
85 90 95
Phe Phe Ala Gln Ala Phe Thr Ile Tyr Glu Asp Ser Ile Ser Asp Ser
100 105 110
Arg Ala Gln Phe Gln Ala Val Cys Ile Ile Ala Gly Ala Leu His Gly
115 120 125
Thr Arg Gly Phe Ser Lys Glu Asn Tyr Asp Thr Leu Ile Thr Lys Ala
130 135 140
Ala Leu His Gly Ser Lys Leu Leu Lys Lys Pro Asp Gln Cys Arg Ala
145 150 155 160
Val Tyr Leu Ala Ser His Leu Trp Trp Val Val Glu Asn Pro Gln Arg
165 170 175
Gly Glu Glu Asp Pro Lys Asn Val Cys Pro Leu Cys Ser Leu Cys Phe
180 185 190
His Asp His Cys Ser
195

<210> 28299
<211> 211
<212> PRT
<213> A.fumigatus

<400> 28299
His Asn Leu Val Arg Ile Cys Val Cys Gly Asp Glu Gly Thr Gly Lys
1 5 10 15
Ser Ser Leu Ile Thr Ser Leu Val Lys Gly Val Phe Val Thr Asn Lys
20 25 30
Ile Gln Pro Val Leu Pro Gln Ile Thr Ile Pro Pro Thr Ile Gly Thr
35 40 45
Pro Glu Asn Val Thr Thr Thr Thr Val Val Asp Thr Ser Ala Leu Pro
50 55 60
Gln Glu Arg Ser Asn Leu Ala Arg Glu Ile Arg Lys Ser Asn Val Ile
65 70 75 80
Leu Leu Val Tyr Ser Asp His Tyr Ser Tyr Glu Arg Val Ala Leu Phe
85 90 95
Trp Leu Pro Tyr Phe Arg Ser Leu Gly Val Asn Val Pro Val Val Leu
100 105 110
Cys Ala Asn Lys Ser Asp Leu Ala Ala Asp His Thr Glu Ala Gln Val
115 120 125
Ile Glu Glu Glu Met Leu Pro Val Met Ala Glu Phe Lys Glu Ile Asp
130 135 140
Ser Cys Ile Arg Thr Ser Ala Arg Glu His Arg Asn Val Asn Glu Ala
145 150 155 160
Phe Phe Leu Cys Gln Lys Ala Val Thr His Pro Ile Ala Pro Leu Phe
165 170 175

```
Asp Ser Lys Glu Ser Ala Leu Lys Pro Ala Ala Val Ala Ala Leu Gln
            180                 185                 190
Arg Ile Phe Tyr Leu Ser Asp Lys Asp Arg Asp Gly Tyr Leu Ser Asp
        195                 200                 205
Lys Glu Ile
    210
```

<210> 28300
<211> 69
<212> PRT
<213> A.fumigatus

<400> 28300

```
Thr Ile Glu Ala Gly Val Lys Arg Ser Ala Leu Pro Asn Cys Leu Thr
1               5                   10                  15
Gly Leu Ala Pro Glu Asp Pro Thr Leu Ile Pro Phe Ser Leu Trp Pro
            20                  25                  30
Phe Ser His Cys Ile Ser Asn Phe Tyr Glu Cys Ile Asp Ala Ser Ser
        35                  40                  45
Asp Ile Ser Lys Tyr Gly Asn Ser Gln Val Asn Pro Lys Lys Leu Leu
    50                  55                  60
Gln Thr Val Asn Pro
65
```

<210> 28301
<211> 64
<212> PRT
<213> A.fumigatus

<400> 28301

```
Ile His Pro Ile Asp Val Ala Ile Ile Leu Leu Asp Pro Gly Pro Ser
1               5                   10                  15
Ser Thr Ser Asp Phe Ser His Ala Ser Ile Ser Ser Gly Ala Ala Ser
            20                  25                  30
Asp Ser Gly Gln Ala Gln Met Thr Leu Ile Asn Phe Leu Arg Trp Phe
        35                  40                  45
Met Gln Leu Ile Tyr Tyr Glu Tyr Asn Val Ser Arg Thr Leu Gly Ser
    50                  55                  60
```

<210> 28302
<211> 259
<212> PRT
<213> A.fumigatus

<400> 28302

```
Thr Pro Phe Ser Phe His Pro Thr Ile Thr Met Tyr His Arg Ser Ala
1               5                   10                  15
Phe Gly Leu Val Leu Ala Ser Ile Leu Leu Leu Asn Pro Val Ala Gly
            20                  25                  30
Lys Pro Pro Leu Gly Gln Thr Pro Gln Met Gly Trp Asn Ser Trp Asn
        35                  40                  45
Thr Phe Lys Ser Gln Ile Asn Ser Ser Val Ile Glu Asn Thr Val Gln
    50                  55                  60
Leu Phe Glu His Leu Gly Leu Lys Asp Val Gly Tyr Glu Tyr Ile Leu
65                  70                  75                  80
Leu Asp Glu Gly Trp Ser Asp Tyr Ser Arg Thr Ala Asp Gly Tyr Leu
```

```
                85                  90                  95
Gln Pro Asn Leu Thr Ser Phe Pro Asn Gly Ile Lys Pro Leu Ile Asp
            100                 105                 110
Asp Ile His Ala Lys Gly Leu Lys Ile Gly Leu Tyr Gly Asp Ser Gly
        115                 120                 125
Ile Leu Thr Cys Gly Phe Arg Pro Gly Ser Trp Ser Tyr Glu Glu Arg
    130                 135                 140
Asp Ala Gln Thr Leu Ala Arg Trp Gly Val Asp Tyr Trp Lys Tyr Asp
145                 150                 155                 160
Asn Cys Gly Gly Phe Gln Ala Met Thr Glu Pro Pro Gln Val Arg Phe
                165                 170                 175
Gly Ile Met Gln Lys Ala Leu Glu Leu Ser Gly Arg Gln Ile Phe Tyr
            180                 185                 190
Ser Val Cys Glu Trp Gly Tyr Gln Phe Pro Trp His Trp Gly Gly Ser
        195                 200                 205
Thr Phe Tyr Pro Pro Ser Ala Thr Ser Gly Lys Trp Leu Lys Lys Arg
    210                 215                 220
Arg Asp Arg Pro Phe Leu Ser His Val Gly Arg His His Arg Gln Ile
225                 230                 235                 240
His Gln Arg Asp Arg Gln Arg Arg Ile Arg Pro Gln Gly Leu Glu Gly
                245                 250                 255
Pro Gln Ile
```

<210> 28303
<211> 198
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (69)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28303

```
Ala Phe Leu Val Tyr Arg Leu Ser Arg Gly Ser Ser Trp Phe Leu Phe
1               5                   10                  15
Gln Tyr Ile Ser Thr Arg Tyr Lys Trp Thr Phe Ala Glu Ala Asn Leu
            20                  25                  30
Leu Ile Ser Phe Lys Pro Ala Leu Thr Ile Pro Leu Phe Leu Phe Ile
        35                  40                  45
Leu Pro Ala Leu Ser Arg His Leu Leu Arg Ser Met His Thr Ser Lys
    50                  55                  60
Lys Asp Leu Gln Xaa Ala Arg Val Ser Ile Ile Cys Leu Cys Leu Gly
65                  70                  75                  80
Thr Leu Gly Ile Gly Leu Ser Pro Ser Ile Ala Thr Leu Val Pro Ser
                85                  90                  95
Leu Leu Val Gln Thr Ala Gly Ser Gly Phe Leu Tyr Leu Ile Arg Ser
            100                 105                 110
Leu Ile Thr Thr Met Val Lys Gln Glu Glu Thr Ala Arg Leu Phe Thr
        115                 120                 125
Ile Ile Glu Val Leu Gln Ala Val Gly Asn Val Ile Ala Ser Leu Ser
    130                 135                 140
Ile Thr Thr Val Phe Gln Leu Gly Leu Glu Leu Gly Gly Pro Trp Ile
145                 150                 155                 160
Gly Leu Ala Trp Met Met Thr Ser Thr Ala Phe Ala Leu Val Gly Ala
```

```
                165                 170                 175
Ala Val Trp Cys Phe Arg Leu Pro Pro Ile Val Glu Gly Lys Asn Glu
            180                 185                 190
Ala Glu Val Ala Glu Val
        195
```

<210> 28304
<211> 476
<212> PRT
<213> A.fumigatus

<400> 28304

```
Gly Leu Met His Cys Phe Gly Leu Leu Val Leu Val Ser Gly Trp Trp
1               5                  10                  15
Phe Arg Tyr Ser His Ser Thr Arg Met Ser Asn Ser Leu His Asp Glu
            20                  25                  30
Leu Glu Ser Phe Val Phe Leu Cys Leu His Leu Leu Ile Ile Ala Leu
        35                  40                  45
Leu Leu Thr Arg Leu His Pro Ser Phe Val Ser Leu Asn Lys His Phe
    50                  55                  60
Leu Gln Val Ser Cys Ser Ala Phe Pro Val Asp Ser Ala Pro Leu Leu
65                  70                  75                  80
Thr Thr Gly Leu Ser Phe Pro Ser His Pro Ser Val Phe Glu Gln Thr
                85                  90                  95
Thr Met Ala Arg Thr Ile Gln Ser Glu Leu Thr Pro Ser Ala His Glu
            100                 105                 110
Ile Gly Lys Gly Leu Pro Leu Thr Thr Arg Tyr Thr Leu Ala Asp Arg
        115                 120                 125
Lys Gln Ser Lys Ala Pro Thr Arg Pro Glu Arg Thr Pro Asp Glu Leu
    130                 135                 140
Glu Ala Gly Glu Ala Leu Ile Leu Leu Ser Arg Gly Tyr Gly Asp Pro
145                 150                 155                 160
Pro Ala Gly Pro Arg Gln Asn Met Gln Thr Gln Asn Asp Leu Gly Ser
                165                 170                 175
Tyr Gln Met Arg Asn Asn Arg Gly Val Pro Ser Asn Ala Tyr Pro Arg
            180                 185                 190
Ala Arg Gln Asn Thr Val Leu Ala Gln Ala Asp Gly Arg Met Gln Ile
        195                 200                 205
Pro Gln Asn Val Pro Gln Gln Pro Ala Ser Ala Ala Met Pro Ala Met
    210                 215                 220
Gln Thr Gly Pro Tyr Trp Asn Gly Asn Pro Ala Ala Ala Gln Arg Val
225                 230                 235                 240
Ala Leu Thr Gly Gln Glu Ala Leu Gln Ala Tyr Leu Ile Arg Gln Gln
                245                 250                 255
Ile Leu Ala Gly Val Ala Pro Gln Asp Ile Ile Met Met Arg Gly Pro
            260                 265                 270
Pro Gln His Gly Arg Pro Ala Val Pro Pro Leu Val Arg Ile Thr Asn
        275                 280                 285
Gln Gly Val Tyr Ala Pro Val Ile Pro Pro Ala Thr Phe Asn Gly Val
    290                 295                 300
Phe His Pro Phe Pro Met Leu Pro Val Gln Gln Asn Lys Pro Asn Val
305                 310                 315                 320
Pro Ala Pro Thr Ala Ala Pro Gly Val Pro Tyr Pro Ala Val Ala Pro
                325                 330                 335
Gly Ile Ser Pro Gln Thr Ala Arg Glu Pro Gln Cys His Cys Pro Pro
            340                 345                 350
```

```
Asn Gly Arg Met Met Pro Gln Glu Ala Gly Lys Phe Gln Ala Gln Arg
        355                 360                 365
Pro Leu Asn Arg Asp His Ser Asn Ala Ala Ala Met Ala Gly Leu Asp
    370                 375                 380
Thr Asn Leu Gly Ala Gln Asn Arg Val Val Leu Pro Ala Val Met Gln
385                 390                 395                 400
Pro Asn Gly Gln Gln Pro Gln Gly Pro Tyr Phe Leu Pro Ala Arg Thr
                405                 410                 415
Ile Ala Glu Arg Asn Val Asn Met Pro Ala Asn Asn Met Ile Ala Arg
            420                 425                 430
His Asn Gly Ile Phe Glu Lys Asn Ala Gly Ser Gln Arg Pro Ser Tyr
        435                 440                 445
Lys Thr Pro Arg Ile Lys Thr Glu Ser Pro Glu Pro Glu Glu Val Leu
    450                 455                 460
Ala Asn Gln Val Asp His Thr Ser Ile Arg Lys Thr
465                 470                 475

<210> 28305
<211> 61
<212> PRT
<213> A.fumigatus

<400> 28305
Phe Ala Met Gly Pro Gln Arg Phe Lys Arg Gln Phe Ile Val Ala Ile
1               5                   10                  15
Leu Leu Ala Ala Ser Ile Ile Trp Leu Met Arg Ser Phe Glu His Glu
            20                  25                  30
Asp Ala Asp Val Ala Arg Thr Met Pro Leu Leu Gln Lys Tyr Ile His
        35                  40                  45
Pro Pro Ser Gly Lys Gly Gly Gly Lys Thr Gln Thr His
    50                  55                  60

<210> 28306
<211> 105
<212> PRT
<213> A.fumigatus

<400> 28306
Phe Thr Glu Lys Asp Met Arg Ala Asp Cys Ser Val Asp Trp His Thr
1               5                   10                  15
Ser Gly Gly Glu Ser Leu Gly Met Ser Leu Met Gly Tyr Gln Ser Leu
            20                  25                  30
Leu Asp Arg Ala Trp Pro Ser Cys His Val Pro Asp Ser Ala Gln Ala
        35                  40                  45
Asn Glu Lys Asp Ile Gly Ile Pro Glu Pro Ser Arg Gln Leu Val Phe
    50                  55                  60
Glu Glu Phe Ile Asn Ser Pro Arg Glu Tyr Lys His Asp Gly Leu Pro
65                  70                  75                  80
Pro Ala Pro His Ile Tyr Pro Val Pro Tyr Val Gly Thr Glu Glu Ala
                85                  90                  95
Ser Ile Leu Lys Ala Ala Lys Arg Ser
            100                 105

<210> 28307
<211> 67
<212> PRT
```

<213> A.fumigatus

<400> 28307
Ser Phe Ala Ser His Cys Arg Gln Tyr Glu Thr Gln Ala Ala Cys Arg
1 5 10 15
His Phe Asn Cys Ala Glu Pro Tyr Ser Ser Phe Ile Ile Ala Gln Val
20 25 30
Ser Trp Ser Phe Pro Pro His Thr Lys Leu Ala Gly Ser Ser Lys Pro
35 40 45
Arg Arg Glu Ala Phe Leu Glu Tyr Ser Ser Ala Ile Ile Gln Leu His
50 55 60
Gln Phe Val
65

<210> 28308
<211> 603
<212> PRT
<213> A.fumigatus

<400> 28308
Ala Gly Ser Gln Glu Gly Leu Tyr Cys Gly Phe Leu Leu Ala Glu Arg
1 5 10 15
Cys Gly Asp Leu Val Glu Ile Val Lys Ser Lys Ser Ser Pro Asp Pro
20 25 30
Leu Ser Leu Gly Val Gly Ser Lys Thr Asp Thr Gln Thr His Trp Phe
35 40 45
Ser Glu Ser Gly Arg Ile Asp Leu Phe Val Phe Leu Gly Pro Thr Pro
50 55 60
Gln Glu Ile Ser Lys Thr Tyr Gly Glu Leu Thr Gly Tyr Thr Gln Leu
65 70 75 80
Pro Gln Gln Phe Ala Ile Ala Tyr His Gln Cys Arg Trp Asn Tyr Val
85 90 95
Thr Asp Glu Asp Val Lys Glu Val Asp Arg Lys Phe Asp Lys Tyr Gln
100 105 110
Ile Pro Tyr Asp Val Ile Trp Leu Asp Ile Glu Tyr Thr Asp Asp Arg
115 120 125
Lys Tyr Phe Thr Trp Asp Pro Leu Ser Phe Pro Asp Pro Lys Gly Met
130 135 140
Glu Glu Gln Leu Asp Asp Ser Glu Arg Lys Leu Val Val Ile Ile Asp
145 150 155 160
Pro His Ile Lys Asn Lys Glu Gly Tyr Ser Ile Ser Glu Glu Leu Lys
165 170 175
Gly Lys Asp Leu Ala Ile Lys Asn Lys Gly Gly Glu Thr Tyr Asp Gly
180 185 190
Trp Cys Trp Pro Gly Ser Ser His Trp Val Asp Cys Phe Asn Pro Glu
195 200 205
Ala Ile Lys Trp Trp Thr Ser Leu Phe Lys Tyr Asp Lys Phe Lys Gly
210 215 220
Thr Gln Pro Asn Val Phe Ile Trp Asn Asp Met Asn Glu Pro Ser Val
225 230 235 240
Phe Asn Gly Pro Glu Thr Thr Met Pro Lys Asp Asn Ile His Tyr Gly
245 250 255
Asn Trp Glu His Arg Asp Val His Asn Val Asn Gly Leu Thr Phe Ile
260 265 270
Asn Ala Thr Tyr Asn Ala Leu Leu Glu Arg Lys Lys Gly Val Val Arg
275 280 285

```
Arg Pro Phe Val Leu Thr Arg Ser Phe Tyr Ala Gly Ala Gln Arg Val
    290                 295                 300
Ser Ala Met Trp Thr Gly Asp Asn Gln Ala Thr Trp Glu His Leu Ala
305                 310                 315                 320
Ala Ser Leu Pro Met Val Leu Asn Asn Gly Ile Ala Gly Phe Pro Phe
                325                 330                 335
Ala Gly Ala Asp Val Gly Gly Phe Phe Gln Asn Pro Ser Lys Glu Leu
            340                 345                 350
Leu Thr Arg Trp Tyr Gln Ala Gly Ile Trp Tyr Pro Phe Phe Arg Ala
        355                 360                 365
His Ala His Ile Asp Thr Arg Arg Arg Glu Pro Tyr Leu Ile Ala Glu
    370                 375                 380
Pro Phe Arg Ser Ile Ile Ser Gln Ala Ile Arg Leu Arg Tyr Gln Leu
385                 390                 395                 400
Leu Pro Ala Trp Tyr Thr Ala Phe His Glu Ala Ser Val Asn Gly Met
                405                 410                 415
Pro Ile Val Arg Pro Gln Tyr Tyr Val His Pro Ala Asp Glu Gln Gly
            420                 425                 430
Phe Ala Ile Asp Asp Gln Leu Tyr Leu Gly Ser Thr Gly Leu Leu Thr
        435                 440                 445
Lys Pro Val Val Val Glu Gly Ala Thr Thr Thr Asp Ile Tyr Ile Ala
    450                 455                 460
Asp Asp Glu Lys Tyr Tyr Asp Tyr Tyr Asp Phe Thr Val Tyr Gln Gly
465                 470                 475                 480
Ala Gly Arg Arg His Thr Val Pro Ser Pro Ile Glu Lys Val Pro Leu
                485                 490                 495
Leu Met Gln Gly Gly His Ile Ile Pro Arg Lys Asp Arg Ala Arg Arg
            500                 505                 510
Ser Ser Gly Leu Met Arg Trp Asp Pro Tyr Thr Leu Val Ile Val Leu
        515                 520                 525
Asp Lys Asn Gly Lys Ala Glu Gly Thr Leu Tyr Val Asp Asp Gly Glu
    530                 535                 540
Ser Phe Asn Tyr Gln Gln Gly Ala Tyr Ile His Arg Arg Phe Lys Phe
545                 550                 555                 560
Glu Lys Ser Thr Leu Leu Ser Glu Asp Ile Gly Thr Lys Gly Ser Lys
                565                 570                 575
Thr Ala Glu Tyr Leu Lys Ser Met Thr Asn Val Arg Ala Gln Lys Val
            580                 585                 590
Phe Phe Thr Arg Ser Lys Asp Arg Val Lys Leu
        595                 600
```

<210> 28309
<211> 221
<212> PRT
<213> A.fumigatus

<400> 28309

```
Leu Asn Ala Ser Arg Ile Phe Ala Pro Arg Gly Glu Asp Gln Asp Phe
1               5                   10                  15
Asp Leu Cys Asp Asp Cys Arg Leu Leu Ile Phe Leu Phe Arg Asn Pro
            20                  25                  30
Cys Ile Gln Arg Gly Ser Ser Ala Leu Ala Ile Gly Cys Pro Arg Ser
        35                  40                  45
Ser Glu Glu Glu Ala Ile Tyr Arg Leu Phe Ala Leu Pro Gln Val Ser
    50                  55                  60
Cys Arg Leu Arg Val Ala Ala Ala Tyr Leu Leu Ser Ser Gly Asn Trp
```

```
65                  70                  75                  80
Leu Ala Asp Arg Arg Gly Arg Arg Leu Ser Gln His Ser Val Thr Arg
                85                  90                  95
Pro Phe Ser Thr Thr Cys Arg Tyr Ser His Tyr His Ala Asn Phe Val
            100                 105                 110
Pro Ser Gln Leu Thr Ile Ser Gly Ala Met Trp Ile Arg Arg Ser Phe
        115                 120                 125
Gly Asn Asp Pro Leu Tyr His Thr Val Val Gln Ala Tyr Ile Asp Thr
    130                 135                 140
Leu Leu Gln Lys Gly Phe Asn Phe Glu Cys Phe Ile Glu Gly Gly Arg
145                 150                 155                 160
Ser Arg Thr Gly Lys Leu Leu Ser Pro Lys Phe Gly Ile Leu Asn Phe
                165                 170                 175
Ile Val Asp Ser Leu Leu Ser Gly Arg Val Glu Asp Thr Ile Ile Cys
            180                 185                 190
Pro Val Ser Thr Gln Tyr Asp Lys Val Ile Glu Thr Glu Tyr Gly Thr
        195                 200                 205
Pro Glu Arg Met Val Pro Cys His Ile Leu Leu Thr His
    210                 215                 220
```

<210> 28310
<211> 132
<212> PRT
<213> A.fumigatus

<400> 28310

```
Asp Arg Ser His Ser Tyr His Arg Tyr Val Tyr Arg Asp Tyr Lys Gly
1               5                   10                  15
His Ile Gly Thr Asp Ser Leu Gln Leu Phe Arg Gly Glu Phe Ile Phe
            20                  25                  30
Pro Pro Glu Gly Leu Thr Thr Asn Leu Glu Lys Thr Leu Arg Gly Leu
        35                  40                  45
Glu Lys Asp Glu Val Ile Thr Val Ser Arg Asp Ser Ser Gly Lys Pro
    50                  55                  60
Leu Phe Val Glu Leu Ser Asp Ala Glu Arg Gln Arg Gly Arg Glu Asn
65                  70                  75                  80
Tyr Asp Phe Tyr Cys Phe Leu Ile Trp Pro Phe Ile Glu Ala Ala Trp
                85                  90                  95
Leu Gly Ala Val Ser Leu Met Gly Leu Thr Pro Pro Leu Asp Gly Pro
            100                 105                 110
Lys Asp Val Trp Ile Asp Gln Lys Lys Ala Gln Asp Ser Ala Gln Ile
        115                 120                 125
Val Ser Val Phe
    130
```

<210> 28311
<211> 90
<212> PRT
<213> A.fumigatus

<400> 28311

```
Ser Phe Cys Ser Gly Ile His Val Ser Ser Glu Glu Val Leu Arg Leu
1               5                   10                  15
Arg Ser Val Ala Gln Glu Ala Ala Lys Lys Lys Gln Ser Ile Val Phe
            20                  25                  30
Leu Pro Cys His Lys Ser His Val Asp Tyr Val Ser Leu Gln Leu Ile
```

```
        35                  40                  45
Cys Tyr Arg Leu Gly Ile Gly Leu Pro Ile Val Val Ala Gly Asp Tyr
    50                  55                  60
Leu Asn Ile Pro Leu Leu Gly Pro Phe Leu Gln His Ala Gly Thr Val
65                  70                  75                  80
Ile Ile Thr Pro Ile Leu Tyr His His Ser
                85                  90
```

<210> 28312
<211> 255
<212> PRT
<213> A.fumigatus

<400> 28312

```
Gln Gly His Arg Asp Arg Val Trp His Pro Arg Thr Tyr Gly Ser Leu
1               5                   10                  15
Ser His Ser Ser Asp Thr Leu Ile Arg Ser Tyr Ile Ser Glu Leu Leu
            20                  25                  30
Gly Gln Pro Lys Arg Lys Glu Asn Leu Ala Asp Leu Leu Ser Ser Ser
        35                  40                  45
Ser Val Leu Ser Leu Lys Leu Gly Arg Val Asp Val Arg Phe His Glu
    50                  55                  60
Pro Trp Ser Leu Arg Glu Phe Ile Thr Gln Gln Leu Ser Arg Leu Pro
65                  70                  75                  80
Asn Gln Ile Asp Ala Lys Ser Gly Gln Lys Leu Ser Tyr Ala Glu Arg
                85                  90                  95
Gly Arg Ile Leu Arg Thr Leu Gly Tyr Arg Val Leu Ser Asp Ile Asn
            100                 105                 110
Asn Val Ser Val Met Met Pro Thr Ala Leu Val Gly Thr Val Leu Leu
        115                 120                 125
Thr Leu Arg Gly Arg Gly Val Gly Lys Gly Glu Leu Val Arg Arg Val
    130                 135                 140
Glu Trp Leu Cys Gln Arg Val Arg Ala Lys Gly Gly Arg Val Ala His
145                 150                 155                 160
Phe Tyr Arg Ser Pro Thr Glu Leu Val Val Asp Arg Ala Leu Glu Val
                165                 170                 175
Leu Gly Pro Lys Leu Val Gly Glu Val Thr Gly Leu Ala Glu Pro Thr
            180                 185                 190
Phe Tyr Ala Ile Asp Arg Phe Gln Leu Ser Phe Tyr Arg Asn Met Thr
        195                 200                 205
Ile His Leu Phe Ile Thr Glu Ala Leu Val Ser Ala Ala Met Tyr Thr
    210                 215                 220
Arg Val Lys Gln Gly Gly Gly Pro Ala His Gln Arg Ile Ser Phe Glu
225                 230                 235                 240
Asp Leu Leu Arg Gln Val Ser Phe Leu Ser Gln Val Cys Leu Ser
                245                 250                 255
```

<210> 28313
<211> 615
<212> PRT
<213> A.fumigatus

<400> 28313

```
Arg Gln Asp Tyr Thr Ser Ser His Gly Ala Asp Ala Ala Gln Ser Leu
1               5                   10                  15
Gly Ser Glu Glu Leu Trp Glu Ala Ala Glu Ser Ala Trp Gln Lys Leu
```

```
            20                  25                  30
Pro Arg Ala Gly Lys Ser Asn Val Ala Ala Ser Arg Ser Ala Ser Glu
        35                  40                  45
Leu His Arg Gln Tyr Gln Arg His Val Leu His Ile Cys Arg Gly Leu
    50                  55                  60
Trp Ala Lys Phe Asp Val Pro Ser Met Leu Gln Gly Val Gly Ile Leu
65                  70                  75                  80
Phe Ala Ala Ile Val Leu Leu Val Phe Tyr Ala Arg Gly Ile Thr Ala
                85                  90                  95
Ala Arg Thr Glu Leu Thr Gly Ser Leu Leu Ser Ser Val Gly Val Gly
            100                 105                 110
Ser Val Leu Gly Ala Val Thr Gly Ala Cys Leu Ser Tyr Ser Arg Met
        115                 120                 125
Leu Ser Ala Arg Ala Val Glu Ser Ser Ala Leu Leu Ala Ala Val Gly
    130                 135                 140
Ser Ile Val Gly Ala Ser Trp Ala Ile Phe Gly Lys Ser Gly Arg Ile
145                 150                 155                 160
Val Leu Pro Leu Pro Asn Ser Leu Trp Gly Trp Leu Ala Ile Leu Phe
                165                 170                 175
Thr Val Ser Gln Ser Met Gly Phe Ala Ser Asn Ser Tyr Thr Ile Trp
            180                 185                 190
Glu Asp Glu Ile Leu Leu Phe Phe Leu Ser Thr Phe Gly Val Val Ala
        195                 200                 205
Gly Ala Ser Ser Met Arg Gln Lys Ser Thr Ala Asp Arg Val Leu Gly
    210                 215                 220
Val Tyr His Ser Ile Leu Phe Val Ile Leu Gly Arg Ile Ala Ser Phe
225                 230                 235                 240
Ser Arg Leu Cys Arg Glu Glu His Met Pro Phe Cys Arg Ser Thr Tyr
                245                 250                 255
Tyr Ala Ser Thr Thr Ser Ser Thr Ser Ala Pro Trp Gln Leu Val Ile
            260                 265                 270
Pro Phe Leu Val Thr Leu Thr Leu Pro Ala Val Val Arg Ser Phe Tyr
        275                 280                 285
Ala Gly Ser Lys Ser Tyr Glu Gly Ala Ala Thr Leu Trp Ile Gly Phe
    290                 295                 300
Ala Phe Arg Phe Gly Leu Phe Val Thr Ser Ile Phe Trp Thr Leu Glu
305                 310                 315                 320
Ala Ala Asp Asp Ser Glu Trp Gly Leu Leu Ser Lys Glu Thr Leu Lys
                325                 330                 335
Thr Ile Arg Val Phe Phe Ala Gln Val Val Leu Ala Leu Ala Phe Ala
            340                 345                 350
Ala Gly Thr Thr Ala Phe Val Tyr Thr Lys Pro Cys Val Ser Ile Ser
        355                 360                 365
Val Ser Gln Gly Gly Ala Glu Ser Glu Gly Arg Glu Pro Ala Arg Lys
    370                 375                 380
Thr Val Thr Ile Leu Gly Phe Gly Asn Val Tyr Gly Thr Arg Ala Phe
385                 390                 395                 400
Leu Leu Val Val Asn Phe Cys Leu Ala Ile Ile Leu Met Gln Lys Pro
                405                 410                 415
Met Gly Gln Gly Ala Ile Gly Leu Leu Leu Trp Gln Ile Phe Ser Leu
            420                 425                 430
Leu Glu Ile Leu Asp Thr Asn Gly Leu Val Met Gly Asn Ser Ala Ile
        435                 440                 445
Gly Pro Val Val Leu Gly Leu Leu Gly Ser Phe His Phe Phe Lys Thr
    450                 455                 460
Gly His Gln Ala Thr Leu Thr Ser Ile Gln Trp Glu Thr Ala Phe Ile
```

```
465                 470                 475                 480
Pro Leu Ser Ser Val Gln Tyr Pro Trp Ser Pro Ile Leu Val Ile Leu
                485                 490                 495
Asn Thr Phe Gly Ala Gln Ile Leu Thr Ala Ile Ala Val Pro Leu Thr
            500                 505                 510
Val Leu Trp Lys Arg Pro Leu Gln Leu His Asp Ser Ser Ser Ser Thr
        515                 520                 525
Thr Ser Ser Thr Pro Ala Thr Arg Ile Leu Ser Asp Val Ala Gln Ala
    530                 535                 540
Ala Ala Thr Tyr Ile Leu Tyr Phe Ala Thr Ile Asn Leu Ala Thr Thr
545                 550                 555                 560
Met Trp Ala Gly His Leu Arg Arg His Leu Met Leu Tyr Arg Ile Phe
                565                 570                 575
Cys Pro Arg Phe Met Met Gly Ala Ala Val Leu Gly Val Val Asp Ile
            580                 585                 590
Val Leu Ile Leu Phe Ser Val Thr Ser Val Arg Phe Ser Ile Leu Ser
        595                 600                 605
Val Ala Glu Ile Phe Gly Trp
    610                 615
```

<210> 28314
<211> 248
<212> PRT
<213> A.fumigatus

<400> 28314

```
Tyr Gln His Asn Ile His Asn Thr Lys Asn Ser Arg Pro His His Glu
1               5                   10                  15
Ser Arg Ala Glu Asp Pro Val Glu His Glu Val Ala Ala Gln Val Ala
            20                  25                  30
Ser Pro His Arg Gly Cys Glu Val Asp Arg Cys Lys Val Lys Asn Ile
        35                  40                  45
Cys Arg Gly Arg Leu Arg His Ile Gly Gln Asn Pro Gly Gly Arg Arg
    50                  55                  60
Ala Arg Cys Ser Gly Arg Ala Ala Ile Val Gln Leu Glu Gly Ser Phe
65                  70                  75                  80
Pro Gln His Arg Glu Arg Asn Ser Asn Cys Ser Glu Asp Leu Arg Ala
                85                  90                  95
Glu Arg Val Glu Asp Asp Gln Asn Arg Arg Pro Arg Ile Leu Asn Arg
            100                 105                 110
Arg Gln Arg Asp Glu Arg Ser Phe Pro Leu Asp Thr Gly Glu Gly Gly
        115                 120                 125
Leu Val Ser Gly Leu Glu Glu Val Glu Arg Pro Lys Lys Thr Gln Asp
    130                 135                 140
His Arg Pro Asp Gly Arg Val Ala His Asp Lys Pro Ile Arg Val Lys
145                 150                 155                 160
Asp Leu Gln Glu Arg Glu Asp Leu Pro Gln Gln Gln Ala Asp Arg Pro
                165                 170                 175
Leu Thr His Arg Phe Leu His Glu Asn Asp Gly Gln Ala Glu Ile Asn
            180                 185                 190
Asp Glu Lys Glu Ser Pro Cys Ala Ile Asn Ile Pro Glu Ser Gln Asp
        195                 200                 205
Ser His Arg Leu Ser Gly Arg Phe Ser Thr Leu Gly Phe Ser Ala Ala
    210                 215                 220
Leu Ala Asp Ala Tyr Ala Asp Ala Arg Phe Gly Val Asn Glu Cys Gly
225                 230                 235                 240
```

Gly Ser Ser Gly Glu Cys Lys Gly
245

<210> 28315
<211> 548
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (179),(229)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28315
Pro Met Ala Gly Thr Tyr Thr Phe Leu Pro Gly Asp Leu Asn Ala Ser
1 5 10 15
Leu Lys Ser Arg Asn Arg Pro Tyr Thr Gly Leu Arg Leu Pro Ser Ser
20 25 30
Ser Pro Ala Lys Lys Arg Ala Ser Ser Phe Tyr Pro Glu His Gly Pro
35 40 45
Glu Ile Val Asp Glu Thr Asn Pro Asp Pro Phe Tyr Leu Glu His Ser
50 55 60
Leu Gly Arg Ser Gly Ala Trp Gly Arg Ser Arg Gly Asp Ile Arg Asp
65 70 75 80
Val Arg Phe Cys Glu Glu Thr Asn Gln Tyr Phe Arg Leu Ser Pro Val
85 90 95
Asn His Ser Gln Lys Glu Pro Thr Phe Pro Lys Ser Val Arg Gly Glu
100 105 110
Ser Lys Arg Thr Pro Arg Pro Ser Gln Pro Asp Arg Ser Thr Leu Thr
115 120 125
Val Val Gly Phe Glu His Gln Tyr Ser Ile Pro Pro Gln Val Ala Val
130 135 140
Pro Arg Trp Glu Lys His Pro Pro His Glu Ser Gln Gly Ser Phe Ser
145 150 155 160
Ser Glu Gln Ile Asp Ala Thr Pro Asp Leu Thr Pro Ser Ser Ser Phe
165 170 175
Ser Ser Xaa Tyr Ser Ser Pro Ile Tyr Pro Asp Ser Gly Leu Gln Gly
180 185 190
Ser Glu Tyr Pro Val Leu Pro Val Gln Leu Pro Ala Gln Arg Thr Gln
195 200 205
Ser Arg Ser Ser Glu Arg Phe His Gln Ala Ser Ala Lys Gln Pro Val
210 215 220
Ser Leu Arg Pro Xaa Ser Ser Asn Arg Pro Ser Thr Pro Ala Arg Asn
225 230 235 240
Thr Glu Ile Thr Ser Ser Ala Glu Thr Leu Arg Met Pro Arg Thr Glu
245 250 255
Asp Gln Asp Leu Ser Val Arg Arg Gly Lys Pro Leu Pro Ser Leu Pro
260 265 270
Ile Asn Pro Arg His Gly Ser Gly Val Pro Ser Lys Arg Ser Thr Asn
275 280 285
Ser Gly Arg Arg Pro Ser Ile Glu Pro Ser Met Ile Ser Pro Pro Ser
290 295 300
Leu Ile Asn Pro Val Thr Leu Glu Pro His Thr Thr His Phe Asp Gln
305 310 315 320
Ala Met Phe Ile Pro Ala Asn Asp Cys Pro Ser Pro Val Pro Ser Arg
325 330 335

```
Gly Pro Pro Ser Pro Thr Thr Thr Ser Glu Ala Pro Val Ser Ser Arg
            340                 345                 350
Ser Gln Arg Pro Ser Thr Ser Ala Ser Glu Ala Pro Phe Glu His Ser
        355                 360                 365
Val Trp Glu Pro Asp Ser Asp Ser Glu Ser Leu Gly Pro Lys Ser Leu
    370                 375                 380
Ser Lys Lys Pro Met Asp Thr Leu Lys Lys Val Arg Ser Arg Val His
385                 390                 395                 400
Leu Arg Val Ala Lys Ser Ala Pro Lys Leu Gln Asn Ser Thr Ala Ser
                405                 410                 415
Ala Pro Thr Asp Pro Pro Leu Glu Lys Phe Pro Thr Met Pro Asp His
            420                 425                 430
Pro Pro Arg Asp Pro Phe Pro Glu Pro Val Lys Ser Met Ala Pro Leu
        435                 440                 445
Thr Leu Ser Ser Arg Glu Val Phe Arg Pro Ser Pro Leu Gln Thr Leu
    450                 455                 460
Arg Leu Val Asn Pro Ser Thr Thr Ser Leu Ala Arg Pro Arg Thr Pro
465                 470                 475                 480
Arg Ser Arg Arg Asn Ser Ser Gln Ala Arg Gly Gln Asp Arg Asp Gln
                485                 490                 495
Pro Arg Asn Tyr Asp Phe Asp Arg Ser Ala Ala Pro Ala Ile Lys Ala
            500                 505                 510
Lys Ser Gln Arg Lys Gln Arg Ser Asn Pro Leu Ala Thr Pro Ala Val
        515                 520                 525
Met Glu Gly Lys Ser Val Ala Leu Pro Pro Ala Arg Ile Pro Ser Asn
    530                 535                 540
Trp Pro Ser Ser
545
```

<210> 28316
<211> 465
<212> PRT
<213> A.fumigatus

<400> 28316

```
Leu Pro Lys Ser Val Thr Ala Glu Val Val Ala Glu Asn Ala Gln Val
1               5                   10                  15
Gln Ala Ile Ile Glu Pro Arg Leu Lys Met Leu Thr Asp Ile Ala Asn
            20                  25                  30
Gly Phe Leu Thr Thr Ile Ile Ser Ser Val Asp Glu Ala Pro Tyr Gly
        35                  40                  45
Ile Arg Trp Ile Cys Lys Gln Ile Arg Ser Leu Ser Arg Arg Lys Tyr
    50                  55                  60
Pro Asp Ala Gln Asp Gln Thr Ile Cys Thr Leu Ile Gly Gly Phe Phe
65                  70                  75                  80
Phe Leu Arg Phe Ile Asn Pro Ala Ile Val Thr Pro Arg Ser Tyr Met
                85                  90                  95
Leu Ile Glu Ser Val Pro Thr Glu Lys Pro Arg Arg Thr Leu Thr Leu
            100                 105                 110
Ile Ala Lys Met Leu Gln Asn Leu Ala Asn Lys Pro Ser Tyr Ala Lys
        115                 120                 125
Glu Pro Tyr Met Ala Lys Leu Gln Pro Phe Ile Gln Gln Asn Lys Glu
    130                 135                 140
Arg Val Asn Lys Phe Leu Leu Asp Leu Cys Glu Val Gln Asp Phe Tyr
145                 150                 155                 160
Glu Ser Leu Glu Met Asp Asn Tyr Val Ala Leu Ser Lys Arg Asp Leu
```

```
                165                 170                 175
Glu Leu Gln Ile Thr Leu Asn Glu Met Tyr Ala Thr His Ala Leu Leu
            180                 185                 190
Glu Lys His Ser Leu Ala Leu Ala Gln Asp Gln His Ser His Leu Asn
        195                 200                 205
Glu Leu Leu Gln Glu Leu Gly Ser Ala Pro Pro Leu Val Pro Arg Lys
    210                 215                 220
Glu Asn Arg Thr Ile Thr Val Pro Leu Phe Ser Arg Trp Glu Thr Ala
225                 230                 235                 240
Leu Asp Asp Leu Thr Ala Ala Leu Asp Ile Thr Gln Glu Glu Val Phe
                245                 250                 255
Phe Met Glu Ala Lys Ser Thr Phe Val Gln Ile Leu Arg Ser Leu Pro
            260                 265                 270
Pro Asn Ser Ala Ile Ala Arg Arg Pro Leu Arg Leu Asp Arg Ile Ala
        275                 280                 285
Glu Ala Val Ala Thr Leu Lys Asn Asp Ala Val Met Val Arg Lys Gly
    290                 295                 300
Ile Arg Thr Met Glu Leu Leu Ser Gln Leu Gln Glu Met Gly Val Ile
305                 310                 315                 320
Asp Arg Ser Asp Asp Phe Ser Leu Leu Arg Asp Glu Val Glu Gln Glu
                325                 330                 335
Leu Val His Leu Gly Ser Leu Lys Glu Lys Val Leu Glu Glu Thr Lys
            340                 345                 350
Lys Leu Glu Glu Val Phe Ala Thr Ile Arg Asp His Asn Ala Tyr Leu
        355                 360                 365
Val Gly Gln Leu Glu Thr Tyr Lys Ser Tyr Leu His Asn Val Arg Ser
    370                 375                 380
Gln Ser Glu Gly Lys Gln Arg Lys Gln Gln Lys His Gln Glu Leu Gly
385                 390                 395                 400
Pro Tyr Lys Phe Thr His Gln Gln Leu Glu Lys Glu Gly Val Ile Arg
                405                 410                 415
Lys Ser Asn Val Pro Glu Asn Arg Arg Ala Asn Ile Tyr Phe Met Phe
            420                 425                 430
Lys Ser Pro Leu Pro Gly Thr Phe Val Ile Ser Leu His Tyr Lys Gly
        435                 440                 445
Lys Cys Gly Leu Gln Pro Ser Ile Cys Cys Asp Leu Leu Ser Cys Gly
    450                 455                 460
Gly
465
```

<210> 28317
<211> 248
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (96),(185)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28317

```
Asn Ser Cys Val Phe Lys Ser Pro Gln Lys Arg Arg Ile Gly Ser Leu
1               5                   10                  15
His Met Thr Pro Val Asp Lys Gly Val Leu Pro Gln Tyr Asn Pro Gly
            20                  25                  30
Gln Phe Val Ser Val Arg Cys Tyr Val Pro Ser Ile Gly Ser Tyr His
```

```
        35                  40                  45
Leu Gly His Asn Ser Leu Ser Asp Ile Pro Asn Gly Gly His Phe Gly
    50                  55                  60
Ile Ser Val Lys Arg Glu Ser Ala Arg Asp Ser Arg Pro Ala Gly Arg
65                  70                  75                  80
Ile Ser Asn Val Leu His Glu Ser Leu Pro Val Gly Ala Glu Leu Xaa
                85                  90                  95
Val Ser Met Pro Phe Gly Asp Phe Val Leu Asp Leu Asn Ala Thr Thr
            100                 105                 110
Pro Ala Val Leu Ile Ser Gly Gly Val Gly Leu Thr Pro Met Met Ser
        115                 120                 125
Met Leu Lys Ser Ile Val Ser Gln Gln Gly Gln Ser Arg Arg Val Val
    130                 135                 140
Phe Ile His Ala Ala Arg Asn Gly Arg Val His Ala Met Lys Thr Asp
145                 150                 155                 160
Leu Asn Arg Ile Val Ala Glu Asn Pro Thr Val Ser Arg Ile Val Phe
                165                 170                 175
Tyr Glu Asn Ala Thr Glu Asp Asp Xaa Gln Gly Val Asp Tyr Asp Tyr
            180                 185                 190
Thr Gly Arg Val Asp Leu Thr Gln Ile Lys Asp Lys Ala Val Leu Pro
        195                 200                 205
Asp Ala Asp Tyr Tyr Ile Cys Gly Pro Gln Pro Phe Met Lys Ala Gln
    210                 215                 220
Ser Gln Ser Leu Glu Ala Leu Gly Val Ala Pro Asp Arg Ile His Met
225                 230                 235                 240
Glu Val Phe Gly Ala Pro Arg Asp
                245
```

<210> 28318
<211> 65
<212> PRT
<213> A.fumigatus

<400> 28318

```
Gln Leu Ile Val Pro Asp Ile Val Pro Ala Asn Val Asp Ser Asp Asp
1               5                   10                  15
Val His Gly Cys Asn Ile Met Pro Thr Ser Asp Glu Glu Ile Val Asn
            20                  25                  30
Met Leu Leu Leu Thr Ser Leu Arg Lys Ser Pro Glu Asp Gly Tyr Gly
        35                  40                  45
Thr Pro Arg Met Thr Gly Lys His Ile Pro Asp Gln Gly Gly Val Ala
    50                  55                  60
Glu
65
```

<210> 28319
<211> 74
<212> PRT
<213> A.fumigatus

<400> 28319

```
Ser Asn Leu Glu Ala His Gln Lys Ile Pro Cys Thr Pro Tyr Leu Asp
1               5                   10                  15
Tyr Thr His Cys Ile Ser Thr Ser Ile Lys Leu Thr Val Ala Ser Gln
            20                  25                  30
Asn Gly His Pro Ser Thr Ser Ala Pro Cys Cys Ser Asn Thr Pro Lys
```

```
        35                  40                  45
Leu Val Ile Pro Asp Ile Lys Ile Phe Asn Ser Ala Leu Gly Arg Gln
    50                  55                  60
Leu Asn Pro Pro Pro Ile Ser Thr Ser Ser
65                  70
```

<210> 28320
<211> 196
<212> PRT
<213> A.fumigatus

<400> 28320

```
Leu Asn Pro Ile Gly Ser Ile Ser Lys Val Asp Leu Lys Lys Phe Ile
1               5                   10                  15
Ala Trp Ala Arg Asp Ser Phe Asp Leu Pro Ile Leu His Asp Phe Leu
            20                  25                  30
Thr Ala Thr Pro Thr Ala Glu Leu Glu Pro Ile Thr Ala Thr Tyr Val
        35                  40                  45
Gln Ser Asp Glu Ala Asp Met Gly Val Thr Tyr Ala Glu Leu Gly Thr
    50                  55                  60
Phe Gly Tyr Leu Arg Lys Val Ala Lys Leu Gly Pro Trp Ser Met Tyr
65                  70                  75                  80
Glu Lys Leu Leu His Val Trp Gly Asn Glu Tyr Ser Pro Arg Glu Ile
                85                  90                  95
Tyr Glu Lys Thr Arg His Phe Phe Tyr His Tyr Ala Ile Asn Arg His
            100                 105                 110
Lys Met Thr Val Leu Thr Pro Ser Tyr His Ala Glu Gln Tyr Ser Pro
        115                 120                 125
Glu Asp Asn Arg His Asp Leu Arg Gln Phe Leu Cys Gln Leu Leu Ser
    130                 135                 140
Ser Thr Asp Gly Leu Leu Ala Arg Val Asn Ala Asp Leu Cys Leu Leu
145                 150                 155                 160
Asp Pro Pro Phe Thr Trp Ala Tyr Lys Lys Met Glu Glu Ser Val Lys
                165                 170                 175
Tyr Trp Glu Ser Lys Gly Trp Thr Ala Gly Lys Ala Gln Lys Lys Ser
            180                 185                 190
Val Lys Ala Asp
        195
```

<210> 28321
<211> 128
<212> PRT
<213> A.fumigatus

<400> 28321

```
Ser Ser Arg Ile Phe His Thr Ser Phe Met Gly Thr Gln Asn Ser Ser
1               5                   10                  15
Lys Glu Thr Arg Glu Arg Ala Lys Ala Leu Ser Thr Glu Ile Gly Ser
            20                  25                  30
Tyr His Ile Asp Phe Asn Phe Asp Thr Val Val Thr Ala Ile Thr Asn
        35                  40                  45
Leu Phe Thr Val Ile Thr Asn Phe Gln Pro Arg Phe Lys Val His Gly
    50                  55                  60
Gly Thr Gly Ala Glu Asn Ala Ala Leu Gln Asn Val Gln Ala Arg Leu
65                  70                  75                  80
Arg Met Val Leu Ser Tyr Leu Phe Ala Ser Leu Leu Pro Thr Val Arg
```

```
                85                  90                  95
Gln Arg Pro Gly Gly Gly Gly Leu Leu Val Leu Ala Ser Ser Asn Val
            100                 105                 110
Asp Gly Lys Ile Phe Ser Arg Leu His Leu Leu Arg Val Gln Ala His
        115                 120                 125
```

<210> 28322
<211> 65
<212> PRT
<213> A.fumigatus

<400> 28322

```
Ala His Phe Asp Val Phe Asn Ala Leu Thr Leu His Asp Asn Pro Leu
1               5                   10                  15
Phe Leu Glu Gln Leu Lys Phe Gly Ala Gly Asp Gly Gln Leu His Phe
            20                  25                  30
Tyr Leu Tyr Asn Tyr Arg Thr Ala Pro Val Pro Gly Gly Val Asn Glu
        35                  40                  45
Lys Asn Leu Pro Asp Glu Lys Arg Met Gly Gly Val Gly Ile Val Met
    50                  55                  60
Leu
65
```

<210> 28323
<211> 337
<212> PRT
<213> A.fumigatus

<400> 28323

```
Ala Ala Gly Ala Val Gly Phe Val Asp Val Ser Leu Arg Arg Gly Arg
1               5                   10                  15
Gln Cys His Val Pro Val Gln Ile Phe Ala Val Val Pro Thr Leu Val
            20                  25                  30
Gly Ala Gln Arg Gly Arg Gly Ile Cys Phe Ser Pro Ala Trp Glu Gly
        35                  40                  45
Val Asp Tyr Leu Ser Ala Asp Asn Phe Asp Arg Arg Ala Leu Met Ser
    50                  55                  60
Pro Gly Trp Lys Lys Glu Trp His Val Gly Val Arg Ala Thr Lys Ser
65                  70                  75                  80
Arg Lys Leu Val Ala Ser Ile Cys Gly Val Pro Thr Glu Ile Asn Val
                85                  90                  95
Arg Asn Gln Lys Leu Lys Val Val Glu Ile Asn Phe Leu Cys Ile His
            100                 105                 110
Lys Lys Leu Arg Ser Lys Arg Leu Thr Pro Val Leu Ile Lys Glu Ile
        115                 120                 125
Thr Arg Arg Cys Tyr Leu Asn Gly Ile Tyr Gln Ala Ile Tyr Thr Ala
    130                 135                 140
Gly Val Val Leu Pro Thr Pro Val Ser Ser Cys Arg Tyr Tyr His Arg
145                 150                 155                 160
Pro Leu Asp Trp Leu Lys Leu Tyr Glu Val Gly Phe Ser Pro Leu Pro
                165                 170                 175
Ala Gly Ser Thr Lys Ala Arg Gln Ile Thr Lys Asn His Leu Pro Ser
            180                 185                 190
Thr Thr Ser Thr Pro Gly Leu Arg Pro Met Glu Pro Lys Asp Ile Asp
        195                 200                 205
Thr Val His Asp Leu Leu Gln Arg Tyr Leu Ser Arg Phe Ala Leu Asn
```

```
    210                 215                 220
Gln Ala Phe Thr Arg Glu Glu Val Asp His Trp Leu Val His Lys Pro
225                 230                 235                 240
Glu Thr Val Lys Glu Gln Val Ile Trp Ala Tyr Val Val Glu Asp Pro
                245                 250                 255
Glu Thr His Lys Ile Thr Asp Phe Phe Ser Phe Tyr Asn Leu Glu Ser
            260                 265                 270
Thr Val Ile Gln Asn Pro Lys His Asp Asn Val Arg Ala Ala Tyr Leu
        275                 280                 285
Tyr Tyr Tyr Ala Thr Glu Thr Ala Phe Thr Asn Asn Met Lys Ala Leu
    290                 295                 300
Lys Glu Arg Leu Leu Met Leu Met Asn Asp Ala Leu Ile Leu Ala Lys
305                 310                 315                 320
Lys Val Thr Thr Gly Ile His Cys His Phe Pro Gly Val Asp Leu Arg
                325                 330                 335
Ser
```

<210> 28324
<211> 235
<212> PRT
<213> A.fumigatus

<400> 28324

```
Trp Ser Pro Ala Lys Arg Leu Pro Pro Ser Val Tyr Ile Leu Arg Leu
1               5                   10                  15
Arg Arg Gly Ala Val Ala Glu Asn Leu Pro Glu Ile His Tyr Leu Ser
            20                  25                  30
Arg Leu Arg Phe Ser Thr Thr Ser Leu Leu Ala Leu His Thr Leu Glu
        35                  40                  45
Val Met Ser Asn Ser Lys Asp Arg Lys Gly Lys Ala Pro Glu Gly Gln
    50                  55                  60
Ser Ser Glu Lys Lys Asp Gly Ala Val Asn Ile Thr Pro Gln Met Ala
65                  70                  75                  80
Glu Ser Leu Leu Glu Asn Asn Pro Ala Leu Arg Asn Glu Thr Ala Gly
                85                  90                  95
Met Asp Lys Asp Lys Ala Ala Glu Ala Met Arg Lys Met Asn Ile Ala
            100                 105                 110
Glu Leu Leu Thr Gly Leu Ser Val Ser Gly Lys Asn Gln Lys Asp Met
        115                 120                 125
Ala Ser Tyr Lys Phe Trp Gln Thr Gln Pro Val Pro Arg Phe Asp Glu
    130                 135                 140
Thr Ser Thr Asp Thr Gly Gly Pro Ile Lys Ile Ile Asp Pro Glu Lys
145                 150                 155                 160
Val Ser Lys Glu Pro Asp Ala Leu Leu Glu Gly Phe Glu Trp Ala Thr
                165                 170                 175
Leu Asp Leu Thr Asn Glu Thr Glu Leu Gln Glu Leu Trp Asp Leu Leu
            180                 185                 190
Thr Tyr His Tyr Val Glu Asp Asp Asn Ala Met Phe Arg Phe Arg Tyr
        195                 200                 205
Ser Gln Ser Phe Leu His Trp Trp Val His Asn Ala Ala Glu Gly Ser
    210                 215                 220
Val Ser His Arg Leu Gly Arg Val Trp Ile Ile
225                 230                 235
```

<210> 28325

<211> 149
<212> PRT
<213> A.fumigatus

<400> 28325
Ser Phe Gln Pro Arg Gly Glu Asp Thr Ser Phe Leu Ser Leu Val Glu
1 5 10 15
Ala Asp Lys Thr Asp Arg Met Glu Glu Val Lys Ala Ala Leu Lys Asp
20 25 30
His Leu Lys Ile Glu Asn Pro Ser Asp Ala Glu Cys Gln Ala Val Lys
35 40 45
Val Leu Val His Ala Ile Gly Lys Arg Ala Ala Arg Leu Ser Ala Val
50 55 60
Pro Leu Ala Ala Ile Leu Ile Ser Thr Gly Lys Leu Glu Thr Asp Asp
65 70 75 80
Met Val Asp Ile Gly Val Asp Gly Ser Leu Val Glu Phe Tyr Pro Asn
85 90 95
Phe Glu Gly Tyr Ile Arg Glu Ala Leu Arg Glu Val Pro Glu Val Gly
100 105 110
Ala Ala Gly Glu Lys Lys Val Arg Ile Gly Ile Ser Lys Asp Gly Ser
115 120 125
Gly Val Gly Ala Ala Leu Ile Ala Leu Val Ala Ser Arg Asn Glu Thr
130 135 140
Gly Ser Gly Pro Lys
145

<210> 28326
<211> 61
<212> PRT
<213> A.fumigatus

<400> 28326
Ser Arg Lys Val Thr Cys Phe Ser Glu Ser Ser Pro Arg Asp Lys Ala
1 5 10 15
His His Met Met Val Leu Glu Val Lys Leu Asp Lys Asp Pro Thr Leu
20 25 30
Arg Pro Leu Tyr Cys Glu Ser Val Ser Val Ile Val Glu Tyr Leu Cys
35 40 45
Leu Val Asn Pro Gly Arg Ala Tyr Gly Tyr Cys Thr Trp
50 55 60

<210> 28327
<211> 448
<212> PRT
<213> A.fumigatus

<400> 28327
Arg Tyr Val Val Leu Ile Pro Val Lys Cys Val Lys Ala Asp Ile Ser
1 5 10 15
Gly Arg Ile Thr Thr Asn Gly Thr Ser Val Val Val Thr Gly Ala Ser
20 25 30
Thr Val Asp Ile Phe Phe Asp Thr Gln Thr Ser Tyr Arg Tyr Pro Asp
35 40 45
Glu Thr Glu Arg Asp Ser Ala Val Lys Lys Gln Leu Asp Ala Ala Val
50 55 60
Lys Leu Asn Tyr Pro Ala Val Lys Gln Ala Ala Thr Ser Asp Tyr Gln

```
65                  70                  75                  80
Ser Leu Ser Gly Arg Val Lys Leu Asp Leu Gly Ser Ser Gly Ser Ala
                85                  90                  95
Gly Asn Gln Pro Thr Asp Ile Arg Leu Thr Asn Tyr Lys Thr Asn Pro
            100                 105                 110
Asn Gly Asp Pro Glu Leu Val Thr Leu Met Phe Asn Phe Gly Arg His
        115                 120                 125
Ser Leu Ile Ala Ser Ser Arg Glu Gly Ser Ser Ser Gly Leu Pro Ala
    130                 135                 140
Asn Leu Gln Gly Ile Trp Asn Gln Asp Tyr Ser Pro Ala Trp Gly Gly
145                 150                 155                 160
Lys Tyr Thr Val Asp Val Asn Leu Glu Met Asn Tyr Trp His Ala Gln
                165                 170                 175
Val Thr Asn Leu Ala Asp Thr Phe Glu Pro Val Ile Asp Leu Met Asp
            180                 185                 190
Lys Val Leu Pro His Gly Gln Asp Val Ala Arg Lys Met Tyr His Cys
        195                 200                 205
Asp Thr Gly Tyr Ile Leu His His Asn Thr Asp Leu Trp Gly Asp Ala
    210                 215                 220
Ala Pro Val Asp Asn Gly Thr Lys Trp Thr Met Trp Pro Met Gly Ser
225                 230                 235                 240
Ala Trp Leu Ser Met Asn Leu Met Asp Gln Tyr Arg Phe Thr Gln Asp
                245                 250                 255
Lys Thr Leu Leu Arg Glu Arg Ile Trp Pro Leu Leu Lys Ser Ala Ala
            260                 265                 270
Asp Phe Tyr Tyr Cys Tyr Leu Phe Glu Phe Glu Gly Tyr Tyr Thr Ser
        275                 280                 285
Gly Pro Ser Ile Ser Pro Glu Asn Ala Phe Arg Ile Pro Glu Asp Met
    290                 295                 300
Thr Leu Ala Gly Lys Ser Thr Gly Ile Asp Leu Ala Pro Thr Met Asp
305                 310                 315                 320
Asn Leu Leu Leu His Glu Leu Phe Leu Ala Val Ile Glu Thr Cys Lys
                325                 330                 335
Ala Leu Asp Ile Thr Gly Glu Asp Leu Ala Asn Ala Gln Lys Tyr Ile
            340                 345                 350
Ser Arg Ile Arg Gln Pro Gln Ile Gly Ser Tyr Gly Gln Ile Leu Glu
        355                 360                 365
Trp Arg Arg Glu Tyr Gln Glu Thr Glu Leu Gly His Arg His Met Ser
    370                 375                 380
Pro Ile Leu Gly Leu Tyr Pro Gly Ser Gln Met Thr Pro Leu Val Asn
385                 390                 395                 400
Gln Thr Leu Ala Asn Ala Ala Lys Val Leu Leu Asp His Arg Ile Thr
                405                 410                 415
Ser Gly Ser Gly Ser Thr Gly Trp Ser Arg Ala Trp Thr Met Ser Leu
            420                 425                 430
Tyr Ala Arg Leu Phe Asp Gly Asn Ser Val Trp Ala Pro Arg Thr Val
        435                 440                 445
```

<210> 28328
<211> 211
<212> PRT
<213> A.fumigatus

<400> 28328

```
Ala Ala Gln Arg Gln Val Glu Glu Ala Leu Pro Asn Arg Pro Ser Arg
1               5                   10                  15
```

```
Thr Val Leu Val Asp Leu Met Gly Gly Ala Asp Val Pro Ala Thr Asn
            20                  25                  30
Pro Ala Ala Asn Gly Ser Gln Asn Thr Ala Asp Val Leu Ala Asp Ile
        35                  40                  45
Leu Gly Gly Asp Ser Gly Ile Ser Ser Pro Ala Pro Gln Ala Ala His
    50                  55                  60
Ala Pro Ala Gln Ser Val Asn Thr Ser Ala Ile Met Asp Leu Phe Gly
65                  70                  75                  80
Ser Asn Gly Ala Thr Pro Ser Pro Arg Pro Ala Glu Pro Ala Ser Ala
                85                  90                  95
Ser Val Asp Ile Leu Gly Gly Leu Gly Ser Ala Pro Ser Pro Ala Pro
            100                 105                 110
Ser Pro Ser Ala Ala Ala Val His Thr Ala Tyr Asn Lys Asn Asp Leu
        115                 120                 125
Thr Leu Thr Leu Gln Val Gln Arg Ala Gly His Gly Asn Ala Gln Ile
    130                 135                 140
Gln Ala Arg Phe Arg Asn Val Ser Asp Phe Ser Gln Phe Ser His Val
145                 150                 155                 160
Gly Leu Gln Ala Ala Val Pro Lys Ser Gln Arg Leu Gln Leu Ser Ala
                165                 170                 175
Ile Asn Lys Ser Glu Leu Ser Ala Gly Asp Glu Gly Val Gln Met Leu
            180                 185                 190
Lys Ile Ala Ala Ile Ser Gly Val Ser Leu Ser Ala Phe Tyr Lys Ser
        195                 200                 205
Thr Pro Gly
    210
```

<210> 28329
<211> 120
<212> PRT
<213> A.fumigatus

<400> 28329

```
Met Tyr Gly Met Tyr His Phe His Ser Arg Ser Ser His Ser Gly Ala
1               5                   10                  15
Thr Ser Pro His Glu Ser Ser Val Tyr Leu Gln Leu Ser His Thr Arg
            20                  25                  30
Thr Leu Ser Ser Leu His His Leu Asn Thr Gln Leu Asp Asn Leu Pro
        35                  40                  45
Val Thr Leu Thr Met Ala Gln Thr Ile Arg Ile Pro Ile Arg Thr Glu
    50                  55                  60
Lys Ala Pro Leu Pro Pro Pro Phe Leu Ser Gln Gly Ile Lys Val Gly
65                  70                  75                  80
Asn Met Ile Tyr Cys Ser Gly Gln Val Gly Val Asp Pro Thr Thr Gly
                85                  90                  95
Lys Met Val Glu Gly Pro Ile Gln Ala Arg Thr Val Leu Ser Leu Ser
            100                 105                 110
Pro Ser Ser Thr Ile Leu Gln Arg
        115                 120
```

<210> 28330
<211> 71
<212> PRT
<213> A.fumigatus

<400> 28330

```
Asn Asp Gly Thr Lys Ala Thr Gln Lys Gln Ile Leu His Asn Leu Ser
1               5                  10                  15
Ala Val Leu Glu Ala Gly Gly Ser Ser Leu Gln Asp Val Val Lys Val
            20                  25                  30
Asn Ile Phe Leu Ala Asp Met Gly Asp Phe Ala Ala Val Asn Glu Val
        35                  40                  45
Tyr Gln Ala Ala Phe Gly Glu Pro Lys Pro Gly Ser Phe Leu Leu Ser
    50                  55                  60
Val Leu Leu Cys Val Leu Arg
65                  70
```

<210> 28331
<211> 363
<212> PRT
<213> A.fumigatus

<400> 28331

```
Ser Phe Ser Ser Ser Glu Thr Ser Val Leu Leu Ile Val Phe Val Thr
1               5                  10                  15
Phe Gln Arg Val Trp Gln Val Gln Leu Val Ala Pro Met Pro Ile Leu
            20                  25                  30
Pro Thr Ser Ile Glu Gly Phe Ser Pro His Val Asp Ser Asn Pro Gly
        35                  40                  45
Arg Ala Ile Glu Gly Gly Gln Trp Lys Pro Gln Ser Ala Pro Arg Thr
    50                  55                  60
His Ala Arg His Gly Met Ser Phe Leu Ser Trp Met Ala Pro Phe Leu
65                  70                  75                  80
Pro Ala Trp Leu Thr Gln Arg Thr Asn Ser Asp Thr Asn Pro Asn Thr
                85                  90                  95
Asn Ser Asn Glu Lys Gln Arg Gln Arg Thr Arg Pro Thr Ala Tyr Leu
            100                 105                 110
Asp Gly Leu Arg Gly Phe Ala Ala Leu Val Val Tyr Trp Gly His His
        115                 120                 125
Glu Leu Trp Ala His Glu Gly Ala Gly Val Gly Lys Ala Phe Glu Leu
    130                 135                 140
Ala Tyr Gly Tyr Asp Asn Lys Tyr Tyr Phe Ala Cys Leu Pro Gly Val
145                 150                 155                 160
Arg Thr Ile Phe Ala Gly Gly His Phe Ala Val Ser Val Phe Phe Val
                165                 170                 175
Leu Ser Gly Tyr Val Leu Ser Met Lys Pro Leu Gly Cys Ile Gln Asp
            180                 185                 190
Gly Asp Tyr Ala Glu Leu Gly Lys Asn Leu Ser Ser Ala Val Phe Arg
        195                 200                 205
Arg Trp Phe Arg Leu Tyr Ile Pro Val Ile Cys Thr Thr Phe Gly Tyr
    210                 215                 220
Leu Thr Phe Leu His Leu Phe Lys Ile Arg Thr Ile Pro Glu Phe Gln
225                 230                 235                 240
Gly Ile Tyr Arg Ser Glu Leu Trp Ser Trp Tyr Ala Glu Phe Lys Asn
                245                 250                 255
Phe Thr Phe Val Leu Gly Thr Gly Gly Glu Pro Trp Phe Thr Tyr Asn
            260                 265                 270
Phe His Val Trp Ser Ile Pro Val Glu Tyr Arg Gly Ser Leu Val Val
        275                 280                 285
Tyr Thr Ala Ala Leu Ala Phe Ala Arg Phe Arg Arg Asn Ala Arg Leu
    290                 295                 300
Ile Gly Glu Val Ala Leu Val Gly Tyr Leu Leu Tyr Ile Ala Asp Gly
```

305 310 315 320
Ala His Phe Ala Met Phe Val Ala Gly Met Leu Leu Arg Asp Leu Asp
325 330 335
Leu Leu Ala Met Arg Asn Asp Leu Pro Gly Phe Phe Arg Arg Leu Glu
340 345 350
Pro Phe Lys Ser Val Met Met Thr Gly Leu Phe
355 360

<210> 28332
<211> 438
<212> PRT
<213> A.fumigatus

<400> 28332
Arg Ala Trp Arg Arg Thr Arg Arg Pro Gln Ala Phe Ser Ser Lys Gln
1 5 10 15
Met Gly Asn Arg Asp Thr Lys Ala Thr Asn Thr Asn Gly Arg Ile Gln
20 25 30
Leu Asp Leu Leu Gln Leu Val Gln Arg Asp Tyr His Leu Arg Ser Tyr
35 40 45
Thr Leu Asn Ser Val Ser Tyr Glu Phe Leu Lys Glu Gln Lys Glu Asp
50 55 60
Val His His Thr Met Ile Thr Glu Leu Phe Asn Gly Thr Pro Asp Ser
65 70 75 80
Arg Arg Arg Leu Ala Val Tyr Cys Leu Lys Asp Ala Tyr Leu Pro Gln
85 90 95
Arg Leu Met Asp Lys Leu Met Cys Leu Val Asn Tyr Thr Glu Met Ala
100 105 110
Arg Val Thr Gly Val Pro Phe Asn Phe Leu Leu Ser Arg Gly Gln Gln
115 120 125
Val Lys Phe Leu Ser Gln Leu Phe Arg Lys Ala Leu Glu Gln Gln Leu
130 135 140
Val Ile Pro Asn Ile Lys Ser Thr Asp Glu Gln Asp Tyr Glu Gly Ala
145 150 155 160
Thr Val Ile Glu Pro Ile Arg Gly Tyr Tyr Gly Val Pro Ile Ala Thr
165 170 175
Leu Asp Phe Ala Ser Leu Tyr Pro Ser Ile Ile Gln Ala His Asn Leu
180 185 190
Cys Tyr Thr Thr Leu Leu Asn Lys Asn Ile Val Glu Lys Leu Lys Leu
195 200 205
Lys Lys Asp Glu Asp Tyr Ile Val Thr Pro Asn Gly Asp Met Phe Cys
210 215 220
Thr Thr Lys Val Arg Lys Gly Leu Leu Ser Gln Ile Leu Glu Glu Leu
225 230 235 240
Leu Ala Ala Arg Lys Arg Ala Lys Lys Glu Leu Ala Val Glu Thr Asp
245 250 255
Pro Phe Lys Lys Ala Val Leu Asn Gly Arg Gln Leu Ala Leu Lys Val
260 265 270
Ser Ala Asn Ser Val Tyr Gly Leu Thr Gly Ala Thr Val Gly Lys Leu
275 280 285
Pro Cys Leu Pro Ile Ala Ser Ser Thr Thr Ser Tyr Gly Arg Gln Met
290 295 300
Ile Glu Lys Thr Lys Gln Glu Val Glu Ala Arg Tyr Thr Ile Ala Asn
305 310 315 320
Gly Tyr Ser His Asp Ala Lys Val Ile Tyr Gly Asp Thr Asp Ser Val
325 330 335

```
Met Val Lys Phe Gly Val Thr Glu Leu Glu Glu Ala Met Lys Leu Gly
            340                 345                 350
Gln Glu Ala Ala Asp Tyr Val Ser Ser Lys Phe Pro Lys Pro Ile Lys
        355                 360                 365
Leu Glu Phe Glu Lys Val Tyr Phe Pro Tyr Leu Leu Ile Asn Lys Lys
    370                 375                 380
Arg Tyr Ala Gly Leu Tyr Trp Thr Asn Pro Lys Lys Phe Asp Lys Met
385                 390                 395                 400
Asp Thr Lys Gly Ile Glu Thr Val Arg Arg Asp Asn Cys Leu Leu Val
                405                 410                 415
Gln Asn Val Ile Glu Thr Val Leu His Lys Ile Leu Ile Glu Arg Asp
            420                 425                 430
Ile Asp Gly Ala Gln Glu
        435
```

<210> 28333
<211> 119
<212> PRT
<213> A.fumigatus

```
<400> 28333
Ala Phe Pro Phe His Pro Val Val Lys Thr Val Ile Gln Ile Ala Asn
1               5                   10                  15
Val Val Thr Arg Tyr Gly Glu Ser Lys Pro Phe Ile Arg Asn Val Phe
            20                  25                  30
Val Leu Asp Thr Cys Ser Leu Ile Val Asn Thr Gln Ile Leu Glu Phe
        35                  40                  45
Asp Lys Glu Glu Lys Met Leu Met Ala Trp Arg Asp Phe Leu Glu Lys
    50                  55                  60
Val Asp Pro Asp Val Ile Ile Gly Tyr Asn Ile Ala Asn Phe Asp Phe
65                  70                  75                  80
Pro Tyr Leu Leu Asp Arg Ala Lys His Leu Lys Cys Thr Gly Phe Pro
                85                  90                  95
Tyr Trp Thr Arg Leu Lys Gly Met Ala Ser His Ala Thr Ser Thr Ser
            100                 105                 110
Phe Phe Gln Gln Ala Asp Gly
        115
```

<210> 28334
<211> 369
<212> PRT
<213> A.fumigatus

```
<400> 28334
Ala Gly Trp Met Gly Lys Gly Lys Asn Arg Asp Ser Glu Gln Glu Gln
1               5                   10                  15
His Val Ser Arg Pro Leu Ser Ser Leu Lys Asp Pro Ser Ala Phe Gly
            20                  25                  30
Pro Pro Pro Lys His Ile Ala Val His Gly Pro Gly Ala Val Pro Asn
        35                  40                  45
Gln Thr Thr Pro Asp Arg Arg Gly Leu Gly Ala Pro Leu Ser Gln Glu
    50                  55                  60
Glu Ile Gln His Ala Gln Ala Arg Gln Gln Glu Gln Asn Arg Ala Glu
65                  70                  75                  80
Glu Ala Glu Pro Pro Lys Pro Ala Gly Pro Pro Leu Pro Tyr Arg Val
                85                  90                  95
```

```
Asn Thr Thr Gly Ile Asn Thr Asp Asn Leu Pro Pro Pro Pro Ala Arg
            100                 105                 110
Arg Leu His Ser Pro Ala Ser Ser Val Ser Ser Ala Gly Ser Arg Pro
        115                 120                 125
Val Pro Ser Val Pro Pro Pro Val Pro Pro Arg Met Asn Ser Thr Thr
    130                 135                 140
Gln Ser His Pro Ala Thr Pro Pro Pro Ala Tyr Ser Pro Ser Glu Thr
145                 150                 155                 160
Ala Ser Glu Gly Phe Leu Asn Gln Ser Ala Val Thr Arg Leu Ser Asn
                165                 170                 175
Ala Gly Val Ser Val Pro Ser Leu Gly Ile Gly His Asn Arg Ser Ser
            180                 185                 190
Pro Ser Asn Thr Pro Gly Gly Val Ala Gly Pro Ala Ser Val Asn Glu
        195                 200                 205
Leu Gln Ala Arg Phe Ser Gln Met Arg Thr Ser Leu Ser Gln Ser Pro
    210                 215                 220
Ser Gln Ala Pro Ser Pro Pro Val Arg Gly Ser Thr Thr Gln Pro Glu
225                 230                 235                 240
Leu Ser Thr Ala Ser Pro His Ser Asn Leu His Glu Arg His Asn Asp
                245                 250                 255
Lys Leu Gln Ala Gly Lys Glu Arg Val Gln Asp Leu Asn Asp Lys Tyr
            260                 265                 270
Lys Ile Thr Gln Arg Phe Asn Asn Phe Val Asp Glu Lys Arg Ser Ala
        275                 280                 285
Asn Thr Ser Ile Ser Ser Gln Gln Phe Arg Leu Pro Pro Thr Pro Pro
    290                 295                 300
His Pro Asp Arg Ser Gln Pro Ser Pro Asp Ser Val Glu Leu Asp Ala
305                 310                 315                 320
Leu Asn Arg Arg Lys Ala Pro Pro Pro Pro Pro Pro Lys Lys Ala Ala
                325                 330                 335
Met Arg Ser Thr Pro Val Asn Ala Pro Ser Ser Thr Ser Pro Val Pro
            340                 345                 350
Pro Pro Leu Pro Leu Ser Thr Lys Pro Ala Arg Ala Glu Val Arg Tyr
        355                 360                 365
Asn
```

<210> 28335
<211> 436
<212> PRT
<213> A.fumigatus

<400> 28335

```
Ser Pro Ala Asp Arg Val Asp Asp Asn Cys Tyr Ser Asp Ala Ala Thr
1               5                   10                  15
Asn Tyr Pro Asn Val Asn Tyr Glu Pro Ser Thr Ser Pro Arg Pro Arg
            20                  25                  30
Tyr Glu Ile Met Ser Ser Ala Leu Ala Arg Val Gly Arg Pro Ile Leu
        35                  40                  45
Phe Gln Ile Cys Glu Trp Gly Ile Asp Phe Pro Ala Leu Trp Ala Pro
    50                  55                  60
Ala Leu Gly Asn Ser Trp Arg Ile Gly Asn Asp Ile Ile Pro Ala Trp
65                  70                  75                  80
Arg Ser Ile Phe Arg Thr Leu Asn Gln Ala Val Ala Asn Thr Asp Phe
                85                  90                  95
Ala Gly Pro Gly Gln Trp Ala Asp Leu Asp Met Leu Tyr Val Gly Asn
```

```
            100                 105                 110
Gly Val Phe Ser Leu Pro Glu Glu Gln Thr His Phe Ser Leu Trp Ala
        115                 120                 125
Ile Leu Lys Ser Pro Leu Thr Ile Gly Ala Ala Leu Lys Asp Asp Asp
    130                 135                 140
Thr Ser Ile Ser Gln Ala Ser Leu Glu Val Leu Lys Gln Lys Asp Val
145                 150                 155                 160
Ile Gly Phe Asn Gln Asp Ala Leu Gly Val Ser Ala Ser Leu Lys Arg
                165                 170                 175
Arg Trp Ser Asp Glu Gly Tyr Glu Val Trp Ser Gly Pro Leu Ser Gly
            180                 185                 190
Asn Arg Thr Val Val Ala Val Ile Asn Trp Arg Asn Glu Ser Arg Asp
        195                 200                 205
Leu Thr Leu Asp Leu Pro Asp Val Gly Leu Gln Tyr Ala Gln Val Ala
    210                 215                 220
Arg Asn Ile Trp Gly Lys Thr Val Val Arg Asp Val Arg Thr Ser Tyr
225                 230                 235                 240
Thr Ala Gly Val Ala Gly His Gly Thr Ile Leu Leu Glu Leu Gln Gly
                245                 250                 255
Thr Leu Pro Ser Gly Leu Tyr Pro Ala Lys Ile Phe Ala Lys Ser Thr
            260                 265                 270
Gly Gln Arg Ser Thr Phe Glu Ser Ile Tyr Ala Ala Thr Thr Ser Ala
        275                 280                 285
Asn Tyr Glu Leu Ala Ile Thr Phe Ser Arg Pro Ser Thr Glu Thr Val
    290                 295                 300
Thr Ile Thr Thr Ser Ser Gly Gln Thr Val Ser Ile Ser Gly Lys Ser
305                 310                 315                 320
Gly Arg Ile Ala Leu Thr Ala Gly Ser Asn Thr Ile Thr Ile Gln His
                325                 330                 335
Lys Thr Pro Ile Glu Ser Ile Gln Ile Thr Pro Pro Thr Gly Thr Tyr
            340                 345                 350
Tyr Ala Asn Thr Val Phe Asn Val Thr Gly Ser Ala Lys His Thr Thr
        355                 360                 365
Cys Gly Ser Gly Cys Ser Pro Val Gly Ser Lys Ile Gly Tyr Leu Ser
    370                 375                 380
Pro Thr Ser Asn Ala Tyr Thr Ser Ile Ser Thr Thr Thr Ala Gly Ser
385                 390                 395                 400
Lys Tyr Leu Ala Ile Asp Tyr Ile Asn Asn Glu Val Ala Phe Ser Ser
                405                 410                 415
Ser Trp Gly Trp Gly Ser Asn Ser Arg Ser Ser Pro Arg Gly Trp Lys
            420                 425                 430
Gly Pro Arg Leu
        435
```

<210> 28336
<211> 148
<212> PRT
<213> A.fumigatus

<400> 28336

```
Leu Ala Arg Trp Asn Ser Tyr Asn Tyr Tyr Ser Cys Ser Pro Asn Glu
1               5                   10                  15
Ala Ile Ile Arg Ser Asn Ala Lys Ala Leu Val Asp Leu Gly Leu Ala
            20                  25                  30
Glu Leu Gly Tyr Arg Tyr Val Thr Thr Asp Cys Gly Trp Ser Val Ala
        35                  40                  45
```

```
Asp Arg Leu Pro Asn Gly Thr Leu Thr Trp Asn Glu Thr Leu Phe Pro
    50                  55                  60
Ser Gly Phe Pro Ala Met Gly Glu Tyr Leu His Glu Leu Gly Leu Leu
65                  70                  75                  80
Phe Gly Val Tyr Gly Asp Ser Gly Thr Lys Leu Cys Gly Ser Pro Pro
                85                  90                  95
Asp Gln Val Gly Ser Leu Cys Lys Ser Pro Ser Ser Met Ile Leu Thr
            100                 105                 110
Leu Ala Asn Val Pro Asp His Glu Glu Gln Asp Ala Lys Thr Phe Ala
        115                 120                 125
Glu Trp Gly Ala Asp Ser Leu Lys Cys Met Ser Val Cys Pro Leu Lys
    130                 135                 140
Met Lys Pro Arg
145
```

<210> 28337
<211> 172
<212> PRT
<213> A.fumigatus

```
<400> 28337
Ala Thr Ala Lys His Phe Phe Asp Asp Pro Asn His Leu Val Gln Thr
1               5                   10                  15
Ala Leu His Ser Leu Thr Leu Thr Asn Pro Ser Leu Ala Phe Asp Ser
            20                  25                  30
Lys His Lys Val Ile Phe Arg Arg Pro Asp Ala Ser Arg Lys Pro Lys
        35                  40                  45
Val Ala Ile Ile Ser Gly Gly Gly Ser Gly His Glu Pro Ala Phe Ala
    50                  55                  60
Gly Tyr Val Gly His Gly Leu Met Asp Ala Ser Val Ala Gly Ser Ile
65                  70                  75                  80
Phe Ala Ser Pro Ser Ala Glu Gln Ile Arg His Ala Ala Met Asn Cys
                85                  90                  95
Val Asp Asn Glu Lys Gly Val Leu Ile Ile Pro Met Asn Tyr Thr Gly
            100                 105                 110
Asp Val Leu Asn Phe Gly Met Ala Ala Glu Lys Ser Arg Ala Ala Gly
        115                 120                 125
Ile Lys Thr Glu Phe Phe Ala Ile Asn Asp Asp Ala Gly Val Gly Arg
    130                 135                 140
Lys Lys Gly Gly Lys Val Gly Arg Arg Gly Ile Gly Gly Gly Ile Leu
145                 150                 155                 160
Ile Leu Lys Ile Val Gly Ala Leu Ala Glu Thr Gly
                165                 170
```

<210> 28338
<211> 238
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (228)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28338
Thr Val Leu Cys Arg Ala Ser Leu Glu Asp Val Tyr Arg Val Ala Gln

```
1               5                   10                  15
Leu Ala Asn Ala Asn Leu Ala Ser Val Gly Ser Ser Leu Glu His Val
            20                  25                  30
His Ile Pro Gly Arg Gly Val Pro Glu Asp Val Ile Pro Asp Gly Glu
        35                  40                  45
Val Glu Val Gly Met Gly Ile His Asn Glu Pro Gly Ser His Arg Met
    50                  55                  60
Lys Phe Ser Leu Pro Glu Val Ile Lys Thr Met Leu Leu Gln Ile Leu
65                  70                  75                  80
Asp His Asn Asp Pro Asp Arg Ala Phe Leu Thr Tyr Gln Pro Gly Asp
                85                  90                  95
Gln Phe Val Leu Leu Ile Asn Asn Leu Gly Gly Val Ser Thr Leu Glu
            100                 105                 110
Leu Ser Gly Ile Thr Asp Glu Val Tyr Arg Gln Leu Thr Lys Asp Phe
        115                 120                 125
His Ile Lys Pro Val Arg Ile Ile Gln Gly Thr Phe Leu Thr Ser Leu
    130                 135                 140
Asn Gly Leu Gly Phe Ser Val Ser Leu Leu Lys Leu Ala Asp Thr Gly
145                 150                 155                 160
Leu Gly Pro Gly Lys Ser Met Leu Glu Leu Leu Asp Ala Pro Ala Glu
                165                 170                 175
Ala Val Gly Trp Ser Ala Pro Ile Arg Thr Ser Thr Trp Glu Ala His
            180                 185                 190
Gln Ser Asp Ala Pro Val Gln Val Lys Ser Thr Lys Leu Ala Glu Asp
        195                 200                 205
Gln Pro Thr Asn Ile Asn Arg Lys Phe Lys Ile Val Pro His His Ala
    210                 215                 220
Ala Lys Arg Xaa Arg Phe Gly Glu Pro Pro Glu Lys Glu Val
225                 230                 235
```

<210> 28339
<211> 67
<212> PRT
<213> A.fumigatus

<400> 28339

```
Ser Gly Gln Lys Ser Gly Asp Ile Gln Ile Ala Asp Tyr Ser Pro Arg
1               5                   10                  15
Phe Glu Asp Ala Ala Gly Pro Thr Glu Arg Leu Pro Leu Phe Ala Leu
            20                  25                  30
Asn Asn Leu Ser Ala Thr Val Ser Arg Gly Met Ser Ser Asn Pro Thr
        35                  40                  45
Met Ser Gly Arg Ile Ser Pro Ser Ile Asp Ala Asn Pro Gly Arg Gly
    50                  55                  60
Trp Thr Trp
65
```

<210> 28340
<211> 153
<212> PRT
<213> A.fumigatus

<400> 28340

```
Arg Pro Cys Gly Lys Lys Lys Gln Ser Ala Arg Leu Thr Thr Ser Arg
1               5                   10                  15
Ala Gln Leu Gln Ser Val Gln Met Gln Val Asn Glu Ala Phe Ser Met
```

```
            20                  25                  30
Arg Lys Ile Gln Gly Ser Leu Lys Lys Ser Thr Gly Ile Met Lys Asp
        35                  40                  45
Val Asn Thr Leu Val Arg Leu Pro Glu Leu Thr Gly Thr Met Arg Gln
    50                  55                  60
Leu Ala Thr Glu Leu Val Arg Ala Gly Ile Ile Glu Glu Met Val Asp
65                  70                  75                  80
Asp Ala Ile Pro Asn Asn Glu Leu Tyr Glu Asp Glu Glu Asp Glu Ala
                85                  90                  95
Glu Ala Glu Val Asp Lys Val Leu Gln Glu Ile Leu Gln Gly Lys Leu
            100                 105                 110
Ser Gln Ala Gly Glu Val Lys Ala Glu Glu Pro Ala Glu Gly Glu Pro
        115                 120                 125
Ala Ile Glu Asp Gln Met Glu Asp Gln Glu Ala Ala Leu Glu Gln Met
    130                 135                 140
Arg Gly Arg Leu Glu Ala Leu Lys Ser
145                 150
```

<210> 28341
<211> 119
<212> PRT
<213> A.fumigatus

<400> 28341

```
Thr Ser His Ser Pro Ile Arg Thr Thr His Ser Ser Ser Thr Thr Met
1               5                   10                  15
Ser Thr Lys Leu Asp Lys Ser Leu Asp Glu Ile Leu Val Asn Arg Arg
            20                  25                  30
Gln Asn Ala Arg Arg Arg Thr Arg Arg Pro Ala Ala Ser Lys Pro Gly
        35                  40                  45
Ser Ala Ala Val Pro Val Gly Gly Val Lys Lys Asn Ala Lys Ala Ala
    50                  55                  60
Lys Pro Val Ala Lys Gly Ala Gln Gly Gly His Pro Val Ala Thr Glu
65                  70                  75                  80
Ser Lys Ile Met Val Ser Gly Leu Val Ser Phe His Leu Arg Ser Glu
                85                  90                  95
Leu Val Met Cys Gly Tyr Ala Asn Ser Leu Lys Pro Ser Asp Val Asn
            100                 105                 110
Glu Ala Asn Ile Lys Val Cys
        115
```

<210> 28342
<211> 349
<212> PRT
<213> A.fumigatus

<400> 28342

```
Gln Gly Arg Ala Pro Arg Ala Trp Thr Arg Leu Ala Ser Ser Tyr Lys
1               5                   10                  15
Gln Asn Gly Thr Ile Ser Ala Leu Gly Ser Tyr Tyr Arg Leu Thr Pro
            20                  25                  30
Cys Thr Val Leu Leu Gln Cys Gly Gly Thr Ile Thr Gly Phe Ala Glu
        35                  40                  45
Tyr Thr Asn Asp Gln Leu Thr Tyr Leu Leu Cys Thr Leu Tyr Ser Asp
    50                  55                  60
Cys Thr Asn Tyr Thr Met Ser Thr Pro Ser Thr Pro Arg Thr Ala Arg
```

65 70 75 80
Ser Ala Ser Glu Ser Gly Thr Pro Ile Leu Thr Pro Gly Arg Lys Ile
85 90 95
Arg Ala Ile Leu Ala Ala Phe Asp Ser Asp Ser Glu Ser Asp Asn Ala
100 105 110
Asn Asn Lys Gln Arg Thr Ile Gln Lys Pro Val Glu Thr Met Asn Asp
115 120 125
Val Glu Ser Glu Asp Asp Asp Asp Asp Asp Ile Val Lys Pro Lys Gly
130 135 140
Arg Leu Ala Ala Arg Met Gln Ala His Asp Gln Thr Ser Ala Ser Pro
145 150 155 160
Pro Val Thr Glu Arg Thr Ala Phe Asp Arg Val Ser Lys Phe Leu Arg
165 170 175
Ala Glu Arg Glu Gln Ser Lys Glu Gly Glu Gln Ala Arg Leu Glu Ser
180 185 190
Ala Ser Ala Ser Glu Asp Glu Asp Asp Leu Pro Lys Ala Gly Pro Arg
195 200 205
Arg Arg Arg Asn Val Arg Lys Thr Pro Glu Pro Gly Glu Asn Asn Thr
210 215 220
Ser Ala Ser Ser Ser Arg Ala Arg Ser Phe Ser Pro Leu Phe Met Ser
225 230 235 240
Ser Pro Ala Pro Gln Arg Asn Glu Ala Leu Ser Asp Asp Glu Ala Asn
245 250 255
Asp Asp Asp Glu Glu Asp Leu Lys Ala Asp Pro Arg Val Arg Ala Leu
260 265 270
Ile Met Gln Lys Arg Lys Glu Arg Glu Glu Lys Glu Arg Leu Glu Ala
275 280 285
Glu Lys Gln Thr Ala Arg Leu Ala Gln Arg Asp Gln Phe Ser Ser Glu
290 295 300
Ile Ala Ser Val Glu Asp Ile Asp Glu Glu Glu Ala Gly Arg Lys Leu
305 310 315 320
Thr Gln Gln Arg Pro Ala Ala Arg Lys Ala Ser Gln Lys Ser Phe Gly
325 330 335
Lys Glu Met Glu Pro Ala Lys Arg Gln Arg Ile Arg Arg
340 345

<210> 28343
<211> 159
<212> PRT
<213> A.fumigatus

<400> 28343
Trp His Leu Gln Leu Glu Leu Ala Glu Leu Met Gly Pro Lys Leu Ala
1 5 10 15
Phe Ser Thr Gln Pro Ser Lys Pro Arg Lys Glu Lys Ser Asp Tyr Glu
20 25 30
Arg Leu Ala Glu Leu Asn Leu Arg Gly Gln Lys Leu Asn Thr Glu Ser
35 40 45
Val Arg Arg Ala Gln Leu Glu Glu Arg Lys Ala Ser Arg Lys Ala Ala
50 55 60
Ala Ala Val Ala Arg Gly Glu Ala Gln Ala Asn Pro Phe Met Arg Val
65 70 75 80
Arg Thr Leu Ala Lys Thr His Tyr Asp Ala Asn Gly Asn Ser Leu Ile
85 90 95
Pro Asp Ser Leu Ser Ser Arg Gly Gly Thr Pro Ala Thr Gly Ser Glu
100 105 110

```
Thr Pro Ser Lys Pro Ser Thr Pro Lys Pro Ala Val Thr Thr Gln Lys
        115                 120                 125
Lys Gln Ser Lys Gly Gly Ile Gly Ser Ile Arg His Arg Asn Met Asp
    130                 135                 140
Asp Glu Asn Ile Ala Ala Leu Asp Leu Glu Leu Asp Ile Glu Ile
145                 150                 155
```

<210> 28344
<211> 497
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (407),(414),(421),(424),(427),(463),(473)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28344

```
Arg Gln Glu Glu Arg Pro Ala Lys Val Gly Lys Arg Leu Ala Val Phe
1               5                   10                  15
Ser Gly Gln Ile Ser Pro Asn Asp Phe Pro Gly Pro Met Thr Lys Arg
            20                  25                  30
Arg Lys His Ser Asn Ser Gly Arg Leu Pro Ser Asp Leu Thr Met Thr
        35                  40                  45
Lys Leu Glu Asn Gly Gln Ser Ser Val Gly Gly Ser Asn Ser Gly Val
    50                  55                  60
Leu Gly Asn Asp Thr Ser Phe Asn Ala Ala Arg Gly Phe Ala Ser Pro
65                  70                  75                  80
Ala Glu Arg Pro Phe Val Thr Pro Ser Ala Met Ser Gly Gln Phe Ala
                85                  90                  95
Asn Arg Pro Pro Thr Pro Asn Ser Gly Asp Asn Asn Pro Phe Phe Asn
            100                 105                 110
Pro Ser Ala Thr Gln Thr Ser Leu Asp Thr Phe Ile Gln Gln Gln Leu
        115                 120                 125
Met Ser Ala Pro Asn Ser Ala Gln Pro Ser Arg Pro Gly Thr Pro Gly
    130                 135                 140
Asn Ser Ala Arg His Gly Phe Gln Asp Gln Ser Ile Asn Ile Ser Leu
145                 150                 155                 160
Gly Ser Ser Thr Ser Thr Pro Ala Trp Pro Pro Leu Thr Asn Ala Gly
                165                 170                 175
Asn Arg Leu Pro Ser Val Ile His Lys Val Val Pro Ala Glu Gly Ser
            180                 185                 190
Ile Thr Gly Gly Thr Glu Val Thr Leu Leu Gly Ser Gly Phe Tyr Pro
        195                 200                 205
Gly Met Glu Val Val Phe Gly Asp Thr Leu Ala Thr Thr Thr Thr Phe
    210                 215                 220
Trp Gly Asp Lys Cys Leu Asn Cys Leu Thr Pro Pro Ala Leu Gln Pro
225                 230                 235                 240
Gly Met Val Ala Val Val Phe Lys His Glu His Pro Thr Phe Gly Gln
                245                 250                 255
Met Gln Pro Ala Gln Pro Leu Met Pro Lys Gln Gln Gln Phe Phe Arg
            260                 265                 270
Tyr Val Asp Asp Arg Glu Leu Gln Met Tyr Arg Leu Ala Leu Gly Ile
        275                 280                 285
Leu Gly Gln Lys Leu Gly Asn Gln Ala Asp Ala Phe Gln Thr Ala Gln
    290                 295                 300
```

```
Gln Ile Met Gly Ser Asp Pro Lys Ala Val Phe Asn Leu Gln Lys Asp
305                 310                 315                 320
Phe Ser Ala Gly Ser Gly Gly His Gln Arg Gln Val Pro Gly Leu Glu
                325                 330                 335
Ser Gln Gly Glu Leu Ser Asp Leu Asp Ser Lys Met Leu Thr Tyr Leu
            340                 345                 350
Glu Phe Ile Asp Leu Asp Asp Asn Pro Arg Pro Pro Lys Tyr Asn Ser
        355                 360                 365
Arg Cys Ala Thr Gly Gln Thr Leu Leu His Phe Ala Ser Ser Leu Gly
    370                 375                 380
Leu Thr Arg Phe Val Ala Gly Leu Leu Ala Arg Gly Ala Asn Pro Glu
385                 390                 395                 400
Val Gln Asp Asn Ile Gly Xaa Thr Pro Met His Leu Ala Xaa Leu His
                405                 410                 415
Gly His Ala His Xaa Val Asn Xaa Leu Arg Xaa Ala Gly Ala Asp Val
            420                 425                 430
Asn Ala Arg Ser Ile Arg Gly Phe Thr Pro Ala Asp Leu Thr Thr Thr
        435                 440                 445
Leu Pro Thr His Gln Ala Ala Leu Asp Pro Cys Ser His Asn Xaa Phe
    450                 455                 460
Arg Thr Val Gly Ser Val Thr Ser Xaa Arg Arg Arg Pro Tyr Ser Ser
465                 470                 475                 480
Cys Ser Leu Asn Ser Leu Trp Lys Ser Pro Pro Asp Ser Gly Ile Asn
                485                 490                 495
Glu
```

<210> 28345
<211> 61
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (18),(21),(24),(31),(38)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 28345
Val Gly Arg Ser Glu Thr Pro Asp Ala Ala Ser Val Asn Val Gly Thr
1               5                   10                  15
Ser Xaa Thr Gln Xaa Val His Xaa Met Arg Met Thr Met Gln Xaa Gly
            20                  25                  30
Gln Val His Gly Arg Xaa Ser Asp Ile Val Leu Tyr Leu Arg Val Arg
        35                  40                  45
Ser Ser Gly Glu Gln Ser Gly Asn Glu Thr Ser Gln Ala
    50                  55                  60
```

<210> 28346
<211> 501
<212> PRT
<213> A.fumigatus

```
<400> 28346
Thr Gln His Gln Asn Pro Asp Gly Val Val Val Ser Phe Ser Gln Pro
1               5                   10                  15
Pro Glu Thr Asp Asn Asn Tyr Phe Thr Thr Ser Arg Arg Ser Phe Asn
```

```
                20                  25                  30
Arg His Asn Ile Ser Glu Gln Thr Lys Thr Leu Gly Asp Lys Ala Cys
            35                  40                  45
Trp Pro Leu Asn Asn Tyr Asn Met Pro Arg Asn Val Lys Lys Asn Pro
        50                  55                  60
Arg Asp Val Thr Lys Leu Ser Gly Lys Pro Leu Ala Glu Thr Ile Glu
65                  70                  75                  80
Pro Ser Pro Val Leu Lys Thr Leu Gln Glu Gly Trp Val Thr Ser Pro
                85                  90                  95
Asp Leu Ile Glu Gly Asp Leu Ser Phe Thr Leu Glu Val Ile Gln Asn
            100                 105                 110
Met Thr Val Phe Leu Leu Ala Asn Pro Asn Leu Asn Ser Ser His Leu
        115                 120                 125
Phe Arg Ala Asp Ile Leu Tyr Asp Ser Leu Gly Val Leu Ser Ala Pro
    130                 135                 140
His Ala Met Glu Gln Ser Arg Tyr Gln Gly Ser Gly Gly Arg Asn Gln
145                 150                 155                 160
Asp Thr Gln Lys Glu Asp Tyr Val Glu Pro Leu Pro Ala Arg Ser Val
                165                 170                 175
Pro Gly Phe Glu Leu Lys Arg Thr Phe Val Arg Arg Leu Ile Pro Arg
            180                 185                 190
Asn Arg Asn Leu Asp Arg Pro Leu Glu Gln Thr Cys His Phe Tyr Glu
        195                 200                 205
Ala Asp Glu Leu Pro Pro Thr Ser Asn Ser Thr Asn Ile Ala Gln Ser
    210                 215                 220
Glu Gln Cys Glu Ser Lys Ala Glu Ser Pro Arg Gln Arg Phe Leu Val
225                 230                 235                 240
Ile Tyr Leu Pro His Val Ser Ser Lys Glu Glu Met Pro Trp Tyr His
                245                 250                 255
Pro Leu Leu Arg Ser Leu Ala Phe Leu Tyr Glu Phe Thr Pro Asn Ala
            260                 265                 270
Phe Pro His Ser Ser Glu Glu Asn Lys Gly Thr Gly Ile Met Ser Val
        275                 280                 285
His Phe Leu Pro Tyr Glu Glu Glu Pro Ile Gln Asn Arg Leu Glu Arg
    290                 295                 300
Thr Leu Leu Ala Leu Leu Ser Thr His Ile Arg Leu Ala Arg Gln Thr
305                 310                 315                 320
Arg Leu Asp Glu Lys Pro Glu Arg Gly Asn Tyr Asn Pro Pro Lys Asp
                325                 330                 335
Asn Val Ile Pro Lys His Leu Val Gln Asp Thr Tyr Ala Arg Leu Lys
            340                 345                 350
Leu Lys Tyr Ala Ala Asp Leu Cys Gln Asn Trp Val Glu Asp Thr Glu
        355                 360                 365
Pro Thr Lys His Val Leu Glu Asp Ser Pro Ile Thr Ala Phe Leu Ile
    370                 375                 380
Gln Leu Trp Lys Asn Met Tyr Gly Ile Val Pro Pro Asn Glu Arg Thr
385                 390                 395                 400
Pro Thr Gln Trp Asn Arg Glu Val Pro Leu Lys Phe Pro Arg Val Pro
                405                 410                 415
Glu Phe Pro Cys Gly Thr Gly Val Arg Ser Ser Ser Pro Leu Gly Arg
            420                 425                 430
Val Thr Cys Trp Gly Ile Lys Ala Leu Leu Gln Asn Thr Glu Leu Phe
        435                 440                 445
Pro Leu Ser Leu Arg Lys Lys Ile Arg Glu Glu Phe Ser Phe Arg Thr
    450                 455                 460
Leu Cys Lys Leu Leu Pro Asn Arg Lys Arg Leu Gly Val Lys Pro Pro
```

```
465                 470                 475                 480
Gly Leu Phe Leu Glu Thr Phe Pro Leu Leu Ile Trp Glu Lys Thr Asn
                485                 490                 495
Leu Gly Leu Leu Trp
            500
```

<210> 28347
<211> 508
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (254)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28347

```
Pro Arg Leu Ala Gly Gly Leu Ile Ala His Asn Asp Gly Phe Ala Leu
1               5                  10                  15
Leu Thr Asn Glu Ala Leu Pro Ser Gly Thr Ser Asn Ala Pro Pro Ser
            20                  25                  30
Asn Thr Pro Val Pro Val Leu Tyr Arg Tyr Thr Asn Gly Gln Gln Thr
        35                  40                  45
Trp Lys Thr Trp Leu Gly Gly Pro Gly Val His Glu Ala Asp Gly Leu
    50                  55                  60
Ser Ala Ser Pro Asp Leu Asn Gly Asp Leu Ala Tyr Ser Glu Ser Ala
65                  70                  75                  80
Lys Met Tyr Gly Ala Tyr Phe Val Val Thr Asp Tyr Thr Gly Trp Ala
                85                  90                  95
Gln Gly His Phe Gly Asp Ser Ile Gln Tyr Val Ser Asp Asn Gly Thr
            100                 105                 110
Leu Val Thr Ile Pro Gly Ala Ser Ser Ser Trp Gly Cys Ser His Asn
        115                 120                 125
Thr Gly Ile Ala Phe Glu Ala Ala Asp Glu Pro Pro Phe Ala Ser Ile
    130                 135                 140
Cys Ala Glu Asp Gln Gly Ala Ile Trp Leu Asn Thr Lys Thr Gln Gly
145                 150                 155                 160
Met Ser Asn Asp Gly Val Lys Ile Ser Asn Glu Asn Thr Thr Asn Gly
                165                 170                 175
Ala Ser Gly Glu Pro Met Gly Gly Met Ser Gly Ser Tyr Ser Ala Leu
            180                 185                 190
Ala Arg Phe Ala Asp Thr Ala Arg Tyr Ile Phe Ala Trp Val Ser Arg
        195                 200                 205
Gly Ala Met Asp Val Thr Glu Asn Ser Trp Met Gly Ala Gly Tyr Thr
    210                 215                 220
His Val Asn Asn Arg Thr Asn Gly Arg Asn Val Ala Ile Ala Leu Phe
225                 230                 235                 240
Ser Asp Lys Tyr Thr Lys Val Gly Ala Gln Ala Thr Ser Xaa Val Gly
                245                 250                 255
Ala Glu Asp Gly Asp Ser Gln Val Thr Trp Ile Thr Ser Gly Ser Asn
            260                 265                 270
Asp Cys Ser Asn Ala His Ala Ala Thr Phe Gly Ala Asp Ser Ala Leu
        275                 280                 285
Ile Thr Trp Glu Glu Ile Ser Asn Pro Thr Cys Asp Tyr Ile Ala Met
    290                 295                 300
Gly Cys Arg Gly Gln Phe Ala Gly Ser Phe Phe Gln Gln Val Asp Ser
```

```
305                 310                 315                 320
Ser Gly Lys Lys Val Gly Glu Ala Leu Thr Ser Thr Asp Thr Tyr Val
                325                 330                 335
Ala Gly Asp Met Val Thr Met Ala Asp Gly Arg Val Cys Trp Pro Tyr
            340                 345                 350
Val Ser Met Thr Trp Asp Leu Ser Gln Pro Val Gly Phe Ser Ser Ser
        355                 360                 365
Thr Thr Lys Lys Met Ser Phe Ala Cys Ile Ser Leu Gly Gly Ala Ser
    370                 375                 380
Ser Ser Ser Ser Ser Ser Ser Ala Ala Ser Ser Ala Ser Ser Ala Ser
385                 390                 395                 400
Ser Ala Ser Asn Val Val Thr Pro Gln Pro Glu Ala Ser Ser Ser Ala
                405                 410                 415
Ser Ala Thr Ala Thr Pro Glu Ala Gly Ala Ser Ser Glu Ser Ala Ala
            420                 425                 430
Val Pro Ser Gly Ala Ser Ser Ala Ser Ser Asp Ser Thr Val Asp Thr
        435                 440                 445
Glu Thr Asn Tyr Ala Ser Glu Pro Ala Ala Gln Asp Ala Ser Val Pro
    450                 455                 460
Ala Pro Thr Asp Thr Gln Pro Ala Val Glu Ala Glu Thr Pro Thr Pro
465                 470                 475                 480
Ala Pro Thr Ala Ser Ser Gly Arg Lys Gly Ser His Gly His Gly His
                485                 490                 495
Leu Lys Tyr Lys His Pro Thr Ser Cys Arg Ala Lys
            500                 505
```

<210> 28348
<211> 174
<212> PRT
<213> A.fumigatus

```
<400> 28348
Pro Thr Lys Pro Cys Leu Pro Glu Pro Ala Met Arg Pro Arg Pro Thr
1               5                   10                  15
Pro Pro Phe Gln Ser Ser Thr Ala Thr Pro Thr Ala Ser Arg Arg Gly
            20                  25                  30
Arg Pro Gly Trp Val Ala Pro Glu Cys Thr Arg Leu Thr Ala Cys Gln
        35                  40                  45
Leu Leu Pro Thr Ser Thr Ala Ile Trp Pro Thr Pro Lys Ala Pro Arg
    50                  55                  60
Cys Thr Ala Pro Ile Leu Ser Ser Leu Thr Thr Arg Ala Gly Pro Arg
65                  70                  75                  80
Ala Thr Ser Ala Thr Val Phe Ser Thr Cys Arg Thr Thr Glu Pro Ser
                85                  90                  95
Ser Arg Ser Pro Ala Pro Ala Ala Pro Gly Ala Ala Val Thr Thr Pro
            100                 105                 110
Ala Leu Arg Ser Arg Pro Arg Thr Asn His Pro Leu Pro Ala Ser Ala
        115                 120                 125
Pro Arg Thr Lys Ala Pro Ser Gly Ser Thr Pro Arg Arg Arg Glu Cys
    130                 135                 140
Pro Thr Thr Gly Ser Arg Ser Pro Met Arg Thr Pro Pro Thr Glu Pro
145                 150                 155                 160
Arg Val Ser Pro Trp Ala Val Cys Pro Ala Ala Thr Val Leu
                165                 170
```

<210> 28349

<211> 76
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (3)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28349
Ser Ala Xaa Pro Phe Ile Pro Ala Val Gly His Asp His Val Asp Pro
1 5 10 15
Ala Val Leu Leu Gly Phe Met Ser Lys Tyr Thr Ser Ser Ser Ala Asp
20 25 30
Trp Ala Arg Tyr Met Arg Asn Asp Pro Ser Lys Asn Tyr Thr Arg Asn
35 40 45
Leu Val Ala Asp Ile Ser Gly Arg Ala Asn Leu Val Cys His Leu Cys
50 55 60
His Ser Arg Tyr Leu Pro Asn Leu Glu Val Arg Asp
65 70 75

<210> 28350
<211> 131
<212> PRT
<213> A.fumigatus

<400> 28350
Leu Leu Leu Val Trp Asn Pro Glu Lys Gly Ser Pro Ile His Asp His
1 5 10 15
Ala Asn Ala His Cys Ile Met Lys Ile Leu Asp Gly Glu Leu Asn Glu
20 25 30
Ser Val Tyr Tyr Thr Pro Thr Ala Glu Asp Gln Asp Ser Pro Leu Lys
35 40 45
Ile Lys Thr Asn Thr Thr Tyr Gln Pro Asn Glu Val Ala Tyr Ile Ser
50 55 60
Asp Gln Ile Gly Leu His Arg Val Val Asn Pro Ala Lys Asp Arg Leu
65 70 75 80
Ala Val Ser Leu His Cys Thr Phe Met Ile Met Ala Phe Trp Arg Val
85 90 95
Trp Thr Asn Glu Gln Arg Leu Val Tyr Thr Pro Pro Asn Ala Ala Asp
100 105 110
Phe Gly Tyr Asn Ile Tyr Asp Pro Ile Thr Gly Lys Ser Ser His Val
115 120 125
Phe Gln Ala
130

<210> 28351
<211> 62
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (38)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28351
Gln Leu Thr Pro Thr Asp Gly Gly Trp Met Pro Ser Ala Leu Ile Gly
1 5 10 15
Gln Ala Gln Arg Phe Asn Asn Val Pro Pro Lys Ala Lys Asn Gly Lys
20 25 30
Ile Phe Leu Pro Val Xaa Glu Asn Arg Leu Pro Lys Ile Tyr His Gly
35 40 45
Thr Arg Pro Phe Ala Leu Gln His Phe Val Ser Ile Ser Arg
50 55 60

<210> 28352
<211> 416
<212> PRT
<213> A.fumigatus

<400> 28352
Thr Asp Gln Leu Leu Ala Gly Ser His Pro Leu Leu His Gln Pro Pro
1 5 10 15
Val Ile Leu His Pro Ile Arg Thr Gln His Pro Pro Glu Asp Thr Thr
20 25 30
Leu Pro His Thr Ala His Pro Gln Ile Ile Gln Gln Gln Ile His Ile
35 40 45
Arg Asn Arg Ile Lys His Lys Val Arg Val Pro Leu Pro Lys Pro Ala
50 55 60
Gly Ile Pro Pro Leu Ala Lys Leu Gly Met Gln Arg Arg Leu Pro His
65 70 75 80
Gln Ile His Leu Leu Ala Leu Phe Val Gln Leu Leu Gly Ile Tyr Ile
85 90 95
Cys Val Val Val Val Leu Val Asp Arg Pro Gln Arg Thr Arg Thr Pro
100 105 110
Leu Arg Arg Ala Gln His Gly Thr Pro Ser Lys Glu Arg Ser Asp Pro
115 120 125
Gln Arg Leu His Leu Arg Gln Gln Arg Arg Val Asp Arg His Gly Asn
130 135 140
Pro His Lys Arg Gln Gly Ala Phe Pro Arg Gln Arg Ala Arg His His
145 150 155 160
Glu Ala Gly Gln Ala Glu Gly Met Arg Asp Gly Gly Gly Gly Ile Arg
165 170 175
Arg Glu Arg Gly Val Val Leu Gly Arg Gly Gly Leu Val Ala Gln Pro
180 185 190
Arg Glu Pro Thr Glu Asp Phe Phe Val Gly Gly Gly Glu Glu Ile Arg
195 200 205
Trp Asp Gly Val Cys Gly Pro Gly Glu Ala Ala Val Gly Leu Gln Ala
210 215 220
Gly Arg Glu Glu Val Glu Val Gly Gly Gly Phe Pro Ala Gly Gly Ala
225 230 235 240
Asp Glu Gly Val Gly Gly Glu Val Arg Ala Gly Gly Glu Val Asp Gly
245 250 255
Ser Leu Gly Glu Thr Gly Asp Val Gly Asp Val Asp Ala His Gly Ala
260 265 270
Gly Ala Asp Gln Leu Glu Glu Val Arg Trp Val Val Glu Asp Ala Glu
275 280 285
Ala Gly Gly Asp Pro Glu Gly Ala Asp Pro Gly Leu Glu Leu Gly Gly
290 295 300
Leu Arg Val Gly Val Val Ala Val Gln Leu Asp Asp Val Val Gly Glu
305 310 315 320

```
Asp Ala Pro Lys Arg Val Asp Asp Leu Ala Pro Glu Pro Gly Ala Val
                325                 330                 335
Gln Glu Ala Ala Asp Ala Arg Val Ala Val Gly Gly Ala Pro Asp Ala
            340                 345                 350
Gly Ala Glu Glu Gly Gln Glu Ala Arg Gly Asp Gln Leu Leu Glu Pro
        355                 360                 365
Leu Leu Gln Arg Gly Asp Val Arg Arg Arg His Pro Asp Gly Pro Val
    370                 375                 380
Thr Val Leu Ala Asp Asp Pro Val Asp Leu Arg Ala Arg Arg Gly Gly
385                 390                 395                 400
Arg Val Asp Gly Val Arg Leu Arg Pro Gln Gly Leu Glu Glu Pro Ala
                405                 410                 415
```

<210> 28353
<211> 108
<212> PRT
<213> A.fumigatus

<400> 28353

```
Ser Ala Phe Pro Ser Ile Pro Arg Val Glu Glu Leu Cys Pro Pro Tyr
1               5                   10                  15
Gly Leu Glu Gln Asn Trp Ser Asp Gly Pro Phe Glu Thr Ala Val Arg
            20                  25                  30
Thr Trp Tyr Trp Gly Arg Glu Lys Val Gly Pro Phe Ser Val Val Trp
        35                  40                  45
Phe Asp Met Leu Pro Ala Gly His Gly Thr Glu Val Val Ser Gly Tyr
    50                  55                  60
Val Ala Val Gly Met Glu Val Val Val Ser Val Arg Pro Trp Lys Asp
65                  70                  75                  80
Gly Trp Gln Leu His Ile Arg Gln Cys Val Arg Met Cys Arg Met Gly
                85                  90                  95
Phe Arg Val Phe Ile Gly Leu Gly Trp Arg Trp Met
            100                 105
```

<210> 28354
<211> 170
<212> PRT
<213> A.fumigatus

<400> 28354

```
Thr Ala Thr Thr Pro Thr Arg Arg Pro Pro Ser Ser Ser Pro Gly Ser
1               5                   10                  15
Ala Pro Ser Gly Ser Pro Pro Ala Ser Ala Ser Ser Thr Thr Gln Arg
            20                  25                  30
Thr Ser Ser Ser Trp Ser Ala Pro Ala Pro Cys Ala Ser Thr Ser Pro
        35                  40                  45
Thr Ser Pro Val Ser Pro Arg Glu Pro Ser Thr Ser Pro Pro Ala Arg
    50                  55                  60
Thr Ser Pro Pro Thr Pro Ser Ser Ala Pro Pro Ala Gly Lys Pro Pro
65                  70                  75                  80
Pro Thr Ser Thr Ser Ser Arg Pro Ala Trp Arg Pro Thr Ala Ala Ser
                85                  90                  95
Pro Gly Pro Gln Thr Pro Ser Gln Arg Ile Ser Ser Pro Pro Pro Thr
            100                 105                 110
Lys Lys Ser Ser Val Gly Ser Arg Gly Cys Ala Thr Ser Pro Pro Arg
        115                 120                 125
```

```
Pro Arg Thr Thr Pro Arg Ser Arg Arg Met Pro Pro Pro Pro Ser Arg
    130                 135                 140
Ile Pro Ser Ala Trp Pro Ala Ser Trp Cys Arg Ala Arg Trp Arg Gly
145                 150                 155                 160
Asn Ala Pro Trp Arg Leu Trp Gly Leu Pro
                165                 170
```

<210> 28355
<211> 364
<212> PRT
<213> A.fumigatus

<400> 28355

```
Ala Arg Val Leu Pro Ala Pro Val Val Glu Asp Gly Arg Arg Leu Arg
1               5                   10                  15
Gly Arg His Gly Gly Arg Ala Gly Arg Leu Gly His Pro Pro Glu Arg
            20                  25                  30
Ser Arg Ala Arg Leu Asp Gly Ala Ala Val Arg His Pro Ala Glu Glu
        35                  40                  45
Val Ala Arg Glu Ala Gly His His Ala Pro Pro Asp Leu Leu Gln Pro
    50                  55                  60
Leu His Leu Gly Arg Arg Arg Arg Leu Pro Ala His Pro Pro Leu Pro
65                  70                  75                  80
Ala Arg His Arg Ala Arg Ala Gln Asp Arg Arg Arg Val Leu Ala His
                85                  90                  95
Pro Arg Gln Arg Arg Arg Pro Ala Glu Pro Leu Arg Arg Pro Pro Gly
            100                 105                 110
Asp Arg Gln Ala Gln Ala Leu Asp Gln Pro Leu Leu Asp Arg Leu Arg
        115                 120                 125
Pro Gln His Pro Gln Leu Pro Asn Gly Leu Leu Arg Ala Gly Pro Leu
    130                 135                 140
Arg Arg Arg Ala Arg Pro Arg Arg Gln His His Pro Ser Arg Pro Gly
145                 150                 155                 160
Asn Arg Pro Pro Leu Leu Arg His Gly Pro Pro Leu Arg Arg Pro His
                165                 170                 175
Leu Leu His Arg Leu Glu Ser His Pro Gln Pro Arg Leu Pro Pro Ala
            180                 185                 190
Arg Leu Gly Asp Arg Leu Arg Leu Pro Leu Gly Arg Arg Pro His Pro
        195                 200                 205
Ser Gly Ser Pro Arg Arg Arg Arg Arg Arg Asn Pro Pro Ser Val Pro
    210                 215                 220
Ala Ala Ala Gln Pro Ala Arg Pro Ala Gln Gly Leu Arg Pro Ala Arg
225                 230                 235                 240
Ala Gly Cys Pro Arg His Arg Arg Ala Ser Leu Pro Pro Gly Pro Leu
                245                 250                 255
His Gly Ala Val Leu Val Gly Glu Gly Thr Leu Pro Gly Val Tyr Gly
            260                 265                 270
Asp Cys His Asp Asp Gln His Asp Val Ala Gly Ala Gly Ala Gly Ala
        275                 280                 285
Val Asp Arg Cys Val Leu Trp Arg Glu Ser Arg Val Ala His Asp Gly
    290                 295                 300
Ala Val Ser Ser Cys Ala Ala Gly Gly Arg Arg Glu Arg Arg Pro Arg
305                 310                 315                 320
Arg Cys Arg Cys Arg Glu Ala Gly Arg Lys Ala Arg Ala Asn Gly Ser
                325                 330                 335
Gly Val Gly Asp Gly Ala Ala Tyr Pro Val Trp Gln Val Ala Val Ser
```

```
            340                 345                 350
Arg Arg Val Trp Glu Ala Glu Pro Gly Leu Cys Val
        355                 360

<210> 28356
<211> 412
<212> PRT
<213> A.fumigatus

<400> 28356
Arg Gly Phe Phe Gln Pro Leu Trp Ser Lys Thr Asp Ala Val Tyr Ala
1               5                  10                  15
Ala Ala Thr Ala Gly Ala Gln Val Asp Trp Val Ile Arg Gln Asn Gly
            20                  25                  30
His Gly Pro Val Trp Met Ala Pro Pro Tyr Val Thr Pro Leu Lys Lys
        35                  40                  45
Trp Leu Glu Lys Leu Val Thr Thr Arg Leu Leu Thr Phe Phe Ser Pro
    50                  55                  60
Cys Ile Trp Gly Ala Ala Asp Gly Tyr Pro Arg Ile Arg Arg Phe Leu
65                  70                  75                  80
His Gly Thr Gly Leu Gly Arg Lys Ile Val Asp Ala Phe Trp Arg Ile
                85                  90                  95
Leu Ala Asn Asp Val Val Gln Leu Asn Arg Tyr Asp Ala His Pro Glu
            100                 105                 110
Thr Ala Lys Leu Lys Pro Trp Ile Ser Pro Phe Trp Ile Ala Ser Gly
        115                 120                 125
Leu Ser Ile Leu Asn Tyr Pro Thr Asp Phe Phe Glu Leu Val Arg Ser
    130                 135                 140
Gly Ala Val Arg Val His Val Ala Asn Ile Thr Arg Leu Ala Gln Gly
145                 150                 155                 160
Thr Val His Leu Ser Ser Gly Thr Asp Leu Pro Ser Asp Ala Leu Ile
                165                 170                 175
Cys Ser Thr Gly Trp Lys Ala Thr Pro Asn Leu Asp Phe Leu Pro Pro
            180                 185                 190
Gly Leu Glu Thr Asp Cys Gly Phe Pro Trp Ala Ala Asp Pro Ile Pro
        195                 200                 205
Ala Asp Leu Leu Ala Ala Ala Asp Glu Glu Ile Leu Arg Arg Phe Pro
    210                 215                 220
Arg Leu Arg Asn Gln Pro Ala Pro Pro Lys Asp Tyr Ala Pro Leu Ala
225                 230                 235                 240
Pro Asp Ala Pro Ala Thr Val Ala His Pro Phe Arg Leu Ala Arg Phe
                245                 250                 255
Met Val Pro Cys Ser Leu Ala Arg Glu Arg Ser Leu Ala Phe Met Gly
            260                 265                 270
Ile Ala Met Thr Ile Asn Thr Thr Leu Leu Ala Gln Val Gln Ala Leu
        275                 280                 285
Trp Ile Ala Ala Phe Phe Gly Gly Ser Pro Val Leu Arg Thr Thr Glu
    290                 295                 300
Arg Cys Pro Arg Ala Leu Arg Ala Val Asp Glu Asn Asp Asp His Ala
305                 310                 315                 320
Asp Val Asp Ala Glu Lys Leu Asp Glu Lys Arg Glu Gln Met Asp Leu
                325                 330                 335
Val Trp Glu Thr Ala Leu His Thr Gln Phe Gly Lys Trp Arg Tyr Pro
            340                 345                 350
Gly Gly Phe Gly Lys Arg Asn Pro Asp Phe Val Phe Asp Ala Ile Pro
        355                 360                 365
```

```
Tyr Val Asp Leu Leu Leu Asn Asp Leu Gly Val Ser Ser Val Arg Lys
    370                 375                 380
Ser Gly Ile Phe Gly Arg Val Leu Ser Pro Tyr Gly Met Glu Asp Tyr
385                 390                 395                 400
Arg Gly Leu Val Glu Glu Trp Met Ala Ala Arg Gln
                405                 410
```

<210> 28357
<211> 62
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (28),(29)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28357

```
Leu Arg Arg Tyr Ser Thr Ser Ser Pro His Leu Ser His Leu Gly Asn
1               5                   10                  15
Tyr Val Val Leu Tyr Glu Tyr Ile Asn Ala Arg Xaa Xaa Pro Ser Ser
            20                  25                  30
Tyr Leu Thr Leu Phe His Ile Ala Val Asn Asn Tyr Cys Asp Asp Ser
        35                  40                  45
Ser Leu Leu Met Ile Ile Thr Gly Ala Asp Cys Thr Asp Cys
    50                  55                  60
```

<210> 28358
<211> 411
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (406)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28358

```
Pro Met Arg His Pro Pro Phe Pro Leu Val Tyr Gln Leu Lys Thr Lys
1               5                   10                  15
Ser Tyr Thr Ala Cys Thr Asn His Leu Thr Tyr Asn Asn Leu Lys Thr
            20                  25                  30
Ala Thr Ile Arg Thr Ala Ser Asp Ala Asp Asp Asp Ala Gly Ser Asn
        35                  40                  45
Ser Asp Ile Asp Arg His Gly Val Asp Val Asp Asp Ala Arg Ala His
    50                  55                  60
Phe Leu Gly Ala Thr Val Asp Ala Arg Asp Val Asn Phe Ser Asp Ser
65                  70                  75                  80
Ile Ala Leu Lys Arg Lys Ser Tyr Arg Ser Lys Ser Arg Arg Arg Arg
                85                  90                  95
Arg Gly Pro Asp Gly Val Glu Asp Val Gly Asp Ala Ser Asp Thr Glu
            100                 105                 110
Glu Glu Ser Phe Glu Arg Lys Leu Ala Arg Leu Arg Arg Glu Val Glu
        115                 120                 125
Glu Leu Lys Asp Glu Met Ala Ser Arg Lys Ala Lys Ser Glu Ser Thr
    130                 135                 140
```

```
Glu Glu Pro Ala Gln Ala Val Asp Asp Gly Val Leu Glu Leu Ser Arg
145                 150                 155                 160
Ala Leu Asp Asn Leu His Gly Ser Ser Gln Asn Ala Ser Gly Ser His
                165                 170                 175
Ser Ala Ala Ala Val Leu Ser Arg Lys Leu Val Ser Thr Ser Ser Gln
            180                 185                 190
Gly Ile Pro Gly Glu Ser Lys Gly Ala Asp Gln Pro Ile Ala Thr Glu
        195                 200                 205
Asp Ala Val Thr Leu Ser Ser Ala Gly Val Leu Ala His Ala Ala Ala
    210                 215                 220
Phe Asp Gly Arg Leu Ala Leu Ile Glu Ala Ala Met Gly Ile Ser Ser
225                 230                 235                 240
Ser Ser Asn Pro Phe Val Ser Asp Gly Ile Ser Glu Pro Ala Leu Gln
                245                 250                 255
Pro Val Leu Pro Ala Leu Asp His Leu Thr Ser Arg Leu Ser Thr Leu
            260                 265                 270
Thr Asn Met Leu Ala Gly Pro Thr Pro Ala Ser Ala Val Pro Thr Thr
        275                 280                 285
Gly Ser Ala Pro Pro Ser Thr Thr Phe Thr Thr Thr His Leu Glu Ala
    290                 295                 300
Leu Ser Ser Arg Val Arg Arg Leu Thr Ala Asp Ala Asp Ala Leu Ala
305                 310                 315                 320
Ser Ala Arg Ile Arg Ala Val Asp Ala Ala Lys Ala Ala Gln Lys Ala
                325                 330                 335
Arg Ile Ala Thr Ser Thr Ile Glu Gln Ala Ser Asp Met Ser Val Ser
            340                 345                 350
Ser Gly Ser Gly Thr Glu Ile Glu Gln Ala Ala Ala Gln Arg Asp Glu
        355                 360                 365
Gln Ala Thr Lys Ile Gln Ala Leu Tyr Ala Asn Leu Pro Gln Tyr Pro
    370                 375                 380
Val Pro Phe Ile Leu Ser Leu Thr Ser Val Val Glu Pro Leu Thr Phe
385                 390                 395                 400
Pro Pro Trp Pro Ser Xaa Pro Gly Gly Ala His
                405                 410
```

<210> 28359
<211> 190
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (187)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28359

```
Val Thr Asp Lys Ala Glu Ser Pro Ser Val Tyr Cys Arg Asp Leu Ile
1               5                   10                  15
Ala Ile Leu Pro Ser Gly Cys Ala Ile Pro Tyr Arg Val Ala His Met
            20                  25                  30
Ala Pro Phe Thr Phe Leu Val Gly Ile Leu Ser Leu Cys Ile Cys Cys
        35                  40                  45
Ile Val Leu Gly Ala Ala Ala Glu Pro Ser Tyr Ala Val Val Glu Gln
    50                  55                  60
Leu Arg Asn Val Pro Asp Gly Trp Ile Lys His Asp Ala Ala Pro Ala
65                  70                  75                  80
```

```
Ser Glu Leu Ile Arg Phe Arg Leu Ala Met Asn Gln Glu Arg Thr Ala
                85                  90                  95
Glu Phe Glu Arg Arg Val Ile Asp Met Ser Thr Pro Gly His Ser Ser
            100                 105                 110
Tyr Gly Gln His Met Lys Arg Asp Asp Val Arg Glu Phe Leu Arg Pro
        115                 120                 125
Pro Glu Glu Val Ser Asp Lys Val Leu Ser Trp Leu Arg Ser Glu Asn
    130                 135                 140
Val Pro Ala Gly Ser Ile Glu Ser His Gly Asn Trp Val Thr Phe Thr
145                 150                 155                 160
Val Pro Val Ser Gln Ala Glu Arg Met Leu Arg Thr Arg Phe Leu Arg
                165                 170                 175
Leu Pro Pro Arg Trp Arg Gln Val Ser Thr Xaa Ser Ser Glu
            180                 185                 190
```

<210> 28360
<211> 90
<212> PRT
<213> A.fumigatus

```
<400> 28360
Lys Ala Tyr Ala Pro Thr Arg His Arg Tyr Thr Ala Leu Ser Leu Thr
1               5                   10                  15
Ala Ser Asn Val Cys Leu Lys Arg Pro Ser Ser Asp Asp Gly Val Leu
            20                  25                  30
Ser Ser Arg Leu Ser Lys Ser Phe Lys Phe Ser Thr Leu Met Ser Leu
        35                  40                  45
Ile Met Arg Arg Lys Lys Ser Ser His Pro Thr Arg Gln Ala Asn Ala
    50                  55                  60
Gly Ser Ser Pro Gly Lys Ala Gln Thr Asp Asn Arg Ala Ser Ala Val
65                  70                  75                  80
Ile Leu Leu Val Gln Ile Leu Ala Asn Lys
                85                  90
```

<210> 28361
<211> 68
<212> PRT
<213> A.fumigatus

```
<400> 28361
Tyr Ala Gly Phe Asn Gln Ala Lys Lys His Leu His Phe Ile Asn Ala
1               5                   10                  15
Met Arg Tyr Val Arg Ala Ser Met Val Ile Cys Ile Pro Phe Leu Thr
            20                  25                  30
Leu Tyr Ile Leu Gln Val Arg Thr Asp Ala Val Ile Ala Ala Val Tyr
        35                  40                  45
Ile Ser Arg Ser Cys Gly Val Ile Ser Arg Leu Ser Gly Pro Pro Arg
    50                  55                  60
Leu Pro Ser Pro
65
```

<210> 28362
<211> 396
<212> PRT
<213> A.fumigatus

<400> 28362
Ser Gln Asp Leu Gln Pro Ile Leu Lys Gln Gly Thr Glu Asn Lys Arg
1 5 10 15
Thr Val Asp Leu Thr Gln Pro His Ile Thr Arg Asn Met Asn Lys Asn
20 25 30
Asp Ser Val Ile Ile Ile Gly Ala Gly Ala Phe Gly Leu Ser Thr Ala
35 40 45
Leu Arg Leu Ala Gln Asp Gly Tyr Thr Ser Ile Thr Val Leu Asp Arg
50 55 60
Cys Met Pro Pro Val Pro Asp Gly Ser Ser Asn Asp Ile Ser Arg Val
65 70 75 80
Ile Arg Phe Asp Tyr Gly Asp Pro Val Tyr Ala Gln Ile Ala Lys Glu
85 90 95
Ala Tyr Asp Gln Trp Lys Thr Pro Gln Tyr Ser Glu Ala Phe His Gln
100 105 110
Thr Pro Cys Leu Trp Val Ser Gln Glu Gly Thr Leu Glu Gln Pro Val
115 120 125
Gln Pro Arg Ala Ala Glu Tyr Ser Arg Lys Thr Arg Gln Val Leu Thr
130 135 140
Glu Met Gly Gln Glu Trp His Ala Val Pro Ser Val Glu Glu Ala Lys
145 150 155 160
Arg Arg Phe Pro Ala Leu Ser Gly Lys Leu Ala Thr Pro Gly Phe Asp
165 170 175
Gly Phe Tyr Asn Thr Asn Ala Gly Trp Ala Asp Ala Gly Leu Ala Val
180 185 190
Gln Arg Leu Ala Ser Arg Cys Val Ala Ala Gly Val Ser Phe Ile Thr
195 200 205
Gly Pro Asn Gly His Val Val Glu Leu Glu Tyr Gly Arg Asp Gly Val
210 215 220
Val Asp Ala Val Arg Thr Ile Asn Gly Asn Arg Ile Thr Gly Asp Arg
225 230 235 240
Phe Ile Val Ala Thr Gly Ala Trp Thr Ala Ser Leu Ile Pro Ser Trp
245 250 255
Asn Ser Met Met Ala Thr Gly Gln Ile Val Gly Trp Leu Arg Leu Thr
260 265 270
Pro Glu Glu Met Val Arg Leu Lys Asp Leu Pro Ile Tyr Phe Asn Phe
275 280 285
Ser Thr Gly Phe Phe Cys Phe Pro Val His Glu Ala Thr Gly Tyr Leu
290 295 300
Lys Val Ala Val His Gly Phe Gly Tyr Thr Ser Pro His Pro Lys Ala
305 310 315 320
Val Ser Ala Pro Pro Ser Ser Ala Val Ser Ala Arg Ala Asn Phe Ile
325 330 335
Pro Ala Asp Gly Met Lys Arg Leu Leu Ala Gly Leu Arg Asp Ile Leu
340 345 350
Pro Glu Leu Ala Glu Arg Gly Phe Glu Lys Val Gly Leu Cys Trp Tyr
355 360 365
Asn Asp Thr Pro Thr Gly Asp Phe Ile Phe Asp Tyr His Pro Glu His
370 375 380
Lys Asn Leu Phe Ile Ala Thr Gly Gly Ser Gly Gln
385 390 395

<210> 28363
<211> 201
<212> PRT
<213> A.fumigatus

<400> 28363
Ser Ser Ser Asn Leu Arg His Glu Ser Ser Arg Ser Phe Leu Ala Leu
1 5 10 15
Thr Met Gly Ala Gly Arg Ser Arg Arg Pro Gln Val Cys Ala Gly Tyr
20 25 30
Ile Leu Glu Leu Gly Gln Val His Gly Lys Ile Leu Leu Gln Val Arg
35 40 45
Cys Ala Phe Ser Gly Leu Ile Arg Ile Asp Val Leu Thr Glu Ile Arg
50 55 60
Trp Pro Val Ile Val Gly Ile Ile Ile Gly Ala Val Ile Leu Ile Ser
65 70 75 80
Val Ile Ala Cys Val Ile Asn Cys Leu Cys Cys Gly Ile Gln Cys Cys
85 90 95
Thr Gly Cys Cys Arg Cys Cys Ser Cys Cys Cys Pro Ser Pro Arg Asn
100 105 110
Lys Ala Pro Arg Pro Lys Tyr Leu Asp Asp Pro Gly Tyr His Gln Pro
115 120 125
Pro Pro Met Pro Ala Asn Asp Gly Tyr Arg Ala Pro Pro Gly Pro Pro
130 135 140
Val Tyr Arg Gly Ala Gln Val Ala Arg Phe Glu Ser Thr Thr Ser Pro
145 150 155 160
Ala Pro Ala Lys Val Asn Glu Asp Ala Leu Pro Ala Met Pro Thr Trp
165 170 175
Asn Asp Ala Val Thr Arg Arg Val Glu Asp Asn Ser Pro Gln Asp Thr
180 185 190
Met Glu Met Glu Pro Leu Asn Pro Ala
195 200

<210> 28364
<211> 173
<212> PRT
<213> A.fumigatus

<400> 28364
Gln Asp Tyr Gln Arg Val Gln Ser Pro Arg Arg Phe Asn Ser Pro Gly
1 5 10 15
Gln Met Asp Val Pro Pro Val Arg Thr Gln Thr Ser Ser Pro Gly Tyr
20 25 30
Phe His Ala Ser Ser Pro Tyr Asp Asp Glu Arg Leu Tyr Gly His Asp
35 40 45
Ser Ser Gly Thr Tyr Asn Gln Ser Thr Thr Ser Pro Tyr Asp Arg Ala
50 55 60
Tyr His Asp Tyr Ser Pro Gln Asn Phe Ser Gln Pro Met Thr Arg Asn
65 70 75 80
Ala Ala Pro Tyr Ser Ser Gln Thr Gln Tyr Ser Asn Met Pro Thr Ala
85 90 95
Leu Ser Pro Ser Ala Glu Val Pro Arg His Leu Pro Tyr Arg Gln Pro
100 105 110
Ser Pro Gly Met Ser Ser Met Pro Pro Pro Ser Tyr Arg Gly Met Ser
115 120 125
Pro Asn Pro Pro Thr Ser Pro Pro Pro Pro Phe Ser Ala Thr Asn Pro
130 135 140
Val Pro Leu Glu Val Ser Asp Pro Gly Arg Pro Pro Ser Ile Leu Gln
145 150 155 160
Ser Gly Arg Lys Pro Ala Pro Asn Ser Tyr Arg Asn Val

165 170

<210> 28365
<211> 155
<212> PRT
<213> A.fumigatus

<400> 28365
Asp Ala Asn Phe His Lys Arg Gln Glu Leu Thr Ile Ser Leu Ala Asp
1 5 10 15
Ile Ile Asp Ser Lys Thr Gln Glu Ile Arg Ala Glu Asp Gly Glu Val
20 25 30
Tyr Ser Lys Met Gln Asp Leu Ala Asp Glu Leu Pro Glu Ser Ser Pro
35 40 45
Arg Phe Ile Leu Leu Ser Tyr Pro Leu Thr Leu Val Gly Gly Ile Cys
50 55 60
Ala Gly Gly Ser Asp Ala Pro Pro Leu Lys Ser Cys Ser Lys Asn Val
65 70 75 80
Arg Val Leu Glu Thr Asn Phe Phe Ser Ser His Gln Gly Ser Gly Arg
85 90 95
Leu Thr Val Pro Tyr Val Leu Leu Tyr Tyr Leu Pro Glu Asn Cys Asn
100 105 110
Pro Ser Met Arg Met Thr Tyr Ala Gly Ala Val Glu Leu Met Arg Asn
115 120 125
Thr Ala Glu Val Asn Arg Val Ile Glu Val Gln Asp Glu Asp Asp Ile
130 135 140
Leu Ser Ile Glu Ser Lys Leu Gln Gly Ser Asp
145 150 155

<210> 28366
<211> 83
<212> PRT
<213> A.fumigatus

<400> 28366
Cys Gln Gln Leu Gln Thr Ile Asp Thr Asn Ser Ala Phe Phe Ala Lys
1 5 10 15
Tyr Cys Phe Ser Leu Gly Ile Gln Leu Lys Arg Val Glu Val Ile Ala
20 25 30
Asp Asp Glu Asp Glu Ile Ile Glu Ala Val Arg Arg Met Ser Asn Asn
35 40 45
Tyr Asp Phe Val Val Thr Ser Gly Gly Ile Gly Pro Thr Ser Val His
50 55 60
Ala Leu Thr Tyr Thr Ser Leu Thr Thr Pro Ser Cys Tyr Ile Ala Ser
65 70 75 80
Val Gln Ser

<210> 28367
<211> 65
<212> PRT
<213> A.fumigatus

<400> 28367
Leu Ile Trp Arg Tyr Arg Pro Leu Ser Ser Phe Phe Ile Lys Ser Pro
1 5 10 15

```
Ser Thr Thr Ala Arg Leu Asp Asn Ser Leu Ile Tyr Pro Phe Leu Ser
            20                  25                  30
Ile Leu Leu Arg Tyr Leu Tyr Arg Ala Ser Ser Ser Ser Tyr Asn Ile
        35                  40                  45
Val Asn Lys Gly Leu Tyr Ser Ser Asn Phe Leu Leu Ser Ser Tyr Ile
    50                  55                  60
Leu
65

<210> 28368
<211> 176
<212> PRT
<213> A.fumigatus

<400> 28368
Arg Leu Ser Asp Ile Val Lys Val Arg Leu Gln Thr Thr Ser Glu Tyr
1               5                   10                  15
Lys Ser Ala Leu Asp Cys Ala Thr Arg Ile Phe Lys Asn Glu Gly Pro
            20                  25                  30
Leu Ala Phe Tyr Lys Gly Thr Leu Thr Pro Leu Ile Gly Ile Gly Ala
        35                  40                  45
Cys Val Arg Leu Arg Phe Asp Ser Leu Asp Ile Cys Leu Gln Glu Leu
    50                  55                  60
Ile Phe Cys Arg Ser Ala Tyr Asn Ser Val Arg Ser Met Lys Pro Glu
65                  70                  75                  80
Asp Gly Trp Arg Ser Ser Thr Arg Arg Asn Met Pro Ile Arg Pro Ser
                85                  90                  95
Pro Met Val Ser Thr Ile Trp Leu Glu Val Ser Arg Val Ser Pro Thr
            100                 105                 110
Pro Pro Ser Arg Asp Pro Leu Ser Met Ser Ala Ser Ala Cys Arg Arg
        115                 120                 125
Asn Leu Thr Ala Arg Pro Ala Cys Thr Ala Val Arg Ser Thr Ala Ser
    130                 135                 140
Gly Asn Ser Phe Leu Arg Glu Ala Cys Cys Ala Val Ser Thr Glu Ala
145                 150                 155                 160
Arg Met Ser Arg Ile Ser Glu Lys Pro Arg Pro Thr Val Pro Gly Phe
                165                 170                 175

<210> 28369
<211> 228
<212> PRT
<213> A.fumigatus

<400> 28369
His Leu Leu Ala Arg Thr His Ile Leu Gln Val Ser Val Gln Phe Gly
1               5                   10                  15
Ala Phe His Glu Ala Arg Arg Arg Leu Glu Glu Leu Asn Lys Lys Lys
            20                  25                  30
Tyr Ala Asp Pro Thr Leu Ser Tyr Gly Gln Tyr Tyr Leu Ala Gly Ser
        35                  40                  45
Phe Ala Gly Leu Thr Asn Ser Ala Leu Ser Gly Pro Ile Glu His Val
    50                  55                  60
Arg Ile Arg Leu Gln Thr Gln Pro His Gly Glu Ala Arg Leu Tyr Ser
65                  70                  75                  80
Gly Pro Leu Asp Cys Ile Arg Lys Leu Ile Ser Gln Gly Gly Val Leu
                85                  90                  95
```

```
Arg Gly Leu Tyr Arg Gly Gln Asn Val Thr Tyr Leu Arg Glu Ala Gln
            100                 105                 110
Ala Tyr Gly Thr Trp Phe Leu Thr Phe Glu Tyr Leu Met Asn Gln Asp
        115                 120                 125
Ala Lys Arg Asn Asn Ile Lys Arg Glu Glu Ile Ser Ser Ile Lys Val
    130                 135                 140
Ala Thr Tyr Gly Gly Leu Ala Gly Glu Val Leu Trp Leu Ser Ser Tyr
145                 150                 155                 160
Pro Phe Asp Val Val Lys Ser Lys Met Gln Cys Asp Gly Phe Gly Ala
                165                 170                 175
Gln Gln Gln Tyr Lys Ser Met Thr Asp Cys Phe Lys Lys Thr Phe Ala
            180                 185                 190
Thr Glu Gly Phe Gly Gly Phe Trp Lys Gly Leu Gly Pro Thr Leu Leu
        195                 200                 205
Arg Ala Met Pro Val Ser Ala Gly Thr Phe Ala Val Tyr Val Pro Leu
    210                 215                 220
Thr Ser Leu Ile
225
```

<210> 28370
<211> 60
<212> PRT
<213> A.fumigatus

```
<400> 28370
Leu Leu Lys Glu Glu Ser Leu Val Val Gly Met Pro Ile Tyr Tyr Val
1               5                   10                  15
Ser Thr Ala Thr Ala Met Val Asn Asn Ser Thr Glu Arg Ser Val Lys
            20                  25                  30
Cys Leu Pro Leu Phe Ser Tyr Gln Pro Phe Ser Leu Arg Cys Val Pro
        35                  40                  45
Arg Gly Arg Pro Ile Gly Tyr Ala Gln Ser Thr Gly
    50                  55                  60
```

<210> 28371
<211> 156
<212> PRT
<213> A.fumigatus

```
<400> 28371
Phe Gln Val Asn Ala Val Trp Ala Ser Leu Gly Ala Ser Ala Gly Ile
1               5                   10                  15
Ser Ile Leu Leu Ala Leu Leu Phe Ser Leu Phe Arg Pro Arg His Thr
            20                  25                  30
Leu Val Tyr Ala Pro Lys Val Lys His Ala Asp Arg Arg His Thr Pro
        35                  40                  45
Pro Pro Val Gly Lys Gly Phe Phe Ala Trp Met Arg Pro Val Leu Arg
    50                  55                  60
Thr Arg Glu Pro Glu Leu Val Glu Cys Ile Gly Leu Asp Ala Thr Val
65                  70                  75                  80
Phe Leu Arg Phe Thr Lys Met Cys Arg Asn Ile Phe Ile Ile Leu Ser
                85                  90                  95
Ile Ile Gly Cys Gly Val Met Ile Pro Val Asn Leu Thr Gln Ser Asn
            100                 105                 110
Gly Ser Gly Ile Ser Ser Leu Ser Ala Phe Ala Thr Met Thr Pro Leu
        115                 120                 125
```

```
Tyr Val Thr Thr Glu Ala Ile Trp Ser Gln Val Ile Cys Ala Trp Ala
    130                 135                 140
Phe Asp Ile Phe Thr Thr Arg Leu Glu Gly Thr Thr
145                 150                 155

<210> 28372
<211> 215
<212> PRT
<213> A.fumigatus

<400> 28372
His Met Thr Ser Ser Cys Thr Asn Asp Trp Arg Leu Ser Leu Val Asn
1               5                   10                  15
Ile Asn Ile Thr Gly Gly Gly Phe Pro Gly Thr Asn Thr Phe Ala Val
            20                  25                  30
Ser Phe Ser Phe Gln Ser Gln Ile Ile Leu Tyr Pro Val Ser Val Lys
        35                  40                  45
Ala Ser Met Asp Thr Trp Gln Arg Asn Ile Arg Met Met His Gln Val
    50                  55                  60
Gly Glu Phe Leu Asp Leu Asp Ser Thr Lys Ser Asp Met Val Ala Glu
65                  70                  75                  80
Phe Ile Ala Leu Ile Gln Ala Val Arg Glu Gly Leu Met Gln Ile Asp
                85                  90                  95
Asp Asn Phe Gln Ile Pro Asp Ala His Ile Asn Thr Leu Phe Leu Thr
            100                 105                 110
Lys Leu Lys Ser Arg Pro Gln Trp Lys Glu Trp Ala Thr Thr Met Leu
        115                 120                 125
Arg Asp Pro Arg Ile Thr Ala Ala Asn Ser Thr Glu His Val Thr Phe
    130                 135                 140
Gln Glu Leu Ala Ser Leu Ala Ile Glu Gln Glu Lys Ala Ile Gln Gln
145                 150                 155                 160
Gly Asp Ala Lys Gly Arg Asn Ala Ser Asp Asn Ala Ala Ser Val Ala
                165                 170                 175
Ala Thr Ser Asn Val Glu Ala Asn Pro Arg Ala Leu Thr Gln Asp Glu
            180                 185                 190
Ile Asn Ala Phe Val Val Lys Gln Met Asn Arg Leu His His Gly Ala
        195                 200                 205
Gly Arg Ile Asp Gly Gly Ala
    210                 215

<210> 28373
<211> 73
<212> PRT
<213> A.fumigatus

<400> 28373
Phe Asn Thr Cys Thr Tyr Trp Leu Leu Leu Ser Leu Tyr Phe Val Pro
1               5                   10                  15
Asn Pro Tyr Leu Val Gly Val Tyr Leu Ile Phe Phe Ile Ile Cys Asn
            20                  25                  30
Pro Leu Cys Leu Val Pro Ser Phe Ser Ala Pro Thr Glu Cys Asp Phe
        35                  40                  45
Pro Gly Cys Gly His Arg Pro Ser Asp Pro Pro Gly Gln Asn Arg Gln
    50                  55                  60
Gly Thr Arg Asn Pro Thr Met Glu Leu
65                  70
```

<210> 28374
<211> 83
<212> PRT
<213> A.fumigatus

<400> 28374
Thr Asn Phe Ser Tyr Lys Leu Ile Ser Arg Leu Ala Ser Ser Lys Phe
1 5 10 15
Ala Lys Ser Lys Thr Lys Thr Trp His Glu Ser Asp Asn Ser Ile Glu
20 25 30
Glu Glu His Leu Thr Arg Ser Cys Tyr Leu Ser Ala Ser Glu Gly Lys
35 40 45
Lys Glu Pro Tyr Asn Pro Asp Cys Leu Leu Ser Ala Leu Asn Ser Ile
50 55 60
Gln Tyr Ser Lys Leu Phe Glu Leu Asn His His Arg Lys Met Pro Ser
65 70 75 80
Ser Lys Leu

<210> 28375
<211> 361
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (49),(62)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28375
Met Tyr Leu Arg Gly Glu Gly Val Glu Gln Asn Phe Asn His Ala Leu
1 5 10 15
Thr Trp Phe Thr Arg Gly Leu Val Ile Gly Asp Ser Leu Cys Gln His
20 25 30
Glu Ile Gly Leu Met Tyr Leu His Gly Tyr Gly Val Pro Gln Asp Ala
35 40 45
Xaa Lys Ala Ala Ser Tyr Phe Lys Ser Ala Ala Asp Gln Xaa Tyr Pro
50 55 60
Ala Ser Glu Thr Arg Leu Gly Val Leu Phe Leu Asp Gln Gly Asp Val
65 70 75 80
Ala Thr Ala Thr Arg Tyr Phe Glu Leu Ala Ala Arg Trp Gly Ser Met
85 90 95
Glu Ala Phe Tyr Tyr Leu Ala Glu Leu Ser Asn Asn Gly Ile Gly Arg
100 105 110
Gln Arg His Cys Gly Met Ala Ala Ser Tyr Tyr Lys Met Val Ala Glu
115 120 125
Arg Ala Glu Ala Ile His Ser Ser Phe Ala Glu Ser Asn Ala Ala Tyr
130 135 140
Glu Arg Gly Asp Lys Glu Ala Ala Leu Ile Pro Ala Met Met Ala Ala
145 150 155 160
Glu Gln Gly Tyr Glu Ser Ala Gln Ala Asn Val Ala Phe Leu Leu Asp
165 170 175
Glu Gln Arg Ser Leu Leu Ser Leu Asp Thr Met Leu Pro Gly Ile Lys
180 185 190
Lys Ser Arg Pro Ser Leu Leu Arg Asn Ala Ala Leu Ala Leu Ile Tyr

```
        195                 200                 205
Trp Thr Arg Ser Ala Lys Gln Ala Asn Ile Asp Ser Leu Ile Lys Met
    210                 215                 220
Gly Asp Tyr Tyr Leu Ser Gly Thr Gly Ile Glu Ala Asp Pro Glu Lys
225                 230                 235                 240
Ala Ser Ile Cys Tyr His Thr Ala Ala Glu Ala His Tyr Ser Ala Gln
                245                 250                 255
Ala Tyr Trp Asn Leu Gly Trp Met His Glu Asn Gly Val Ala Val Glu
            260                 265                 270
Gln Asp Phe His Met Ala Lys Arg Tyr Tyr Asp Leu Ala Leu Glu Ala
        275                 280                 285
Asn Ala Gly Ala Tyr Leu Pro Val Lys Leu Ser Leu Ile Lys Leu Arg
    290                 295                 300
Ile Arg Ser Tyr Trp Asn Lys Ile Thr Asn Gly Lys Val Asn Ser Ile
305                 310                 315                 320
Arg Glu Glu Glu Gly Lys Gly Thr Gln Glu Asp Phe Phe Arg Leu Arg
                325                 330                 335
Leu Phe Asn Met Leu Thr Gly His Arg Arg Thr Lys Ala Ser Ser Asp
            340                 345                 350
Ile Gln Arg Val Asp Cys Gly Val Tyr
        355                 360
```

<210> 28376
<211> 159
<212> PRT
<213> A.fumigatus

<400> 28376

```
Leu His Arg Arg Arg Thr Ser Tyr Gln Ile Leu Leu Ser Gln Arg Phe
1               5                   10                  15
Arg Arg Glu Glu Arg Ala Leu Gln Ser Arg Leu Ser Ala Leu Arg Ser
            20                  25                  30
Glu Leu Asp Thr Val Gln Gln Ala Leu Arg Ile Glu Ser Ser Ser Lys
        35                  40                  45
Asp Ala Glu Leu Glu Ala Leu Ile Leu Lys Trp Lys Thr Val Ser Gln
    50                  55                  60
Glu Ala Ala Glu Glu Val Phe Glu Gly Ala Arg Glu Arg Val Ser Arg
65                  70                  75                  80
Met Gly Gly Met Lys Ala Trp Arg Glu Arg Met Gln Ser Asp Ser Ala
                85                  90                  95
Arg Arg Glu Gln Glu Glu Met Asn Leu Trp Tyr Gly Asn Ala Glu Ala
            100                 105                 110
Glu Gly Pro Glu Ile Asn Glu Glu Glu Leu Glu Gln Arg Lys Ala Glu
        115                 120                 125
Leu Leu Asp Glu Val Glu Met Pro Arg Lys Glu Gln Glu Val Val Ser
    130                 135                 140
Glu Arg Glu Ile Ala Glu Asp Glu Val Cys Leu Asn Gly Phe Leu
145                 150                 155
```

<210> 28377
<211> 60
<212> PRT
<213> A.fumigatus

<400> 28377

```
Ile Lys Glu Pro Tyr Thr Ser Gly Gly Ser Val Ser Thr Ala Ile Ser
```

```
1               5                   10                  15
Gly Ile Thr Leu Ser Ser Ile Pro Ile Leu Asn Pro Ser Ile Leu Lys
            20                  25                  30
Lys Gln Pro Leu Pro Met His Asp Lys Arg Gly Asp Cys Gln Ser Ala
        35                  40                  45
Leu Trp Lys Ala Ser Gln Tyr Arg Asp Gln Arg His
    50                  55                  60
```

<210> 28378
<211> 154
<212> PRT
<213> A.fumigatus

<400> 28378

```
Gly Val Ser Ile Leu Ser Ser Ser Gln Arg Asn Pro Phe Lys His Thr
1               5                   10                  15
Ser Ser Ser Ala Ile Ser Leu Ser Leu Thr Thr Ser Cys Ser Phe Arg
            20                  25                  30
Gly Ile Ser Thr Ser Ser Arg Ser Ser Ala Phe Arg Cys Ser Ser Ser
        35                  40                  45
Ser Ser Leu Ile Ser Gly Pro Ser Ala Ser Ala Leu Pro Tyr His Lys
    50                  55                  60
Phe Ile Ser Ser Cys Ser Arg Leu Ala Leu Ser Leu Cys Ile Arg Ser
65                  70                  75                  80
Leu Gln Ala Phe Ile Pro Pro Ile Arg Glu Thr Arg Ser Arg Ala Pro
                85                  90                  95
Ser Lys Thr Ser Ser Ala Ala Ser Trp Leu Thr Val Phe His Leu Arg
            100                 105                 110
Ile Arg Ala Ser Ser Ser Ala Ser Phe Asp Asp Asp Ser Ile Arg Arg
        115                 120                 125
Ala Cys Cys Thr Val Ser Ser Ser Glu Arg Arg Ala Asp Ser Leu Asp
    130                 135                 140
Cys Arg Ala Leu Ser Ser Leu Leu Lys Arg
145                 150
```

<210> 28379
<211> 212
<212> PRT
<213> A.fumigatus

<400> 28379

```
Ile Leu Val Asn Ala Gly Ser Gln Ser Tyr Lys Lys Ile Ile Ser Ser
1               5                   10                  15
Gly Asp Leu Glu Gln Ser Thr Ile Asn Arg Leu Ser His Thr Met Thr
            20                  25                  30
Thr Leu Pro Glu Ser Lys Met Ser Thr Thr Arg Tyr Thr Met Trp Tyr
        35                  40                  45
Trp Tyr Asp Gln Ser Cys Ala Phe Lys Thr Glu Asp Pro Asn Phe Ser
    50                  55                  60
Leu Asn Gln Leu Ser Lys Leu Val Asn Ala Val Gln Lys Glu Val Asn
65                  70                  75                  80
Asp Glu Thr Leu Val Leu Pro Ser Gln Gly Pro Ala Arg Pro Arg Gln
                85                  90                  95
Met Glu Val Ala Val Phe Phe Pro Thr Ser Asp Ala Asp Gln Gly Arg
            100                 105                 110
Phe Ser Arg Glu Thr Gly Thr Glu Leu Ile Asn Arg Lys Ala Arg Glu
```

```
        115                 120                 125
Leu Lys Leu Pro Cys Ser Asp Phe Val Ser Gln Ser Val Glu Asn Val
    130                 135                 140
Arg Ser Phe Thr Arg Gln Glu Ile Glu Arg Val Phe Ser Phe Ala Lys
145                 150                 155                 160
Leu Pro Pro Asn Leu Ile Lys Glu Ala Ser Glu Lys Ile Pro Ser Gly
                165                 170                 175
Gln Ser His Ser Gly Ile Tyr Met Thr Arg Arg Asp Leu Asn Arg Leu
            180                 185                 190
Thr Trp Leu Thr Gly Lys Ser Leu Ala Lys Glu Met Glu Ala Lys Leu
        195                 200                 205
Arg Gly Pro Pro
    210
```

<210> 28380
<211> 456
<212> PRT
<213> A.fumigatus

<400> 28380

```
Thr Ala Pro Trp Arg Phe Ser Val Thr Leu Phe Ser Met Ser Trp Ser
1               5                   10                  15
Trp Arg Cys Leu Asp Ser Glu Leu Leu Leu Ser Arg Leu Arg Ser Asn
            20                  25                  30
Leu Leu Ser Leu Phe Pro Pro Tyr Leu Asn Asp Pro Leu Arg Arg Gly
        35                  40                  45
His Arg Thr Asp Ser Thr Arg His Thr Arg His Lys Arg Ser Lys Ser
    50                  55                  60
Ala Leu Ala Leu Ala Ile Leu His Arg Asp Lys Ser Lys Asp Asn Asp
65                  70                  75                  80
Asp Leu Thr Gly Arg Glu Ser Gly Ser Leu Glu Ser Gly Ala Ser Ser
                85                  90                  95
Pro Ile Asn Ser Thr Ser Ser Phe Ser Leu Leu Ser His Lys Asn Ser
            100                 105                 110
Ile Pro Arg Lys Ser Pro Gln Glu Ala Lys Ser Pro Pro Met Asp Ser
        115                 120                 125
Glu Ala Ser Leu Glu Pro Pro Gly Ser Asn Asn Ser Ala Glu Asn Val
    130                 135                 140
Glu Lys Met Pro Thr Gln Ala Gln Ser Ala Ile Gly Ser Met Thr Leu
145                 150                 155                 160
Glu Gln Ser Val Arg Thr Phe Arg Leu Phe Glu Ile Leu Arg Ser Gly
                165                 170                 175
Asp Thr Asn Ala Ile Ser Lys Ala Ile Lys Glu Thr Arg Glu Pro Gln
            180                 185                 190
Gly Ala Gly Ala Leu Thr Gly Thr Thr Ile Leu His Leu Ala Ile Gln
        195                 200                 205
Cys Ala Glu Pro Gln Val Val Glu Phe Ile Leu Ser Leu Gly Asp Asp
    210                 215                 220
Leu Asp Ile Asn Ala Arg Asp Arg Asp Gly Asn Thr Pro Leu His Leu
225                 230                 235                 240
Ala Ala Gln Leu Gly Arg Gly Pro Leu Val Arg Glu Leu Leu Asn Arg
                245                 250                 255
Pro Ser Val Asn Asp Ser Ile Val Asn Tyr Arg Gly Gln Thr Ala Leu
            260                 265                 270
Asp Val Ala Arg Asn Pro Glu Ile Phe Gln Gln Leu Gln Leu Ala Arg
        275                 280                 285
```

```
Ser Leu Phe Ile Asp Ser Lys Thr Gln Glu Ile Gln Ser Leu Val Tyr
    290                 295                 300
Gln Gly Asp Tyr Asp Asn Leu Glu Arg Val Leu Glu Glu Pro Arg Val
305                 310                 315                 320
Glu Gly Ile Leu Asp Val Asn Ser Leu Asp Leu Val Thr Asp Pro Thr
                325                 330                 335
Thr Ala Gln Ser Gly Gly Thr Leu Leu His Glu Gly Ala Arg Lys Lys
            340                 345                 350
Asp Thr Arg Leu Ile Gln Ile Leu Leu Met His Gly Ala Asp Pro Phe
        355                 360                 365
Arg Arg Asp Lys Lys Gly Arg Leu Pro Gln Asp Val Thr Lys Asp Asp
    370                 375                 380
Lys Thr Arg Ala Ile Val Lys Lys Ser Pro Ala Ala Val Ile Ala Gln
385                 390                 395                 400
Arg Gly Ile Gln Glu Lys Ala Ile Leu Gly Ser Asn Pro Ala Gln Gly
                405                 410                 415
Val Ser Gly Arg Thr Gly Ala Gly Glu Ala Pro Leu Val Gly Lys Asp
            420                 425                 430
Ala Arg Glu Met Arg Gly Tyr Leu Lys Lys Trp Thr Asn Tyr Thr Ser
        435                 440                 445
Gly Tyr Lys Leu Arg Trp Leu Ser
    450                 455
```

<210> 28381
<211> 87
<212> PRT
<213> A.fumigatus

<400> 28381

```
Gln Cys Thr Glu Asn Thr Lys Lys Lys Ile Phe Thr Leu His Thr Ser
1               5                   10                  15
Lys Met Ser Leu Ala Asp Asp Val Asp Leu Asp Glu Phe Ile Asn Gln
            20                  25                  30
Lys Asp Asp Leu Ser Gly Ala Asp Ile Arg Ala Ile Cys Thr Glu Ala
        35                  40                  45
Gly Leu Met Ala Leu Arg Glu Arg Arg Met Arg Val Gln Met Asp Asp
    50                  55                  60
Phe Arg Ala Ala Arg Glu Arg Ile Met Lys Thr Lys Gln Asp Gly Gly
65                  70                  75                  80
Pro Val Glu Gly Leu Tyr Leu
                85
```

<210> 28382
<211> 233
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (39)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28382

```
Trp Ile Arg Arg Phe Lys Glu Ser Arg Glu Phe Val Gly Phe Gly Leu
1               5                   10                  15
Gly Ser Thr Arg Lys Leu Tyr Glu Glu Val Gly Ile Lys Pro Pro Lys
```

```
            20                  25                  30
Gly Val Ile Leu Tyr Val Xaa Pro Gly Thr Gly Lys Thr Trp Phe Ala
        35                  40                  45
Lys Ala Val Ala Asn Gln Thr Ser Ala Thr Phe Leu Arg Ile Val Gly
    50                  55                  60
Ser Glu Leu Ile Gln Asn Ile Leu Gly Asp Gly Leu Arg Leu Val Arg
65                  70                  75                  80
Gln Ile Phe Gln Val Ala Ala Glu His Ala Pro Ser Ile Val Phe Ile
                85                  90                  95
Asp Glu Ile Asp Ala Ile Gly Thr Lys Arg Tyr Asp Phe Thr Ser Gly
            100                 105                 110
Gly Glu Arg Glu Ile Gln Arg Thr Met Leu Glu Leu Leu Asn Gln Leu
        115                 120                 125
Asp Gly Phe Asp Asp Arg Gly Asp Val Lys Val Ile Met Ala Thr Asn
    130                 135                 140
Lys Ile Glu Thr Leu Asp Pro Ala Leu Ile Arg Pro Gly Arg Ile Asp
145                 150                 155                 160
Arg Lys Ile Leu Phe Glu Asn Pro Asp Arg Glu Tyr Pro Ala Lys Gln
                165                 170                 175
Leu Ala Val Val Ser Leu Thr Asp Asn Ala Gln Lys Ile Pro Arg Arg
            180                 185                 190
Arg Ser Ser Pro Phe Thr Arg Pro Arg Cys Pro Leu Arg Met Thr Leu
        195                 200                 205
Thr Ser Met Asn Ser Ser Thr Arg Lys Thr Ile Ser Leu Val Leu Ile
    210                 215                 220
Ser Glu Leu Phe Ala Gln Lys Pro Val
225                 230
```

<210> 28383
<211> 204
<212> PRT
<213> A.fumigatus

<400> 28383

```
Leu Ala Leu Asn Lys His Phe Ala Arg Ser Leu Ser Ile Thr Met Asp
1               5                   10                  15
Gly Phe Asp Glu Glu Ala Phe Lys Lys Phe Phe Pro Ser Ser Phe Gly
            20                  25                  30
Lys Gln Glu Lys Lys Leu Asp Val Asn Ala Gln Ile Asp Arg Thr Lys
        35                  40                  45
Arg Ser Lys Leu Ser Thr Glu Pro Asp Gly Asp Lys Glu Glu Val Thr
    50                  55                  60
Asp Asn Lys Pro Ala Val Glu Asp Gly Glu Ala Glu Asp Glu Thr Arg
65                  70                  75                  80
Gly His Asp Arg Lys Ala Asp Ser Glu Asp Asp Ser Asp Asp Asp Asp
                85                  90                  95
Ser Glu Glu Glu Glu Asp Glu Phe Pro Val Ser His Glu Leu Leu Ile
            100                 105                 110
Lys Thr His Glu Arg Ala Val Thr Thr Met Thr Val Asp Pro Ala Gly
        115                 120                 125
Ala Arg Leu Ile Thr Gly Ser Thr Asp Cys Thr Leu Lys Leu His Asp
    130                 135                 140
Phe Ala Ser Met Thr Pro Thr Thr Ile Arg Ala Phe Lys Ser Val Asp
145                 150                 155                 160
Pro Ser Ala Lys Lys Gln Ser Ala Ala Gln Glu Thr His Pro Val His
                165                 170                 175
```

```
Tyr Val Ala Phe Asn Pro Leu Ser Pro Ser His Val Met Val Val Ser
            180                 185                 190
Ala Thr Pro Gln Pro Arg Ile Leu Asp Arg Asp Gly
        195                 200
```

<210> 28384
<211> 158
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (156)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28384

```
Arg Ser Ser Ser Trp Tyr Phe Leu Cys Ile Val Ser Gln Gly Asn His
1               5                   10                  15
Ser Glu Leu Leu Ser Arg Val Leu Thr Val Trp Val Phe Glu Glu Asn
            20                  25                  30
Leu Ser Val Asn Thr Thr Arg Thr Asp Gln Gly Arg Ile Gln Ser Leu
        35                  40                  45
Asn Leu Val Cys Gly His Asn Asn Leu Tyr Ile Thr Thr Val Val Glu
    50                  55                  60
Thr Ile Gln Leu Val Lys Lys Leu Gln His Ser Thr Leu Asp Phe Ser
65                  70                  75                  80
Phe Thr Thr Arg Cys Lys Val Val Ala Leu Gly Thr Asp Gly Ile Asn
                85                  90                  95
Phe Ile Asp Glu Asp Asn Arg Gly Arg Met Leu Ser Ser Asp Leu Glu
            100                 105                 110
Asn Leu Ser His Gln Pro Lys Thr Ile Ser Gln Asn Ile Leu Asp Gln
        115                 120                 125
Leu Thr Ser Asp Asp Ser Lys Glu Ser Gly Ala Gly Leu Val Cys Asn
    130                 135                 140
Ser Leu Gly Lys Pro Ser Phe Thr Gly Thr Trp Xaa His Val
145                 150                 155
```

<210> 28385
<211> 185
<212> PRT
<213> A.fumigatus

<400> 28385

```
Arg Lys Ala Val Leu Leu Asn Leu Arg Ser His Lys Thr Pro Ile Asp
1               5                   10                  15
Glu Ile Pro Thr Leu Gln Ile Gln Ala Leu His Arg Thr Ala Ile Leu
            20                  25                  30
Leu Ser Leu His Asp Pro Phe Pro Cys Gly Thr Glu Ile Ile His Leu
        35                  40                  45
His Pro His Thr Ala Leu Ser Gln Arg His Gln Thr Gly Phe Cys Ala
    50                  55                  60
Asn Ser Ser Asp Ile Ser Thr Arg Glu Ile Val Phe Leu Val Asp Glu
65                  70                  75                  80
Phe Ile Glu Val Asn Val Ile Arg Lys Gly His Leu Gly Arg Val Lys
                85                  90                  95
Gly Glu Asp Leu Leu Leu Gly Ile Phe Cys Ala Leu Ser Val Lys Glu
```

```
            100                 105                 110
Thr Thr Ala Ser Cys Leu Ala Gly Tyr Ser Arg Ser Gly Phe Ser Lys
        115                 120                 125
Arg Ile Phe Arg Ser Ile Arg Pro Gly Arg Ile Lys Ala Gly Ser Arg
    130                 135                 140
Val Ser Ile Leu Phe Val Ala Ile Ile Thr Phe Thr Ser Pro Arg Ser
145                 150                 155                 160
Ser Lys Pro Ser Ser Trp Leu Arg Ser Ser Asn Ile Val Arg Trp Ile
                165                 170                 175
Ser Arg Ser Pro Pro Asp Val Lys Ser
            180                 185
```

<210> 28386
<211> 168
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (131)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28386

```
Ser Arg Arg Ser Arg His Gln Asn Arg Thr Pro Gln Gly Arg Arg Leu
1               5                   10                  15
Cys Pro Gln Leu Arg Gln Pro Arg Gln Arg Pro Leu Phe Thr Leu Cys
            20                  25                  30
Leu Asp Gln Pro Ile Gln Gly Lys Ser Gly Ala Arg Arg Gln Glu Cys
        35                  40                  45
Pro Arg Pro Pro His Thr His Ala Thr Ala Leu Pro His Arg Arg Leu
    50                  55                  60
Ser Pro Glu Pro Arg Pro Gly Ser Lys Arg Pro Thr Arg Pro Phe Ile
65                  70                  75                  80
Arg Arg Leu Ile Arg Lys Ala Ser Ile Ser Asp Arg Leu Gln His Leu
                85                  90                  95
Trp Leu Trp Ala Gly Trp Ala Leu Pro Arg Gln Glu Ser Val Arg Ser
            100                 105                 110
Pro His Ser Lys Arg Gly Gly Ser Pro Leu Arg His Gly Asp Gly His
        115                 120                 125
Arg Ala Xaa Lys Ser Trp Tyr Leu Asp Cys Gly Tyr Leu Arg Gly Gln
    130                 135                 140
Leu Arg Ile Leu Lys Tyr Pro Cys Cys Leu Val Arg Ala Gly Lys Arg
145                 150                 155                 160
Pro Arg Ala Pro Trp Thr Gln His
                165
```

<210> 28387
<211> 275
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (163)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28387
Arg Thr Ala Thr Lys Glu Ser Pro Leu Ser Gly Ile Thr Val Val Ser
1 5 10 15
Leu Glu Gln Ala Ile Ala Ala Pro Phe Cys Thr Arg Gln Leu Ala Asp
20 25 30
Leu Gly Ala Arg Val Ile Lys Ile Glu Arg Pro Lys Val Gly Asp Phe
35 40 45
Ala Arg Asn Tyr Asp Ser Arg Val Asn Gly Leu Ser Ser His Phe Val
50 55 60
Trp Thr Asn Arg Ser Lys Glu Ser Leu Ala Leu Asp Val Lys Asn Ala
65 70 75 80
Arg Asp His Arg Ile Leu Met Arg Leu Leu Ser Arg Thr Asp Val Leu
85 90 95
Val Gln Asn Leu Ala Pro Gly Ala Ser Ala Arg Leu Gly Leu Ser Phe
100 105 110
Ala Asp Leu Ser Glu Lys His Pro Ser Leu Ile Val Cys Asn Ile Ser
115 120 125
Gly Tyr Gly Pro Asp Gly Pro Tyr Arg Asp Lys Lys Ala Tyr Asp Leu
130 135 140
Leu Ile Gln Ser Glu Ala Gly Leu Leu Ser Val Thr Gly Thr Ala Thr
145 150 155 160
Glu Pro Xaa Lys Val Gly Ile Ser Ile Ala Asp Ile Cys Ala Gly Ser
165 170 175
Tyr Ala Tyr Ser Asn Ile Leu Ala Ala Leu Phe Glu Arg Glu Arg Asp
180 185 190
Pro Glu Arg Arg Gly Arg Asn Ile Asp Ile Ser Met Leu Glu Ser Met
195 200 205
Val Glu Trp Met Gly Phe Pro Met Tyr Tyr Thr Tyr Gly Asp Gln Pro
210 215 220
Gly Pro Thr Pro Ala Gly Ala Ala His Ala Ala Ile Tyr Pro Phe Gly
225 230 235 240
Pro Phe Glu Thr Gly Lys Gly Thr Val Met Leu Gly Ile Gln Asn Glu
245 250 255
Arg Glu Trp Ala Lys Phe Cys Glu Met Val Leu Glu Lys Pro Glu Met
260 265 270
Ile Asp Gly
275

<210> 28388
<211> 118
<212> PRT
<213> A.fumigatus

<400> 28388
Ser Thr Asp Glu Arg Phe Cys Asn Asn Ser Leu Arg Val Lys Asn Arg
1 5 10 15
Asp Ala Leu Arg Glu Thr Ile Cys Lys Val Phe Ala Ala Tyr Ser Ala
20 25 30
Glu Gly Val Leu Arg Arg Leu Asp Glu Ala Gly Ile Ala Asn Ala Ile
35 40 45
Val Asn Asp Met Gln Gly Val Trp Asn His Pro Gln Leu Arg Ala Arg
50 55 60
Gln Arg Trp Thr Gln Ile Gln Thr Pro Ala Gly Ala Val Pro Ala Leu
65 70 75 80
Phe Pro Pro Gly Thr Gly Pro Asp Gly Phe Glu Ala Gln Met Gly Ala
85 90 95

```
Val Pro Glu Ile Gly Gln His Asn Glu Ala Ile Leu Ala Glu Leu Gly
            100                 105                 110
Ile Asp Thr Asp Ile Glu
        115

<210> 28389
<211> 405
<212> PRT
<213> A.fumigatus

<400> 28389
Glu Pro Val Gln Ala Pro Ile Ile Gly Arg Lys Arg Lys Thr Lys Lys
1               5                  10                  15
Ala Pro Thr Ser Asn Ala Asp Ala Ser Asn Thr Ser Ala Asp Asn Ala
            20                  25                  30
Pro Glu Pro Thr Lys Val Ser Gln Pro Gly Pro Gln Glu Ala Ala Glu
        35                  40                  45
Arg Val Glu Pro Lys Thr Glu Glu Thr Lys Lys Asn Lys Gln Glu Lys
    50                  55                  60
Pro Pro Lys Pro His Ile Glu Glu Lys Gln Pro Val Ser Glu Asn Lys
65                  70                  75                  80
Pro Ala Glu Pro Trp Arg Ser Lys Asn Thr Leu Glu Gln Leu Ile Lys
                85                  90                  95
Asp Ser Glu Gln Ser Gly Val Ser Ile Lys Asp Leu Phe Leu Glu Arg
            100                 105                 110
Thr Ser Pro Leu Gln Val Leu Leu Ala Gln Leu His Lys Ala Gly Gln
        115                 120                 125
Leu Asp Leu Asn Asn His Pro Leu Phe Asn Pro Ser Asn Leu Ser Gln
    130                 135                 140
Arg Phe Asp Met Lys Cys Thr Ser Asp Asp Tyr Glu Leu Leu Lys Gln
145                 150                 155                 160
Pro Ile Glu Leu Thr Glu Glu His Arg Lys Ala Leu Leu Arg Gly Glu
                165                 170                 175
Pro Val Arg Leu His Ser Ser Ser Ser Gln Leu Lys Asp Arg Cys Leu
            180                 185                 190
Ile Thr Pro Arg Gly Cys Val Leu His His Leu Thr Pro Glu Glu Glu
        195                 200                 205
Asp Arg Tyr Leu Ala Leu Glu Lys Ser Met Glu Trp Thr Thr Glu Ser
    210                 215                 220
Phe Gln Glu Tyr Pro Ala Ala Leu Ile Thr Glu Pro Asp Val Thr Asn
225                 230                 235                 240
Arg Gly Gly Gly Leu Asp Ala Leu Phe Ala Thr Pro Glu Asn Phe Asn
                245                 250                 255
Ile Cys Trp Val Asp Glu Thr Thr Thr Asn Leu Ser Ser Ala Ala His
            260                 265                 270
Ala Gly Ser Pro Pro Ala Ala Asp Ala Ser Val Ser Ser Thr Ala Ser
        275                 280                 285
Ala Pro Pro Asn Val Leu Ser Thr Met Glu Ala Asp Ser Thr Arg Ser
    290                 295                 300
His Asn Trp Ala Ile Ala Ser Thr Ala Glu Leu Ala Asn Ala Thr Ala
305                 310                 315                 320
Ala Ser Val Arg Ser Phe Ala Ala Ala Thr Ala Lys His Met Leu Gly
                325                 330                 335
Ala Ala Gly Val Val Met Gly Thr Ile Pro Asp Leu Asp Asp Val Val
            340                 345                 350
Gly Met Thr Asp Glu Glu Leu Arg Ser Phe Ala Leu Lys Ser Gln Lys
```

```
        355                 360                 365
Asp Leu Glu Gly Ser Arg Lys Glu Leu Asp Ala Ile Asp Lys Lys Leu
    370                 375                 380
Ala Ala Leu Phe Lys Arg Asn Lys Lys Leu Ala Gln Gln Ala Leu Ala
385                 390                 395                 400
Thr Thr Val Glu Val
                405
```

<210> 28390
<211> 99
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (6)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28390

```
Glu Asp Trp Lys Arg Xaa Asp Asn Pro Ile Ile Arg Leu Arg Lys Trp
1               5                   10                  15
Leu Glu Asn Glu Gly Leu Trp Asn Glu Asp Met Glu Gln Glu Thr Arg
            20                  25                  30
Asp Gln Leu Arg Lys Ala Val Leu Lys Glu Phe Gly Asp Ala Glu Arg
        35                  40                  45
Glu Lys Lys Pro Pro Ile Arg Ala Ala Phe Glu Asp Val Tyr Asp Glu
    50                  55                  60
Leu Thr Glu Glu Ala Gln Glu Gln Met Lys Glu Leu Lys Arg Ile Leu
65                  70                  75                  80
Glu Thr Tyr Pro Glu Glu Tyr Asp Leu Arg Gln Tyr Glu Asp Gly Ile
                85                  90                  95
Lys Gly Leu
```

<210> 28391
<211> 506
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (496),(498)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28391

```
Gly Val Tyr Ala Asp Arg His Leu Val Val Lys Pro Arg Trp Pro Leu
1               5                   10                  15
Leu Phe Asn Ser Phe His Ser Leu Thr Gln Trp Ala Ser Ala Ile Arg
            20                  25                  30
Leu Ser Leu Phe Glu His Thr Ser Leu Tyr Glu Ala Tyr Thr Gly Ser
        35                  40                  45
Ile Ile Ala Gly Lys Gly Lys Asn Leu Asn Asn Ile Arg Ser Ile Leu
    50                  55                  60
Glu Arg Asn Arg Phe Lys Gln Glu Asp Trp Ala Arg Val Arg Phe Gly
65                  70                  75                  80
Ala Gly Thr Pro Trp Arg Arg Cys Trp Phe Val Ile Ser Pro Pro Asn
```

```
                85                  90                  95
Glu Lys Glu Tyr Gln Lys Ala Gln Lys Ser Leu Lys Lys Ser Ala Tyr
            100                 105                 110
Asp Arg Ala Pro Lys Leu Ala Thr Gly Asp Ile Lys Phe Tyr Asp Thr
        115                 120                 125
Arg Lys Thr Lys Lys Ala Lys Pro Ile Ala Thr Ile Thr Asp Ala Tyr
    130                 135                 140
Ala Ala Tyr Ala Ile Tyr Pro Gln Ser Lys Ala Leu Ile Asp Gln Ser
145                 150                 155                 160
Thr Leu Val Lys Ile Glu Gly Thr Val Thr Ile His Ser Asn Pro Glu
                165                 170                 175
Ser Thr Ser Glu Gly Phe Val Phe Val Met Pro Glu Val His Pro Ala
            180                 185                 190
Ile Ser Gly Phe Glu Met Met Val Arg Phe Leu Ile Pro Thr Phe Asp
        195                 200                 205
Thr Phe Asn Leu Tyr Gly Arg Pro Thr Arg Leu Ile Ala Ala Thr Asn
    210                 215                 220
His Val Lys Ser Ile Met Phe Ala Phe Thr Ser Gln Arg Arg Tyr Gly
225                 230                 235                 240
Tyr Leu Asp Val Leu Asp Val Ala Ser Leu Met Gln Met Pro Gly Ser
                245                 250                 255
His Ser Trp Thr Glu Ala Glu Trp Arg Lys Gln Leu Lys Asp Ala Thr
            260                 265                 270
Ala Gln Arg Met Ala Ala Ala Gly Ser Arg Thr Ser Ser Ile Ser Ser
        275                 280                 285
Arg Lys Pro Arg Tyr Arg Ala Ser Leu Pro Asn Arg Tyr Ser Asn Ala
    290                 295                 300
Pro Ala Gly Gly Pro Arg Asn Asn His Leu Leu Pro Glu Ser Arg Pro
305                 310                 315                 320
Glu Tyr Asn Gln Ser Ala Asp Ala Ile Leu Asn Glu Ser Gln Lys Glu
                325                 330                 335
Asp Ile Ala Ser Ser Tyr His Ser Arg Gly Tyr Ser Asp Thr Thr Gly
            340                 345                 350
Thr Glu Pro Met Gln Gln Arg Val Gln Ala Arg Val Met Glu Gly Ser
        355                 360                 365
Pro Ser Ser Ser Asp Gln Asp Leu Met Pro Val Glu Arg Gln Gln Ala
    370                 375                 380
Gly Thr Ala Ser Val Ser Asp Arg Ser Ser Glu Glu Gly Asp Trp Lys
385                 390                 395                 400
Gln Gln Val Asp Pro Pro Ala Thr Ala Val Gly Glu Asn Leu Arg Pro
                405                 410                 415
Gln Ser Pro Pro Asp Pro Val Ala Met Pro Pro Ala Phe Met His Ala
            420                 425                 430
Pro Gly Glu Thr Pro Ser Asn Arg Pro Leu Pro Ser Pro Asp Leu Arg
        435                 440                 445
Lys Ala Asn Asn Arg Met Ser Asp Gly Thr Leu Thr Gln Leu Ala Ala
    450                 455                 460
Ala Gly Lys Leu Asn Leu Ser Asn Leu Ala Leu Pro Ser Thr Thr Glu
465                 470                 475                 480
His Arg Val Gln Gly Leu His His Gly Ala Gly Arg Ile Asp Gly Xaa
                485                 490                 495
Ser Xaa Glu Ile His Thr Gly Phe Gln Ser
            500                 505
```

<210> 28392
<211> 77

<212> PRT
<213> A.fumigatus

<400> 28392
Phe His Ser Trp Ala Leu Ile Ile Thr Leu Gly Pro Ile Tyr Phe Leu
1 5 10 15
Asn Glu Asp Leu Ala Gln Ser Ser Ser Pro Tyr Tyr Ser Leu Leu Pro
20 25 30
Phe Cys Ser Phe Leu Leu Val Leu Ser Pro Gly Arg Val Gly Tyr Ile
35 40 45
Phe Asn Arg His Asp Leu Leu Leu Leu Phe Cys Leu Tyr Ala Ser Leu
50 55 60
Thr Ser Val Ile Leu Leu Lys Thr Leu Gly Pro Phe Asn
65 70 75

<210> 28393
<211> 60
<212> PRT
<213> A.fumigatus

<400> 28393
Leu Ser Val Leu Ser Asn Ser Tyr Gln Pro Gly Gly Ser Ser Gly Phe
1 5 10 15
Thr Lys Asp Lys Asp Pro Leu Ser Asp Pro Asp Ala Cys Leu Arg Asp
20 25 30
Ala Ala Leu Met Gln Arg Leu Gly Val Arg Phe Thr Gly Ser Leu Ser
35 40 45
Arg Phe Phe Trp Tyr Val Thr Tyr Ala Lys Val Gly
50 55 60

<210> 28394
<211> 66
<212> PRT
<213> A.fumigatus

<400> 28394
Val Leu Gln Asn Ser Gly Pro Asn Thr Asn Gly Cys Gln Phe Phe Ile
1 5 10 15
Thr Thr Thr Ala Thr Pro Phe Leu Asn Gly Lys His Val Val Phe Gly
20 25 30
Gln Val Val Asp Gly Met Asp Ile Val Arg Met Ile Glu Asn Thr Arg
35 40 45
Thr Ile Arg Asp Lys Pro Ser Gln Asp Val Ile Ile Thr Gln Cys Gly
50 55 60
Glu Met
65

<210> 28395
<211> 77
<212> PRT
<213> A.fumigatus

<400> 28395
His Ser Val Ala Ile Gly Val Pro Leu Gly Arg Ile Lys Met Glu Leu
1 5 10 15
Phe Ala Asp Val Thr Pro Arg Thr Ala Glu Asn Phe Arg Arg Phe Cys

```
            20                  25                  30
Thr Gly Glu Ser Lys Asn Ser Gln Gly Lys Pro Gln Gly Tyr Lys Asn
        35                  40                  45
Ser Lys Phe His Arg Val Val Arg Leu Gln Pro Phe Val Ser Ala Gln
    50                  55                  60
Lys Ala Asp Pro Lys Pro Leu Ser Arg Ser Lys Ile Leu
65                  70                  75

<210> 28396
<211> 62
<212> PRT
<213> A.fumigatus

<400> 28396
Val Asn Pro Gly Ile Val Glu Leu Trp Thr Val Leu Ser Ala Thr Glu
1               5                   10                  15
Leu Trp Ala Lys Tyr Lys Trp Leu Pro Val Leu His Asn Asn Tyr Ser
            20                  25                  30
Asp Pro Leu Leu Glu Trp Glu Ala Cys Arg Val Trp Ala Gly Ser Gly
        35                  40                  45
Trp His Gly Tyr Arg Ala Asp Asp Arg Lys Tyr Thr His Asp
    50                  55                  60

<210> 28397
<211> 461
<212> PRT
<213> A.fumigatus

<400> 28397
Glu Pro Lys Glu Gly Ser Lys Gly Gln Lys Lys Ser Ala Thr Gly Thr
1               5                   10                  15
Val Lys Leu Asp Phe His Asp Met Gly Lys Leu Glu Lys Met Lys Asn
            20                  25                  30
Val Pro Lys Thr Glu Asp Ser Ala Lys Phe Gly Lys Gly Asp Ile Thr
        35                  40                  45
Ala Glu Ile Lys Ala Ile Tyr His Gly Lys Asn Phe His Ser Ser Thr
    50                  55                  60
Ala Gln Ile Pro Asp Gly Glu Gln Ile Gly Ile Ile Leu Asp Arg Thr
65                  70                  75                  80
Asn Phe Tyr Ala Glu Gln Gly Gly Gln Glu Asn Asp Thr Gly Arg Ile
                85                  90                  95
Ile Ile Asp Gly Arg Ala Glu Leu Glu Val Gly Asp Val Gln Leu Tyr
            100                 105                 110
Ala Gly Tyr Val Leu His Thr Gly Phe Met Lys Tyr Gly Ser Phe Ser
        115                 120                 125
Ile Gly Asp Ala Val Leu Cys Glu Tyr Asp Glu Leu Arg Arg Trp Pro
    130                 135                 140
Ile Arg Asn Asn His Thr Gly Thr His Ile Leu Asn Phe Ala Leu Arg
145                 150                 155                 160
Arg Val Leu Gly Asp Ser Val Glu Gln Lys Gly Ser Leu Val Ala Ala
                165                 170                 175
Glu Lys Leu Arg Phe Asp Phe Ser His Lys Ser Ala Val Thr Glu Lys
            180                 185                 190
Glu Leu Glu Lys Ile Glu Glu Ile Ser Thr Glu Tyr Ile Arg Gln Asn
        195                 200                 205
Cys Asp Val Tyr Ser Gln Glu Val Pro Leu Ala Thr Ala Arg Arg Ile
```

```
    210                 215                 220
Ser Gly Val Arg Ala Val Phe Gly Glu Thr Tyr Pro Asp Pro Val Arg
225                 230                 235                 240
Val Val Ser Val Gly Val Glu Val Glu Glu Ile Leu Lys Asn Val Glu
                245                 250                 255
Asp Pro Arg Trp Leu Glu Val Ser Ile Glu Phe Cys Gly Gly Thr His
            260                 265                 270
Val Gln Lys Thr Gly Asp Ile Lys Asp Leu Ile Ile Leu Glu Glu Asn
        275                 280                 285
Gly Ile Ala Lys Gly Ile Arg Arg Ile Ile Ala Val Thr Gly Glu Asp
    290                 295                 300
Ala His Glu Val Gln Arg Val Ala Lys Glu Phe Glu Lys Arg Leu Asp
305                 310                 315                 320
Arg Leu Asp Ala Met Ala Leu Gly Pro Gln Lys Glu Gln Glu Ala Lys
                325                 330                 335
Gln Ile Gln Val Glu Leu Asn Gln Leu Ser Ile Ser Ala Val Gln Lys
            340                 345                 350
Ser Arg Phe Arg Glu Arg Phe Ala Ser Ile Asn Lys Gln Val Ile Asp
        355                 360                 365
Gly Gln Lys Ala Gln Gln Lys Leu Glu Thr Lys Lys Ala Leu Glu Ala
    370                 375                 380
Ile Ile Ser Tyr Phe Glu Ser Pro Thr Asn Glu Gly Lys Thr Cys Leu
385                 390                 395                 400
Val Thr Arg Leu Pro Ile Ser Ala Asn Pro Lys Ala Val Ser Glu Ser
                405                 410                 415
Leu Asn Tyr Val Lys Ser Lys Leu Gln Asp Lys Thr Val Tyr Val Leu
            420                 425                 430
Ala Ala Asp Leu Glu Gln Gly Arg Val Ala His Gly Cys Tyr Val Ser
        435                 440                 445
Lys Val Ser Leu Pro Ser Phe Phe Thr Tyr Gly Leu Gly
    450                 455                 460

<210> 28398
<211> 149
<212> PRT
<213> A.fumigatus

<400> 28398
Asn Lys Leu Tyr Leu Thr Ile Gly Arg Val Arg Ala Asn His Leu Tyr
1               5                   10                  15
Gly Tyr Pro Ser Tyr Phe Arg Ile Gly Lys Lys His Gly Leu Arg Pro
            20                  25                  30
Glu His Pro His Ile Ser Pro His Cys Val Met Ile Thr Ser Trp Leu
        35                  40                  45
Gly Leu Ser Leu Ile Val Arg Val Phe Ser Ile Ile Arg Thr Ile Ser
    50                  55                  60
Met Pro Ser Thr Thr Cys Pro Asn Thr Thr Cys Phe Pro Phe Lys Lys
65                  70                  75                  80
Gly Val Ala Val Val Val Met Lys Asn Trp Gln Pro Phe Val Phe Gly
                85                  90                  95
Pro Glu Phe Cys Ser Thr Gln His Arg Pro Gln Leu Asn Asn Thr Arg
            100                 105                 110
Val Asn Leu Arg Pro Cys Leu Arg His Leu Arg Gly Arg Ala Ser Arg
        115                 120                 125
Gln Ser Ser His Leu Gln Ile Trp Glu Cys His Ile Trp Tyr Lys Asn
    130                 135                 140
```

Leu Phe His Pro Arg
145

<210> 28399
<211> 384
<212> PRT
<213> A.fumigatus

<400> 28399
Asp Ala Cys Ala Glu Cys Arg Gln Ala Ala Val Ala Gly Cys Gly Gly
1 5 10 15
Met Gly Glu Met Val Pro Ala Gly Arg Gly Arg Gly Val Ile Gly Asp
20 25 30
Ala Gly Asp Leu Ala Ala Ala Ala Val Glu Leu Leu Asn Arg Ala Asp
35 40 45
Cys Met Phe Val Ala Ser Thr His Gly Ala Glu Asp Met Asp Thr Asn
50 55 60
Phe Arg Gly Gly Pro Pro Gly Phe Val Arg Leu Met Ser Asn Gly Pro
65 70 75 80
Ser Gly Ser Val Leu Val Tyr Pro Glu Tyr Ser Gly Asn Arg Leu Tyr
85 90 95
Gln Thr Leu Gly Asn Phe Gln Met Thr Pro Leu Ala Gly Tyr Phe Phe
100 105 110
Pro Asp Phe Asp Thr Gly Asn Ala Leu Tyr Val Thr Gly Thr Pro Glu
115 120 125
Ile Leu Ile Gly Lys Asp Ala Ala Asp Leu Leu Pro Arg Ser Asn Leu
130 135 140
Ala Val Lys Leu Thr Val Thr Ser Ala Arg Phe Val Glu Lys Ser Leu
145 150 155 160
Ala Phe Arg Gly Ile Ala Gly Pro Pro Ser Pro Tyr Thr Pro Thr Val
165 170 175
Arg Tyr Leu Ala Thr Glu Arg Val Asn Gln Val Ala Gln Phe Ser Asp
180 185 190
Asp Val Ser Val Thr Ala Thr Met Val Ala Lys Thr Ile Leu Thr Pro
195 200 205
Ser Ile Ala Arg Phe Arg Phe Arg Ile Ser Asp Pro Ser Lys Ile Gly
210 215 220
Ala Trp Ala Pro Gly Gln Tyr Ala Thr Phe Ser Phe Gln Glu Glu Leu
225 230 235 240
Asp Leu Gly Tyr Cys His Met Leu Asp Asp Asp Pro Leu Ser Leu Asn
245 250 255
Asp Asp Tyr Val Arg Thr Phe Thr Ile Ser Ser Tyr Pro Gly His Gly
260 265 270
Leu Pro Ala Asp Glu Phe Glu Ile Thr Val Arg Lys His Gly Asn Val
275 280 285
Thr Ser His Leu Phe Arg Thr Asn Glu Arg Ala Gly Leu Glu Val Pro
290 295 300
Leu Lys Gly Phe Gly Gly Gly Phe Arg Leu Asp Asp Gln Glu Gly Asp
305 310 315 320
Cys Thr Ile Pro Val Ile Ile Gly Gly Ile Gly Ile Thr Pro Val Ile
325 330 335
Ala Gln Leu Pro Gly Ile Ser Val Ser Arg Leu His Leu Leu Trp Thr
340 345 350
Ile Ser Met Ala Asp Val Gly Leu Val Phe Asp Thr Phe Gln Arg Phe
355 360 365
Pro Gln Leu Pro Gly Ser Thr Thr Leu Phe Leu Thr Gly Pro Lys Pro

370 375 380

<210> 28400
<211> 134
<212> PRT
<213> A.fumigatus

<400> 28400
Lys Leu Pro Arg Val Trp Tyr Asn Leu Leu Pro Glu Tyr Ser Gly Tyr
1 5 10 15
Thr Lys Thr Glu Pro Leu Gly Pro Leu Leu Ile Ser Arg Thr Lys Pro
20 25 30
Gly Gly Pro Pro Arg Lys Leu Val Ser Met Ser Ser Ala Pro Trp Val
35 40 45
Glu Ala Thr Asn Met Gln Ser Ala Arg Leu Ser Asn Ser Thr Ala Ala
50 55 60
Ala Ala Arg Ser Pro Ala Ser Pro Ile Thr Pro Arg Pro Arg Pro Ala
65 70 75 80
Gly Thr Ile Ser Pro Ile Pro Pro His Pro Ala Thr Ala Ala Cys Arg
85 90 95
His Ser Ala His Ala Ser His Arg Ala Ile Asp Met Ile Glu Ile Leu
100 105 110
Pro Arg His Pro Trp Met Asn Arg Asp Arg Cys Ala Ile Pro Leu Ser
115 120 125
Leu Trp Pro Trp Gln Ser
130

<210> 28401
<211> 560
<212> PRT
<213> A.fumigatus

<400> 28401
Tyr Leu Tyr Ile Ser Leu Thr Glu Leu Ser Glu Ile Gly Cys Phe Gly
1 5 10 15
Ala Phe Ser Arg Glu Arg Ile Ala Ile Gly Ile Asp Lys Gln Ile Ser
20 25 30
Asp Phe Asn Asp Pro Leu Leu Trp Pro Ala Gln Gly Ser Ala Ala Glu
35 40 45
Pro Asp Ala Asp Leu Cys Ser Thr Phe Thr Glu Glu Tyr Ile Asp Ile
50 55 60
Leu Pro Pro Asn Trp Asn Val Leu Ser Leu Ser Leu Ser Ala Asp Cys
65 70 75 80
Thr Glu Phe Ile Ile Ser Arg Leu Arg Lys Asp His Ser Pro Phe Leu
85 90 95
Leu Arg Leu Pro Leu Lys Arg Gly Asn Ala Glu Asp Asp Glu Asp Gln
100 105 110
Phe Thr Phe Glu Asp Gly Arg Arg Glu Met Gln Glu Ile Ile Arg Leu
115 120 125
Ala Asn Glu Thr Ala His Ala Ala Lys Leu Gln Lys Asp Arg His Ser
130 135 140
Lys Lys Glu Trp Trp Arg Asn Arg Glu Ala Leu Asn Gln Arg Leu Gln
145 150 155 160
Asn Leu Leu Gln Asn Ile Glu Asn Val Trp Phe Gly Gly Phe Arg Gly
165 170 175
Ile Phe Ser Pro Met Ala His Glu Gly Ala Ala Leu Ser Arg Phe Ala

```
            180                 185                 190
Thr Ser Phe Gln Asn Ile Leu Asp Lys His Leu Pro Ser Arg Gln Lys
        195                 200                 205
Gly Gly Arg Ser Ala Thr Pro Arg Leu Ser Leu His Arg Asn Val Leu
    210                 215                 220
Glu Leu Phe Val Gly Val Asn Asp Leu Glu Gly Gln Glu Asp Pro Glu
225                 230                 235                 240
Glu Thr Leu Met Asp Leu Leu Tyr Phe Val Val Asp Ile Leu Gln Phe
                245                 250                 255
Gln Gly Glu Arg Asn Ala Tyr Asp Glu Ile Asp Phe Asp Met Met Val
            260                 265                 270
Val Glu Thr Leu Asp Ala Val Arg Gly Tyr His Glu Ala Ala Arg Arg
        275                 280                 285
Leu Arg Glu Gly Gln Arg Pro Gln His Thr Val Leu Val Leu Asp Lys
    290                 295                 300
Ala Leu His Leu Phe Pro Trp Glu Ser Leu Pro Cys Leu Glu Gly Leu
305                 310                 315                 320
Pro Val Cys Arg Val Pro Ser Leu Glu Cys Leu Arg Glu Arg Ile Leu
                325                 330                 335
Gln Ser Glu Ser Val Ile Lys Leu Asn Gly Ser Glu Met Gly Phe Ala
            340                 345                 350
Ile Asp Arg Gly Asn Gly Thr Tyr Ile Leu Asn Pro Thr Gly Asp Leu
        355                 360                 365
Gln Thr Thr Gln Ala Thr Phe Glu Ala Asp Leu Gly Arg Leu Ala Thr
    370                 375                 380
Trp Thr Gly Ile Thr Lys Arg Glu Pro Thr Glu Glu Glu Phe Lys Asp
385                 390                 395                 400
Tyr Leu Glu Ser Lys Ser Leu Phe Leu Tyr Phe Gly His Gly Ser Gly
                405                 410                 415
Ala Gln Tyr Ile Arg Gly Arg Thr Ile Lys Arg Leu Asp Arg Cys Ala
            420                 425                 430
Val Thr Phe Leu Met Gly Cys Ser Ser Gly Thr Leu Thr Glu Ala Gly
        435                 440                 445
Glu Tyr Glu Pro Tyr Gly Thr Pro Met Asn Tyr Leu His Ala Gly Cys
    450                 455                 460
Pro Ala Leu Val Ala Thr Leu Trp Asp Val Thr Asp Lys Asp Ile Asp
465                 470                 475                 480
Arg Phe Ala Lys Ser Thr Phe Glu Lys Trp Gly Leu Ile Glu Asp Gln
                485                 490                 495
Asn Thr Asn Gly Glu Gln Ala Thr Leu Pro Ser Lys Gly Arg Ser Arg
            500                 505                 510
Ser Ala Lys Met Ser Ser Asn Thr Glu Ser Ser Asp Pro Val Met Leu
        515                 520                 525
Asp Glu Ala Val Ser Lys Ser Arg Ser Ala Cys Val Leu Lys Tyr Leu
    530                 535                 540
Asn Gly Ala Ala Pro Val Ile Tyr Gly Ile Pro Ser Val Phe Leu Glu
545                 550                 555                 560
```

<210> 28402
<211> 63
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (34)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28402

```
Tyr Ala Asn His Pro Leu Val Thr Gln His Asn Asn Val Ile Phe Asn
1               5                  10                  15
Lys Thr Ala Leu Ser Ser Phe Glu Leu His Leu Thr Glu Leu Gln Asn
            20                  25                  30
Val Xaa Asn Lys Val Ser Asn Lys Arg Ile Glu Trp Ser Cys Ser Ala
        35                  40                  45
Cys Val Leu Ser His Asp Glu Leu Arg Glu Gly Asn His Pro Leu
    50                  55                  60
```

<210> 28403
<211> 241
<212> PRT
<213> A.fumigatus

<400> 28403

```
Val Phe Gln Lys Glu Ala Phe Thr Phe His Ala Gly Val Ala Val Ile
1               5                  10                  15
Gly Ser Arg Arg Gln Ile Gln Lys Phe Thr Met Gly Thr Tyr Thr Lys
            20                  25                  30
Ile Phe Leu Gln Phe Asn Glu Thr Phe Trp Pro Ser Asn Thr Gln Tyr
        35                  40                  45
Phe Leu Tyr Ala Asp Pro Lys Leu Arg Gly Trp Tyr Pro Ile Trp Gln
    50                  55                  60
Ser Leu Ser Thr Pro Gly Phe Leu Pro Gly Ser Asn Ile Leu Phe Val
65                  70                  75                  80
Thr Val Thr Asn Glu Phe Ser Tyr His Val Glu Asn Gln Ser Asp Glu
                85                  90                  95
Glu Thr Lys Ala Glu Val Met Ala Val Leu Arg Lys Met Phe Pro Asp
            100                 105                 110
Lys Asp Val Pro Glu Pro Thr Ala Phe Met Tyr Pro Arg Trp Ser Thr
        115                 120                 125
Glu Pro Trp Ser Tyr Gly Ser Tyr Ser Asn Trp Pro Ala Ser Thr Gly
    130                 135                 140
Leu Glu Glu His Gln Asn Leu Arg Ala Asn Thr Gly Arg Leu Trp Phe
145                 150                 155                 160
Ala Gly Glu His Thr Ser Pro Ser Tyr Phe Gly Phe Leu His Gly Ala
                165                 170                 175
Tyr Phe Glu Gly Leu Asp Ala Gly Arg Gln Ile Ala Ala Leu Leu Gln
            180                 185                 190
Gly Arg Cys Val Tyr Tyr Asn Ser Thr Met Glu Arg Leu Cys Gly Pro
        195                 200                 205
Arg Arg His Phe Glu Thr Leu His Gly Ile Thr Pro Leu Ala Asp Tyr
    210                 215                 220
Ser Ala Val Asn Gly Trp Ile Ser Asn Ser Phe Tyr Asp Tyr Asn Asp
225                 230                 235                 240
Glu
```

<210> 28404
<211> 113
<212> PRT
<213> A.fumigatus

<400> 28404
Pro Leu Asn Leu Ser Gln Arg Thr Arg Pro Lys Ala Ser Cys Asn His
1 5 10 15
Ser Ser Gly His Arg Leu His Ser Ala Met Thr Glu Tyr Asp Tyr Ile
20 25 30
Ile Val Gly Ala Gly Ile Gly Gly Leu Val Leu Ala Asn Arg Leu Ser
35 40 45
Ala Asp Ala Ser Val Asn Val Leu Leu Ile Glu Ala Gly Ala Asn Arg
50 55 60
Met Gly Asp Pro Arg Ile Asp Thr Pro Gly Phe Leu Gly Met Leu Tyr
65 70 75 80
Gly Asn Pro Asp Phe Asp Trp Asp Tyr Met Ser Val Pro Gln Val Ser
85 90 95
Pro Leu Phe His Cys Ser Ile Tyr Gly Asn Asn Ala Thr Met Leu Ile
100 105 110
Val

<210> 28405
<211> 474
<212> PRT
<213> A.fumigatus

<400> 28405
Pro His Val Asn Asn Arg Gln Ile Ala Gln Pro Arg Gly Arg Val Val
1 5 10 15
Gly Gly Ser Ser Ala Leu Asn Phe Ser Val Val Leu Tyr Pro Pro Ala
20 25 30
Ser Asp Phe Glu Ala Trp Lys Ala Leu Gly Asn Gln Gly Trp Gly Ala
35 40 45
Glu Asp Met Ala Pro Tyr Leu Arg Lys Phe His Thr Phe Ser Pro Pro
50 55 60
Ser Lys Ser Thr Ala Asp Leu Leu Gly Val Asp Ser Tyr Met Lys Ala
65 70 75 80
Ser Ser Gln Gly Cys Asp Gly Pro Val Pro Val Ser Leu Pro Asp Val
85 90 95
Tyr Gly Pro Phe Asn Glu Ala Trp Asp Lys Thr Phe Glu Lys Leu Gly
100 105 110
Trp Arg Thr Asp Ala Asp Pro Ile Ala Gly Arg Lys Leu Gly Ala Phe
115 120 125
Thr Pro Pro Leu Thr Val Asp Ala Lys Thr Gly Lys Arg Gly Tyr Ala
130 135 140
Ala Ala Tyr Tyr Ser Pro Glu Val Ala Ala Arg Pro Asn Leu Arg Leu
145 150 155 160
Leu Ala Glu Thr Met Val Glu Arg Val Leu Leu Thr Arg Gln Asp Gly
165 170 175
Asp Val Leu Ala Thr Gly Val Leu Val Lys Asp Lys Asp Gly Ala Arg
180 185 190
Glu Ile His Ala Lys Lys Glu Val Ile Ile Cys Ala Gly Ser Leu Asn
195 200 205
Thr Pro Gln Ile Leu Glu Leu Ser Gly Ile Gly Asn Ala Gly Leu Leu
210 215 220
Gln Lys His Asp Ile Pro Val Val Ile Asp Asn Pro Gly Val Gly Glu
225 230 235 240
Asn Leu Gln Asp His Cys Ile Ser Cys Ile Ser Phe Glu Ile Ala Asp
245 250 255

```
Gly Gln Val Ser Gly Asp Ile Leu Arg Asp Pro Asn Val Val Gln Ala
            260                 265                 270
Leu Val Lys Leu Tyr Glu Glu Thr Arg Gly Gly Pro Leu Ala Gly Met
        275                 280                 285
Pro Ile Ser Val Ala Tyr Leu Pro Phe Val Asp Gly Arg Gly Val Val
    290                 295                 300
Pro Arg Pro Glu Val Glu Glu Leu Leu Ala Lys Tyr Leu Asp Ser Ala
305                 310                 315                 320
Ala Leu Pro Pro Asn Leu Gln Ala Gln Tyr Ala His Leu Arg Lys Ala
                325                 330                 335
Ile Leu Asp Asn Asp Thr Pro Ser Ser Glu Tyr Leu Phe Leu Pro Ala
            340                 345                 350
Gln Leu His Met Lys Pro Gly Ala Thr Ser Leu Pro Asp Val Leu Ala
        355                 360                 365
Lys Pro Leu Pro Glu Asn Tyr Ile Ser Ile Met Ile Leu His Asn His
    370                 375                 380
Pro Phe Ser Arg Gly Ser Val His Ile Ser Ser Pro Lys Ala Glu Asp
385                 390                 395                 400
Lys Pro Ile Tyr Asp Pro Asn Phe Leu Ser His Pro Leu Asp Leu Glu
                405                 410                 415
Ile Leu Ala Arg His Thr Gln Phe Leu Glu Thr Ile Ala Ala Thr Glu
            420                 425                 430
Pro Phe Lys Ser Leu Leu Lys Glu Arg Arg Ile Pro Glu Asn Ala Arg
        435                 440                 445
Asp Leu Gly Asp Leu Glu Arg Ala Asn Glu Leu Val Val Phe His Pro
    450                 455                 460
Gly Gly Arg Asp Met Pro Ala Met Glu Gly
465                 470

<210> 28406
<211> 103
<212> PRT
<213> A.fumigatus

<400> 28406
Asp Lys Met Val Ala Leu Tyr Asp Ala Phe Gly Phe Pro Ile Val Arg
1                   5                   10                  15
Asp Gln Leu Ile Ala Asn Thr Val Leu Val Ala Leu Ala Thr Leu Ala
            20                  25                  30
Val Leu Leu Arg Phe Ile Ser Arg His Ile Arg Lys Ser Lys Ile Trp
        35                  40                  45
Trp Asp Asp Gly Cys Cys Val Gly Ser Met Leu His Thr Tyr Gly Met
    50                  55                  60
Leu Ala Met His Tyr His Tyr Ala Arg Val Gly Met Arg Lys His Val
65                  70                  75                  80
Thr Glu Ile Pro Pro Glu Asn Leu Val Ala Met Leu Lys Met Leu Phe
                85                  90                  95
Val Tyr Gln Val Leu Tyr Tyr
            100

<210> 28407
<211> 190
<212> PRT
<213> A.fumigatus

<400> 28407
```

```
Gln Pro Cys Ile Ser Asn Ala Gly Glu Phe Gln Asp Leu Arg Arg Ile
1               5                  10                  15
Gln Ala Ala Gly Ala Asp Asn Asp Phe Phe Leu Cys Val Asn Leu Ser
            20                  25                  30
Arg Ala Ile Leu Val Leu Asp Gln His Ala Gly Gly Gln His Val Ser
        35                  40                  45
Val Leu Pro Gly Gln Gln His Pro Leu Asp His Gly Leu Cys Gln Gln
    50                  55                  60
Ala Gln Val Trp Pro Cys Gly His Leu Gly Gly Val Val Gly Arg Cys
65                  70                  75                  80
Ile Pro Pro Leu Pro Cys Leu Cys Val Asn Gly Gln Arg Arg Gly Glu
                85                  90                  95
Arg Thr Gln Phe Ala Ser Gly Asp Gly Ile Arg Val Arg Pro Pro Thr
            100                 105                 110
Lys Leu Leu Lys Arg Leu Ile Pro Arg Phe Val Glu Arg Pro Ile Tyr
        115                 120                 125
Val Arg Gln Gly Asn Arg His Arg Ala Val Thr Pro Leu Ala Ala Gly
    130                 135                 140
Phe His Val Ala Ile Asp Ala Glu Lys Val Gly Arg Gly Leu Ala Gly
145                 150                 155                 160
Arg Gly Glu Arg Val Lys Leu Pro Gln Val Arg Arg His Ile Leu Cys
                165                 170                 175
Ala Pro Ala Leu Val Ser Gln Arg Leu Pro Cys Leu Glu Val
            180                 185                 190

<210> 28408
<211> 68
<212> PRT
<213> A.fumigatus

<400> 28408
Asn Arg Arg Ala Leu Asn Ala Leu Asp Gly Glu Leu Ala Asn Cys His
1               5                  10                  15
Leu Val Leu Leu Val Lys Ala Lys Thr Ile Glu Asn Ala Glu Glu Cys
            20                  25                  30
Leu Phe Phe Ser Phe Arg Lys Glu Val Glu Ile Thr Thr Val Leu Tyr
        35                  40                  45
His Ile Val His Asn Val Tyr Phe Thr Phe Asn Thr Ser Asp Pro Leu
    50                  55                  60
Asn Leu Ile Ser
65

<210> 28409
<211> 299
<212> PRT
<213> A.fumigatus

<400> 28409
His Ser Ala Gly Cys Glu Gln Gln His Trp Ile Cys Ser Gly Gly Arg
1               5                  10                  15
His Lys Thr Thr Leu Ile Glu Ile Ala Gly Met Asp Ser Asn Thr Asp
            20                  25                  30
Pro Tyr Ser Glu Pro Pro Cys Pro Leu Gln Gln Leu Arg Thr Pro Ala
        35                  40                  45
Pro Ile Ser Pro Ser Thr Leu Asp Pro Thr Glu Pro Gly Ser Cys His
    50                  55                  60
```

```
Arg Glu Pro Ile Ser Ser Thr His Lys Thr Thr His Ser Pro Tyr Glu
65                  70                  75                  80
Val Trp Gly Cys Asp Ser Asn Ser Thr Asn Gly Leu Val Ser Pro Thr
                85                  90                  95
Thr Arg Pro Ser Glu Pro Asp Leu Phe Asn Gly Leu Ser Thr Leu Ile
            100                 105                 110
Pro Gly Leu Arg Arg Leu Asp Tyr Gly Ala Arg Ala Ala Thr Asn Ala
        115                 120                 125
Glu Arg Lys Ile Thr Phe Leu Asp Gly Cys Arg Leu Tyr Pro Lys Ala
    130                 135                 140
Met Ala Trp Ser Ala Val Val Ser Ser Thr Leu Ile Met Glu Gly Phe
145                 150                 155                 160
Asp Thr Leu Leu Leu Phe Thr Phe Phe Ser Leu Pro Ala Phe Lys Arg
                165                 170                 175
Tyr Tyr Gly Val Pro Ser Lys Asn Gly Asp Tyr Glu Ile Pro Ala Arg
            180                 185                 190
Trp Gln Phe Gly Leu Ser Thr Ala Ile Glu Val Gly Glu Ile Ala Gly
        195                 200                 205
Leu Leu Leu Asn Gly Leu Leu Ala Asp Arg Val Gly Tyr Arg Ile Thr
    210                 215                 220
Ile Ser Ala Ala Ile Val Leu Leu Phe Phe Cys Ile Leu Leu Pro Phe
225                 230                 235                 240
Phe Ala Val Asn Leu Gln Met Leu Leu Ala Gly Gln Ile Leu Cys Gly
                245                 250                 255
Ile Pro Trp Gly Val Phe Gln Thr Leu Thr Ile Asn Tyr Ala Ala Glu
            260                 265                 270
Val Met Pro Val Ala Leu Arg Ala Tyr Leu Leu Ser Ser Ile Asn Met
        275                 280                 285
Cys Trp Val Val Gly Gln Leu Leu Ala Thr Gly
    290                 295

<210> 28410
<211> 65
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (17),(25),(40),(42)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28410
His Pro Glu Arg Pro Ile Ile Arg Glu Arg Gly Met Thr Ile Ala Pro
1               5                   10                  15
Xaa Arg Phe Met Pro Ser Ser Ile Xaa Ile Leu Gly Val Arg Gln Ala
            20                  25                  30
Asp Glu Arg Phe Thr Val Lys Xaa Thr Xaa Asn Ile Ser Ser Gln Phe
        35                  40                  45
Glu Ser Phe Gly Met Lys Asn Glu Asn Glu Ala Tyr Glu Ser Val Ala
    50                  55                  60
Ser
65

<210> 28411
<211> 350
<212> PRT
```

<213> A.fumigatus

<400> 28411

```
Gly Ile Ala Phe His Leu His Arg Ser Ile Leu Val Tyr Gln Arg Lys
1               5                  10                  15
Phe Val Thr Ala Ser Trp Gln Leu Ser Ser Leu Tyr Ala Gly Phe Leu
            20                  25                  30
Ile Phe Leu Asn Arg Pro Ile Gln Pro His Leu Leu Thr Ser Thr Ala
        35                  40                  45
Gln Pro His Leu Pro His Cys Glu Arg Pro Asp Ala Thr Leu Ser Pro
    50                  55                  60
Met Thr Pro Thr Glu Gln Gln Glu Gln Glu Gln Pro Ser Pro Thr Ser
65                  70                  75                  80
Thr Thr Ile Met Pro Ala Ser Pro Ser Arg Thr Gly Thr Leu Leu Ala
                85                  90                  95
Asn Leu Ser Ser Val Thr Ser Arg Ile Ser Thr Ala Ala Leu Asn Ala
            100                 105                 110
Asn Arg Pro Ala Thr Lys Pro Ile Arg Leu Ile Ala Val Ser Lys Leu
        115                 120                 125
Lys Pro Ala Ala Asp Ile Leu Ala Leu His Asn Pro Pro Thr Asn His
    130                 135                 140
Leu His Phe Gly Glu Asn Tyr Leu Gln Glu Leu Leu Glu Lys Ser Lys
145                 150                 155                 160
Leu Leu Pro Pro Ser Ile Arg Trp His Phe Ile Gly Gly Leu Gln Ser
                165                 170                 175
Asn Lys Cys Val Thr Leu Ala Arg Asp Val Arg Gly Leu Trp Ala Val
            180                 185                 190
Glu Ser Val Asp Ser Glu Lys Lys Ala Ser Leu Leu Asp Arg Gly Trp
        195                 200                 205
Gly Glu Arg Ser Glu Glu Val Arg Gly Val Ala Leu Glu Asp Arg Leu
    210                 215                 220
Arg Val Phe Val Gln Val Asn Thr Ser Gly Glu Glu Asn Lys Ala Gly
225                 230                 235                 240
Val Asp Pro Val Ala Gly Ala Val Pro Leu Ala Arg Phe Ile Arg Glu
                245                 250                 255
Lys Cys Pro Arg Leu Lys Leu Gln Gly Val Met Thr Ile Gly Ala Ile
            260                 265                 270
Ala Arg Ser Lys Ala Thr Thr Pro Glu Thr Glu Asn Glu Asp Phe Val
        275                 280                 285
Cys Leu Arg Glu Thr Arg Asp Arg Ile Val Arg Glu Leu Gly Leu Gln
    290                 295                 300
Gly Asp Asp Ala Glu Leu Glu Leu Ser Met Gly Met Ser Glu Asp Phe
305                 310                 315                 320
Glu Gly Ala Ile Lys Leu Gly Ser Asp Glu Val Arg Val Gly Thr Thr
                325                 330                 335
Ile Phe Gly Glu Arg Pro Pro Lys Ser Glu Ala Lys Val Val
            340                 345                 350
```

<210> 28412
<211> 222
<212> PRT
<213> A.fumigatus

<400> 28412

```
Arg Arg Val Phe Pro Ala Arg Gly Glu Asp Ser Arg Lys Ser Ser Pro
1               5                  10                  15
```

```
Phe Ser Pro His Ile Ile Tyr Thr Thr Phe Ala Ser Asp Leu Gly Gly
            20                  25                  30
Arg Ser Pro Lys Ile Val Val Pro Thr Arg Thr Ser Ser Leu Pro Ser
        35                  40                  45
Leu Ile Ala Pro Ser Lys Ser Ser Leu Met Pro Ile Leu Ser Ser Ser
    50                  55                  60
Ser Ala Ser Ser Pro Cys Ser Pro Ser Ser Leu Thr Met Arg Ser Arg
65                  70                  75                  80
Val Ser Arg Lys His Thr Lys Ser Ser Phe Ser Val Ser Gly Val Val
                85                  90                  95
Ala Leu Asp Arg Ala Ile Ala Pro Ile Val Ile Thr Pro Cys Ser Phe
            100                 105                 110
Asn Arg Gly His Phe Ser Arg Met Asn Arg Ala Ser Gly Thr Ala Pro
        115                 120                 125
Ala Thr Gly Ser Thr Pro Ala Leu Phe Ser Ser Pro Glu Val Phe Thr
    130                 135                 140
Cys Thr Asn Thr Arg Ser Arg Ser Ser Ser Ala Thr Pro Arg Thr Ser
145                 150                 155                 160
Ser Asp Arg Ser Pro His Pro Leu Ser Ser Ser Glu Ala Phe Phe Ser
                165                 170                 175
Leu Ser Thr Asp Ser Thr Ala Gln Ser Pro Arg Thr Ser Arg Ala Ser
            180                 185                 190
Val Thr His Leu Phe Asp Cys Ser Pro Pro Met Lys Cys Gln Arg Ile
        195                 200                 205
Leu Gly Gly Arg Ser Leu Asp Phe Ser Arg Ser Ser Trp Arg
    210                 215                 220
```

<210> 28413
<211> 127
<212> PRT
<213> A.fumigatus

<400> 28413

```
Ser Ala Cys Ala Val Phe Arg Leu Leu Gly Glu Asp Glu Val Val Leu
1               5                   10                  15
Thr Gly Lys His Tyr Lys Ser Gly Gly Thr Ser Ala Ala Ser Pro Val
            20                  25                  30
Phe Ala Gly Ile Val Gly Leu Leu Asn Asp Ala Arg Leu Arg Ala Gly
        35                  40                  45
Lys Ser Thr Leu Gly Phe Leu Asn Pro Leu Leu Tyr Ser Ile Leu Ala
    50                  55                  60
Glu Gly Phe Thr Asp Ile Thr Ala Gly Ser Ser Ile Gly Cys Asn Gly
65                  70                  75                  80
Ile Asn Pro Gln Thr Gly Lys Pro Val Pro Gly Gly Gly Ile Ile Pro
                85                  90                  95
Tyr Ala His Trp Asn Ala Thr Ala Gly Trp Asp Pro Val Thr Gly Leu
            100                 105                 110
Gly Val Pro Asp Phe Met Lys Leu Lys Glu Leu Val Leu Ser Leu
        115                 120                 125
```

<210> 28414
<211> 60
<212> PRT
<213> A.fumigatus

<400> 28414

```
Ser Ser Ile Leu Tyr Pro Glu Glu Phe Gln Gly Arg Pro Asn Ile Asp
1               5                  10                  15
Trp Gln Lys Trp Ala Gly Leu Met Glu Gly Arg Arg Leu Arg Leu Leu
            20                  25                  30
Val Met Phe Ala Asp Ala Pro Arg Leu Val Asp Leu Ser Ile Arg His
        35                  40                  45
Arg Thr Leu Ala Ile Gln Arg His Arg Phe Ser Ala
    50                  55                  60
```

<210> 28415
<211> 192
<212> PRT
<213> A.fumigatus

<400> 28415

```
Ser Ile Tyr Ser Asp Ala Ala Thr Gly Val Leu Ile Pro Tyr Leu Gln
1               5                  10                  15
Pro Ala Tyr Asp Ile Gly Leu Leu Lys Val Ser Met Val Tyr Leu Ile
            20                  25                  30
Asn Phe Ala Gly Trp Leu Val Ala Ser Phe Ala Asn Ile His Val Cys
        35                  40                  45
Ser Arg Leu Gly Ser Gly Gly Thr Leu Val Val Gly Ala Thr Ile Gln
    50                  55                  60
Cys Phe Gly Tyr Val Leu Met Phe Trp Lys Pro Pro Tyr Pro Leu Phe
65                  70                  75                  80
Met Thr Ala Phe Phe Phe Thr Gly Met Gly Val Ala Phe Gln Asp Ala
                85                  90                  95
Gln Ala Asn Val Phe Thr Val Thr Val Arg Asn Ala His Arg Trp Leu
            100                 105                 110
Gly Ile Leu His Ala Val Tyr Gly Val Gly Thr Ile Ile Ala Pro Leu
        115                 120                 125
Ile Ala Asn Thr Ile Ala Ser Arg Thr Pro Tyr Trp His Tyr Tyr Tyr
    130                 135                 140
Leu Ala Met Phe Ile Leu Gly Val Ile Asn Val Val Leu Leu Ala Trp
145                 150                 155                 160
Thr Phe Arg Arg Gly Leu Phe Lys Pro Asn Val Ser Asn Ala Lys Asp
                165                 170                 175
Ala Asn Ala Glu Leu Ile Phe Pro Arg Gly Ala Asn Pro Pro Lys Leu
            180                 185                 190
```

<210> 28416
<211> 95
<212> PRT
<213> A.fumigatus

<400> 28416

```
Ala Ala Trp Thr Lys Pro Arg Gly Met Arg Ser Asp Leu Ser Arg Ile
1               5                  10                  15
Leu Ser Thr Cys Ala Thr Ser Ala Tyr Ile Ile Gly Ile Phe Ile Leu
            20                  25                  30
Lys Arg Phe Lys Pro Val His Tyr Ser Thr Leu Arg Leu Lys Asn Ala
        35                  40                  45
Ser Leu Phe Phe Ser Ser Ser Thr Arg Gly Thr Cys Thr Gln Ile Met
    50                  55                  60
Ser Met Ile Ala Gln Asp Tyr Asn Ala Asn Pro Lys Gln Gly Leu Gln
65                  70                  75                  80
```

Glu Asp Ile Gln Leu Phe Pro Arg Thr Leu Ser Phe Ser Pro Arg
85 90 95

<210> 28417
<211> 110
<212> PRT
<213> A.fumigatus

<400> 28417
Pro Ser Leu Val Ala Cys Phe Tyr Ile Arg Phe Pro Arg Thr Asn Gln
1 5 10 15
Asn Gly Asp Asp Tyr Tyr Arg Ala Val Tyr Leu Thr Glu Arg Thr Val
20 25 30
Arg Asp Leu Met Glu Lys Ile Ser Met Lys Gln Lys Ile Asp Pro Gln
35 40 45
Arg Ile Val Arg Val Leu His Val Lys Glu Asn Gly Leu Lys Ile Met
50 55 60
Val Asp Asp Asp Val Val Arg Glu Leu Pro Asp Gly Pro Lys Met Val
65 70 75 80
Val Glu Ile Ser Glu Ala Ser Ala Leu Asp Asn Ala Val Ala Asn Lys
85 90 95
Phe Asp His Leu Asn Ser Ala Val Glu Phe Lys Leu Ser Tyr
100 105 110

<210> 28418
<211> 66
<212> PRT
<213> A.fumigatus

<400> 28418
Thr Ser Ser Arg Ala Met Ile Pro Cys Arg Asn Met Ile Val Ser Leu
1 5 10 15
Ile Leu Phe Asp Phe Ile Asp Leu Ile His Leu Asp Ile Ser Ser Leu
20 25 30
His Val His Ile Phe Leu Thr Thr Ser Ser Thr Phe Leu Arg Thr Ile
35 40 45
Tyr Cys Thr Ile Phe Ala Leu Gly Leu Leu Asn Val Gln Ser His Ile
50 55 60
Ser Leu
65

<210> 28419
<211> 332
<212> PRT
<213> A.fumigatus

<400> 28419
Glu Ser Ala Ser Phe Asp Gly Phe Cys Val Thr Trp Thr Ala Asn Pro
1 5 10 15
Ala Thr Gly Val Pro Glu Cys Ala Ile Ser Val Arg Phe Asn Phe Leu
20 25 30
Ser Thr Asp Phe Ser His Ser Lys Gly Val Lys Gly Ile Pro Val Arg
35 40 45
Leu Cys Ala Lys Thr Glu Met Ile Gly Pro Glu Ser Ala Asp Ser Arg
50 55 60
Glu Ala Glu Val Cys Tyr Cys Lys Val Lys Leu Phe Arg Asp His Gly

65 70 75 80
Ala Glu Arg Lys Leu Ser Asn Asp Val Ala His Val Lys Lys Thr Ile
85 90 95
Glu Lys Leu Arg Gln Gln Ile Ala Gln Ala Gly Ile Gly Ala Gly Ser
100 105 110
Tyr Gly Lys Arg Lys Arg Ala Gly Asn Pro Ile Ser Leu Lys Asn Ser
115 120 125
Asp Gln Arg Pro Ala Lys Ile Ser Lys His Lys Arg Thr Trp Ser Met
130 135 140
Ser Ser Gln Asp Gly Asp Lys Leu Ser Val Glu Asp Asp Leu His Ala
145 150 155 160
Lys Leu Ala Met Leu Gln Asp Met Phe Ser Ser Thr Arg Pro Met Ser
165 170 175
Ile Leu Gly Leu Arg Gly Asp Glu Gln Asp Asp Pro Asp Leu Tyr Pro
180 185 190
Val Ile Leu Pro Gly Asp Ser Phe Asp Gln Val Lys Lys Glu Gly Ser
195 200 205
Ala Lys Pro Gly Asp Pro Arg Leu Ser Ile Asp Ala Ser Ala Tyr Thr
210 215 220
Leu Ser Pro Thr Ser Ser Asn Val Ser Ile Asn Ser Pro Cys His Pro
225 230 235 240
Pro Gln Leu Gln Gln Gln Gly His Phe Tyr Asp Ser Gly Tyr Gln Gly
245 250 255
Ser Met Gly Asn Ser Arg Asp Asn Ser Arg Pro Ser Ser Glu Phe Ser
260 265 270
Gly Glu Lys Met Ile Leu Lys His Pro Val Lys Val Gln Arg Ile Ser
275 280 285
Gly Gly Ser Asn Leu Pro Met Gly Tyr Ile Glu Ala Val Asp Ile Asp
290 295 300
Pro Thr Tyr Arg Pro Pro Ala Glu Arg Pro Gln Lys Pro Ser Lys Ser
305 310 315 320
Ser Thr Arg Ser Tyr Phe Glu Ala Lys Val Leu Thr
325 330

<210> 28420
<211> 74
<212> PRT
<213> A.fumigatus

<400> 28420
Thr Lys Gly Tyr Ser Thr Ile Ile Ile Asn Leu Thr Leu Leu Asn Ser
1 5 10 15
Thr Lys Tyr Ile Arg Ser Ile Ile Leu Leu Lys Val Trp His Thr Leu
20 25 30
Ala Leu Thr Tyr Asn Leu Ile Ser Ile Arg Lys Leu Ile Glu Leu Gly
35 40 45
Ile Asn Thr Ile Phe Arg Lys Asn Ser Ser Ile Lys Leu Ile Tyr Asn
50 55 60
Ser Leu Ile Lys Ala Phe Ala Lys Ile Ile
65 70

<210> 28421
<211> 95
<212> PRT
<213> A.fumigatus

<400> 28421
Ile Thr Leu Ala Val Asp Pro Ser Ser Pro Val Val Lys Thr Ile Asp
1 5 10 15
Cys Asp Gly Ala Asn Asn Ser Ala Gly Asp Cys Ala Asn Asp Pro Ser
20 25 30
Gly Gln Ser Met Thr Ala Phe Met Asp Thr Val Lys Gln Tyr Gly Ile
35 40 45
Ser Asp Leu Asp Ala Asn Ile His Pro Tyr Val Val Phe Gly Asn Ser
50 55 60
Gly Ser Ser Pro Thr Phe Asp Pro Gln Gln Tyr Gly Met Glu Pro Leu
65 70 75 80
Ser Val Met Ala Val Val Cys Asn Asn Gln Leu Val Cys Cys Tyr
85 90 95

<210> 28422
<211> 85
<212> PRT
<213> A.fumigatus

<400> 28422
Phe Tyr Gly Ile Trp Gly Asp Thr Asn Gly Gly Thr Ser Thr Gly Glu
1 5 10 15
Ala Ser Ile Ser Leu Ala Lys Leu Cys Phe Pro Asn Asp Gly Ile Thr
20 25 30
Gly Asp Asn Gly His Gly Glu Glu Asp Val Leu Tyr Ile Gly Phe Met
35 40 45
Gly Gln Asp Ala Val Pro Gly Ala Ser Ala Ala Trp Thr Ala Arg Asp
50 55 60
Thr Lys Thr Phe Glu Glu Ser Ile Lys Ala Leu Gly Asp Arg Leu Val
65 70 75 80
Ala Lys Leu Ser Ala
85

<210> 28423
<211> 164
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5),(13),(14),(16),(17),(18),(19),(25),(28),(29)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28423
Gly Pro Pro Pro Xaa Phe Leu Gly Ala Arg Leu Trp Xaa Xaa Leu Xaa
1 5 10 15
Xaa Xaa Xaa Thr Pro Arg Gly Lys Xaa Pro Ile Xaa Xaa Asn Arg Ala
20 25 30
Ile Val Leu Ala Ser Gln Asn Pro Gln Val Gln Phe His Val Val Asp
35 40 45
Asp Asp Pro Arg Leu Ile Thr Ala Trp Asn Ser Asp Arg Leu Pro Val
50 55 60
Val Glu Pro Gly Leu Asp Asp Leu Val Tyr Glu Asp His Ala Val Ala
65 70 75 80
Ser Asn Ile Pro Lys Lys Gln Ala Gly His Gln Leu Glu Thr His Gln
85 90 95

```
Ser Asp Leu Arg Gln Pro Arg Ile Arg Lys Leu Arg Asn Ile Thr Phe
            100                 105                 110
Ser Thr Asn Ile His Ala Gly Ile Ala Ala Ser Glu Ile Ile Phe Leu
        115                 120                 125
Cys Leu Asp Pro Pro Leu Asp His Val Gly Leu Pro His Pro Gln Pro
    130                 135                 140
Ala Gln Gln Ser Ile Leu Ile Pro Ser Pro Ala Pro Thr Met Arg Leu
145                 150                 155                 160
Pro Val Ser Thr
```

<210> 28424
<211> 318
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5),(6),(13)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28424

```
Tyr Ser Ser Arg Xaa Xaa His Pro Ile Pro Pro Pro Xaa Ser Ser Leu
1               5                   10                  15
Gln Pro Glu Phe Leu Val Pro Gly Ser Ala Ile Arg Asp Leu Leu Tyr
            20                  25                  30
Pro Val Arg Ile Ile Ile Gly His Ile Phe Ser Glu Asp Met Ser Pro
        35                  40                  45
Glu Ala Leu Thr Ala Leu Lys Gly Leu Tyr Ser Trp Ile Pro Glu Asp
    50                  55                  60
Arg Ile Val Thr Met Asp Ala Trp Ser Ser Glu Leu Gly Lys Ile Ala
65                  70                  75                  80
Ala Ser Ala Met Leu Ala Gln Gln Thr Ser Ser Ile Gln Ser Leu Arg
                85                  90                  95
Ala Ile Cys Glu Ser Thr Asn Ala Asn Ile Thr His Ile Glu Gln Thr
            100                 105                 110
Val Gly Thr Leu Ser Thr Thr Gly Tyr Gly Ser Ser Glu Ser Ile Leu
        115                 120                 125
Leu Arg Asp Val Gly Cys Leu Val Tyr Leu Ala Gln Glu Leu Gly Leu
    130                 135                 140
Pro Glu Val Ala Glu Tyr Trp Arg Ala Val Leu Arg Met Asp Ala Tyr
145                 150                 155                 160
His Thr Arg Arg Leu Ala Gln His Ile Thr Glu Ser Val Pro Ala Gly
                165                 170                 175
Thr Glu Arg Arg Asp Val Ala Ile Leu Gly Phe Ala Ser Lys Trp Asn
            180                 185                 190
Thr Ile Glu Ile Gly Asp Arg Ser Ala Thr Arg Leu Val Gln Glu Leu
        195                 200                 205
Thr Arg Thr Gly Val Lys Val Asp Ile Tyr Asp Pro His Val Ser Lys
    210                 215                 220
Glu Gln Ile Glu Arg Ala Leu Gly Leu Val Ser Gly His Leu Asp Ala
225                 230                 235                 240
Val Thr Val Val Glu Asp Leu His Ala Ala Cys Ser Gly Cys Gly Ala
                245                 250                 255
Val Val Leu His Thr Asp Trp Asp Glu Phe Lys Glu Asp Arg Leu Asp
            260                 265                 270
```

```
Trp Glu Lys Val Ala Gly Lys Met Glu Ser Pro Lys Ala Leu Cys Asp
        275                 280                 285
Pro His Gly Met Leu Asp Trp Gln Arg Met Glu Lys Leu Gly Phe Lys
    290                 295                 300
Val Leu Arg Pro Gly Val Asn Cys Ala Asn Lys Leu Gln Ala
305                 310                 315
```

<210> 28425
<211> 246
<212> PRT
<213> A.fumigatus

<400> 28425

```
Pro Pro Tyr Pro Phe Asn Leu Pro Pro Leu Leu Tyr Ala Ile Pro Thr
1               5                   10                  15
Asp Pro Phe Pro Arg Gly Ala Glu Ala Pro Arg Ile Pro Ser Pro Arg
            20                  25                  30
His Pro Ala Arg Arg Arg Ala Pro Phe Arg Ser Gln Tyr Asn Ala Thr
        35                  40                  45
Thr Ala Pro Thr Pro Ala Ala Ser Thr Lys Lys Lys Lys Leu Glu Lys
    50                  55                  60
Asn Asp Ala Thr Pro Asp Asp Pro Ser Ala Glu Ser Arg Pro Pro Ala
65                  70                  75                  80
Gly His Gln Ile Pro Phe Pro Pro Ser Thr Gln Leu Thr Trp Lys Val
                85                  90                  95
Asn Val Ser Gly Ser Pro Arg Ile Thr Phe Val Pro Trp Pro Ala Val
            100                 105                 110
Gln Gly Ser Arg Ala Ala Ser Glu Ile Ala Lys Ala Ala Ser Ser Ser
        115                 120                 125
Ser Thr Ser Leu Ser Phe Gly Ser Arg Pro Ser Asn Ser Gly Ile Glu
    130                 135                 140
Tyr Ala Val Pro Ala Thr Thr Tyr Pro Gly Leu Ala Cys Leu Leu Phe
145                 150                 155                 160
Arg Phe Leu Phe Leu Val Leu Glu Ala Asp Gly Ile Leu Cys Thr Thr
                165                 170                 175
Thr Phe Met Ser Val Gln Met Cys Arg Trp Leu Arg Cys Arg Val Pro
            180                 185                 190
Cys Arg Ala Lys Val Arg Gly Val Tyr Ala Gly Pro Pro Leu Ser Arg
        195                 200                 205
Gly Glu Arg Ser Val Phe Ser Leu Phe Leu Ala Ser Gly Asp Glu Pro
    210                 215                 220
Ala Cys Ala Glu Val Val Arg Gly Ala Val Gly Thr Arg Gln Ala Ser
225                 230                 235                 240
Gly Thr Ser Glu Trp Thr
                245
```

<210> 28426
<211> 334
<212> PRT
<213> A.fumigatus

<400> 28426

```
Asn Val Ser Ala Asn Ser Ser Leu Pro Val Gln Ile Thr Asp Asn Leu
1               5                   10                  15
Gly Lys Leu Gln Tyr Ile Pro Phe Pro Thr Cys Asn Glu Thr Phe Leu
            20                  25                  30
```

```
Pro Leu Ala Leu Arg Tyr Gly Val Thr Glu Thr Val Asn Cys Thr Ile
        35                  40                  45
Ser Ser Leu Pro Asp Glu Leu Tyr His Leu Leu Glu Tyr Tyr Val His
    50                  55                  60
Ser Asp Val Pro Leu Ala Cys Arg Val Pro Thr Ala Pro Leu Thr Thr
65                  70                  75                  80
Ser Ala Gln Ala Gly Ser Ser Pro Asp Ala Lys Lys Ser Glu Asn Thr
                85                  90                  95
Asp Leu Ser Pro Leu Asp Asn Gly Gly Pro Ala Tyr Thr Pro Leu Thr
            100                 105                 110
Phe Ala Leu Gln Gly Thr Leu Gln Arg Ser His Leu His Ile Trp Thr
        115                 120                 125
Asp Met Asn Val Val Val His Asn Ile Pro Ser Ala Ser Lys Thr Lys
    130                 135                 140
Lys Arg Asn Arg Lys Ser Lys His Ala Ser Pro Gly Tyr Val Val Ala
145                 150                 155                 160
Gly Thr Ala Tyr Ser Ile Pro Glu Phe Asp Gly Leu Leu Pro Lys Asp
                165                 170                 175
Lys Asp Val Asp Glu Asp Asp Ala Ala Leu Ala Ile Ser Glu Ala Ala
            180                 185                 190
Arg Asp Pro Trp Thr Ala Gly His Gly Thr Lys Val Ile Arg Gly Glu
        195                 200                 205
Pro Leu Thr Phe Thr Phe His Val Ser Trp Val Glu Gly Gly Lys Gly
    210                 215                 220
Ile Trp Trp Pro Ala Gly Gly Leu Asp Ser Ala Glu Gly Ser Ser Gly
225                 230                 235                 240
Val Ala Ser Phe Phe Ser Ser Phe Phe Phe Phe Val Leu Ala Ala Gly
                245                 250                 255
Val Gly Ala Val Val Ala Leu Tyr Trp Glu Arg Asn Gly Ala Arg Arg
            260                 265                 270
Arg Ala Gly Trp Arg Gly Asp Gly Ile Leu Gly Ala Ser Ala Pro Arg
        275                 280                 285
Gly Lys Gly Ser Val Gly Ile Ala Tyr Ser Asn Gly Gly Lys Leu Asn
    290                 295                 300
Gly Tyr Gly Gly Tyr Ser Pro Ser Ser Thr Pro Ser Val Val Ala Ala
305                 310                 315                 320
Gly Gly Gly Gly Tyr Gly Tyr Gly Gly Tyr Gly Lys Lys Asp
                325                 330
```

<210> 28427
<211> 271
<212> PRT
<213> A.fumigatus

<400> 28427

```
Arg Arg Asp Arg Pro His Pro Arg His Ala Asn Leu Arg Ala Glu Pro
1               5                   10                  15
Gln Arg Pro Ser Ser Ala Asp Ile Ser Thr Lys Ser Val Thr Pro Thr
            20                  25                  30
Val Thr Pro Lys Leu Glu Ala Ala Thr Pro Ala Pro Ala Ser Ala Arg
        35                  40                  45
Pro Thr Ala Pro Gln Lys Pro Gly Ser Ala Tyr Pro Pro Val Gln Ala
    50                  55                  60
Ser Thr Ile Asp Val Asn Ala Asn Pro Val His Pro Ser Thr Gly Lys
65                  70                  75                  80
Pro Ile Leu Ser Thr Asp Met Asp Ser Asp Phe Pro Thr Glu Asp Asp
```

```
                85                  90                  95
Lys Pro Trp Arg Arg Pro Gly Ser Asp Ile Ser Asp Tyr Phe Asn Tyr
            100                 105                 110
Gly Phe Asp Glu Phe Thr Trp Ala Ser Tyr Val Leu Lys Gln Gln Glu
        115                 120                 125
Leu Arg Lys Glu Val Gln Asp Gln Lys Lys Gln Leu Asp Asp Met Gln
    130                 135                 140
Asn Phe Leu Thr Met Gly Leu Pro Pro Ile Pro Gly Ala Pro Gly Pro
145                 150                 155                 160
Ala Ala Pro Pro Gly Ser Ala Pro Pro Ala Leu Pro Gly Met Pro Gly
                165                 170                 175
Met Pro Asp Ile Ala Pro Asp Met Met Gln Gly Met Leu Ala Ser Met
            180                 185                 190
Met Ser Gln Gly Met Asp Pro Ser Ser Met Asp Pro Met Ser Phe Met
        195                 200                 205
Gln His Ala Gln Ala Met Met Gly Arg Pro Arg Trp Cys Trp Arg Arg
    210                 215                 220
Ala Ala Ala Arg Pro Ala Trp Val Arg Arg Pro Val Ala Lys Phe Gly
225                 230                 235                 240
Ile Trp Arg Thr Arg Trp Arg Pro Ala Ser Tyr Gly Ile Trp Arg Leu
                245                 250                 255
Arg Thr Glu Lys Trp Phe Trp Arg Ser Gly Thr Lys Glu Lys Met
            260                 265                 270
```

<210> 28428
<211> 116
<212> PRT
<213> A.fumigatus

<400> 28428

```
Leu Ile His Trp Asp Met Leu Leu Ser Val Ile Ser Cys Leu Tyr Gln
1               5                   10                  15
Ser Val Leu Arg Asn Ile Lys Asn Leu Ala Pro Leu Leu Asp Arg Val
            20                  25                  30
Leu Val Gln Arg Ile Lys Pro Glu Ala Lys Thr Ala Ser Gly Ile Phe
        35                  40                  45
Leu Pro Glu Ser Ser Val Lys Glu Gln Asn Glu Ala Lys Val Leu Ala
    50                  55                  60
Val Gly Pro Gly Ala Val Asp Arg Asn Gly Gln Arg Ile Pro Met Ser
65                  70                  75                  80
Val Ala Ala Gly Asp Lys Val Leu Ile Pro Gln Val Arg Thr Gly Arg
                85                  90                  95
Phe Gly Cys Phe Ile Ser Gly Arg Ile Arg Cys Ala Thr Asp Ile Gly
            100                 105                 110
Phe Phe Cys Arg
        115
```

<210> 28429
<211> 169
<212> PRT
<213> A.fumigatus

<400> 28429

```
Ser Ile Thr Phe Ser Thr Asn Phe Arg Tyr Leu Asp Gln Phe Asp Asn
1               5                   10                  15
Glu Glu Gly Glu Glu Tyr Glu Ala Ser Asn Phe Gly Gly Phe Gly Asp
```

```
            20                  25                  30
Tyr Met Arg Arg Lys Lys Leu Lys Leu Gln Asn Leu Asp Ala Glu Ile
        35                  40                  45
Arg Ser Ser Ser Pro Asp Arg Pro Pro Ile Phe Arg Gly Val Val Ala
    50                  55                  60
His Val Asn Gly Tyr Thr Gln Pro Ser Leu Gln Asp Leu His Arg Leu
65                  70                  75                  80
Ile Val Ser His Gly Gly Gly Phe Leu Gln Tyr Leu Asp Gly Lys Thr
                85                  90                  95
Ala Ala Thr His Ile Ile Ala Ser Ser Leu Thr Leu Lys Lys Arg Glu
            100                 105                 110
Glu Phe Lys Arg Tyr Arg Ile Val Lys Pro Ala Trp Val Val Glu Ser
        115                 120                 125
Ile Lys Ala Gly Arg Leu Leu Pro Trp Asp Ala Phe Arg Val Val Asp
    130                 135                 140
Glu Gly His Ala Gln Lys Val Leu Asn Phe Asp Asn Gly Arg Leu Leu
145                 150                 155                 160
Ser Gln Ala Asn Val Gln Gln Ser Gly
                165
```

<210> 28430
<211> 96
<212> PRT
<213> A.fumigatus

<400> 28430

```
Gln Phe Arg Val Ser Met Ala Ala Ile Asp Pro Asp Glu Thr Pro Glu
1               5                   10                  15
Phe Glu Asp Gly Gln Thr Arg Pro Arg Ala Thr Leu Lys Leu Val Arg
            20                  25                  30
Pro Pro Ala Asp Met Asp Ile Asp Glu Ser Asp Asp Asp Tyr Glu Glu
        35                  40                  45
Asp Ser Glu Glu Asp Ser Asp Asp Glu Glu Ile Asn Gly Gly Pro Ser
    50                  55                  60
Asp Lys Glu Lys Ala Arg Lys Leu Lys Glu Ala Ala Ala Leu Lys Glu
65                  70                  75                  80
Leu Glu Asp Glu Asp Glu Asp Asp Asp Ser Glu Gly Asp Asp Glu Asn
                85                  90                  95
```

<210> 28431
<211> 66
<212> PRT
<213> A.fumigatus

<400> 28431

```
Phe Gly Glu Phe Gln Thr Lys Leu Phe Pro Tyr Pro Arg Ile His Ile
1               5                   10                  15
Pro Leu Phe Pro Gln Ala Ser Val Ile Phe Gly Ala Lys Val Phe Gln
            20                  25                  30
Arg Gly Gln Phe Phe Gln Arg Ile Asn Ile Trp Leu Phe Gly Ala Gln
        35                  40                  45
Pro Thr Arg Trp Ser Ser Val Pro Pro Pro Thr Ala Arg Thr Cys His
    50                  55                  60
Pro Ala
65
```

<210> 28432
<211> 105
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (80),(105)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28432
Leu Glu Asn Ser Arg Pro Asn Cys Ser His Thr Pro Val Tyr Thr Phe
1 5 10 15
Pro Cys Phe Pro Lys Leu Pro Leu Phe Leu Val Pro Arg Phe Ser Lys
20 25 30
Glu Ala Asn Phe Phe Lys Glu Ser Thr Phe Gly Cys Leu Gly Pro Asn
35 40 45
Gln Arg Asp Gly Gln Val Tyr Pro Pro Gln Arg Gln Glu His Ala Thr
50 55 60
Leu Leu Asp Ile Arg Gly Asp Val Val Pro Lys Glu Thr His Ala Xaa
65 70 75 80
Val Val Thr Phe Lys Thr Lys Arg Thr Ile Gln Phe Val Asp Trp Cys
85 90 95
His Asn Gly Ile Lys Ile Gly Ile Xaa
100 105

<210> 28433
<211> 79
<212> PRT
<213> A.fumigatus

<400> 28433
Thr Asn Gly Asn Tyr Ser Cys Met Leu Ser Asn Thr Thr Ala Ile Ala
1 5 10 15
Glu Ala Trp Ser Ala Leu Asp His Lys Phe Asp Leu Met Tyr Ser Lys
20 25 30
Arg Ala Phe Val His Trp Tyr Val Gly Glu Gly Met Glu Glu Gly Glu
35 40 45
Phe Ser Glu Ala Arg Glu Asp Leu Ala Ala Leu Glu Arg Asp Tyr Glu
50 55 60
Glu Val Ala Ala Asp Ser Met Asp Glu Glu Val Glu Ala Glu Tyr
65 70 75

<210> 28434
<211> 69
<212> PRT
<213> A.fumigatus

<400> 28434
Val Arg Ile Pro Leu His Phe Val Ile Pro Ser Thr Pro Phe Pro Ile
1 5 10 15
His Ser Pro Tyr Ser Leu Thr Ile Tyr Ala Arg Gly Ile Ile Phe Thr
20 25 30
Leu Val His Ser Ile Pro Leu Tyr His Leu Ile Ser His Asn Ser Thr
35 40 45
Ser Ile Arg Glu Ile Trp Pro Lys Glu Arg Gly Gly Ala Leu Leu Leu

```
    50                  55                  60
Ser Tyr Asn His Gly
65
```

<210> 28435
<211> 116
<212> PRT
<213> A.fumigatus

<400> 28435

```
Thr Pro Glu Glu Asn Asp Arg Pro Pro Asp Arg Thr Ala Ile Ser Pro
1               5                  10                  15
Ser Ala Val Gly Leu Thr Glu Cys Leu Asn His Leu Ala Gln Arg His
            20                  25                  30
Pro Asn Leu Asn Leu Thr Pro Glu Glu Lys Arg Val Phe Tyr Gln Leu
        35                  40                  45
Phe Gln Ala Ala Asp Thr Thr Asn Leu Gly Val Ile Thr Gly Glu Val
    50                  55                  60
Ala Val Pro Phe Phe Glu Lys Thr Lys Leu Ala Pro Glu Thr Leu Gly
65                  70                  75                  80
Leu Val Ser Cys Val Ala Trp Ile Val Ser Ser Gly Ala Cys Leu Ala
                85                  90                  95
Asp Trp Ser Pro Thr Met Cys Arg Tyr Gly Arg Ser Gln Ile Arg Arg
            100                 105                 110
Thr Glu Gly Ser
        115
```

<210> 28436
<211> 77
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (41)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28436

```
Ile Leu Ser Leu Ala Gly Pro Leu Pro Lys Phe Glu Gly Val Ile Ile
1               5                  10                  15
Glu Pro Thr Ser Pro Thr Ser Arg Ser Ala Gly Ala Thr Ser Pro Pro
            20                  25                  30
Pro Val Ser Gly Pro Ile Arg Val Xaa Pro Leu Asn Pro Glu Asp Val
        35                  40                  45
Asn Lys Phe Thr Ala Leu Phe Glu Lys Ser Asp Val Ser Arg Ser Gly
    50                  55                  60
Val Ile Ser Gly Met His Pro Ala Lys Arg Gly Ser Met
65                  70                  75
```

<210> 28437
<211> 164
<212> PRT
<213> A.fumigatus

<400> 28437

```
Pro Gly Gln Ala Arg Pro Cys Cys Val Ser Phe Phe Pro Val Phe Leu
```

```
1               5                   10                  15
Phe Ser Pro Asn Lys Trp Ser Met Lys Ile Val Ser Glu Leu Thr Ala
            20                  25                  30
Thr Ile Ala Ala Cys Cys Pro Thr Pro Arg Pro Ser Pro Arg Pro Gly
        35                  40                  45
Leu Leu Ser Thr Thr Ser Ser Thr Ser Cys Thr Pro Ser Val Pro Ser
    50                  55                  60
Ser Thr Gly Thr Leu Val Arg Val Trp Arg Lys Val Asn Ser Pro Arg
65                  70                  75                  80
Pro Val Arg Thr Trp Leu Pro Ser Ser Val Ile Thr Arg Arg Ser Pro
                85                  90                  95
Pro Thr Arg Trp Met Arg Lys Ser Arg Pro Ser Thr Arg Arg Thr Ser
            100                 105                 110
Ser Leu Gly Arg Ile Pro Lys Asn Gly Cys Arg Val Trp Pro Ser Asp
        115                 120                 125
Leu Met Gln Arg Leu Leu Leu Ala Val Ser Val Leu Leu Tyr Trp Gly
    130                 135                 140
Gln Ala Phe Ala Lys Val Ile Tyr His Gly Pro Ala Arg Leu Met Leu
145                 150                 155                 160
His Ala Asn Thr
```

<210> 28438
<211> 234
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (37),(130)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28438

```
Leu Gly Arg Cys Leu Ser Leu Lys Ala Ser Leu Leu Asn Leu His Leu
1               5                   10                  15
Pro Pro Leu Ala Pro Leu Val Arg Pro Ala His His Gln Leu Val Gly
            20                  25                  30
Gln Phe Glu Ser Xaa His Ser Thr Arg Lys Thr Ser Ile Asn Ser Gln
        35                  40                  45
Arg Tyr Leu Arg Ser Leu Met Cys Arg Gly Ala Gly Leu Ser Gln Ala
    50                  55                  60
Cys Ile Pro Gln Asn Glu Glu Val Cys Ser Phe Glu Ala Asn Asn Ala
65                  70                  75                  80
Cys Ile Thr Gly Asp Ile Ala Lys Gln Ile Phe Glu Arg Ala Arg Leu
                85                  90                  95
Pro Asn Glu Ile Phe Gly Arg Ile Trp Asn Leu Ala Asp Thr Lys Gln
            100                 105                 110
Arg Gly Ala Leu Asp Ala Thr Glu Phe Ile Ile Ala Met His Leu Leu
        115                 120                 125
Thr Xaa Tyr Lys Ser Gly Ala Met Arg Gly Ile Pro Gln Thr Leu Pro
    130                 135                 140
Pro Gly Leu Tyr Glu Ala Ala Ala Arg Arg Gly Pro Val Arg Thr Ser
145                 150                 155                 160
Val Gly Ser Arg Pro Ala Leu Asp Val Pro Pro Val Pro Ala Ile Pro
                165                 170                 175
Arg Gln Phe Thr Gly Pro Gln Arg Thr Gln Ser Pro Leu Asn Arg Ser
```

```
            180                 185                 190
Gln Phe Gly Thr Pro Leu Thr Ala Gln Ser Thr Gly Gly Asp Trp Leu
        195                 200                 205
Ile Thr Pro Ala Glu Lys Ala Gln Phe Asp Thr Ile Phe Gly Thr Ile
    210                 215                 220
Asp Thr Ala Lys Leu Gly Val Ile His Trp
225                 230
```

<210> 28439
<211> 256
<212> PRT
<213> A.fumigatus

<400> 28439

```
Thr Pro Gln Thr Asn Val Val Leu Ala Leu Ser Glu Glu Lys Val Lys
1               5                   10                  15
Gly Phe Ala Arg Thr Gln Leu Ser Gln Pro Thr Gly Leu Asp Ser Ser
            20                  25                  30
Tyr Phe Glu Gln Tyr Pro Cys Pro Pro Phe Lys Ile Ile Ile Leu Asp
        35                  40                  45
Glu Ala Asp Ser Met Thr Gln Asp Ala Gln Ser Ala Leu Arg Arg Thr
    50                  55                  60
Met Glu Gln Tyr Ser Arg Ile Thr Arg Phe Cys Leu Val Cys Asn Tyr
65                  70                  75                  80
Val Thr Arg Ile Ile Glu Pro Leu Ala Ser Arg Cys Ser Lys Phe Arg
                85                  90                  95
Phe Lys Pro Leu Asp Asn Ser Ala Ala Ala Glu Arg Leu Ala His Ile
            100                 105                 110
Ala Arg Leu Glu Asn Leu Lys Leu Asp Glu Gly Val Ile Asp Lys Leu
        115                 120                 125
Ile Ser Cys Ser Glu Gly Asp Leu Arg Arg Ala Ile Thr Tyr Met Gln
    130                 135                 140
Ser Ala Ala Arg Leu Val Gly Ala Gly Arg Pro Thr Ser Gln Lys Asp
145                 150                 155                 160
Gly Asp Glu Asp Ser Glu Met Thr Asp Ala Ser Ser Glu Pro Val Thr
                165                 170                 175
Met Gln Met Ile Glu Glu Ile Ala Gly Val Val Pro Glu Ser Val Ile
            180                 185                 190
Asp Arg Leu Ile Gln Ala Met Gln Pro Lys Lys Leu Gly Ser Ser Tyr
        195                 200                 205
Glu Ala Ile Ser Thr Val Val Thr Asp Ile Val Ala Asp Gly Trp Ser
    210                 215                 220
Ala Gly Gln Leu Val Leu Gln Val Ser Ser Val Leu Ile Pro Phe Thr
225                 230                 235                 240
Arg Gly Phe Val Gln Leu Arg Asp Ser Val Leu Val Val Lys Glu Cys
                245                 250                 255
```

<210> 28440
<211> 82
<212> PRT
<213> A.fumigatus

<400> 28440

```
Ala Leu Phe Leu Phe Pro Leu His Glu Ala Ser Phe Asn Cys Glu Ile
1               5                   10                  15
Pro Ser Leu Trp Ser Lys Ser Ala Asp Asn Pro Gln Leu Tyr Arg Arg
```

```
            20                  25                  30
Ile Val Tyr Asn Asp Ala Ile Pro Asp Ile Gln Lys Asn Lys Ile Val
        35                  40                  45
Thr Ala Phe Ser Glu Met Asp Lys Arg Leu Val Asp Gly Ala Asp Glu
    50                  55                  60
His Leu Ser Ile Leu Asp Leu Ala Leu Arg Ile Ser Gly Ile Leu Gly
65                  70                  75                  80
Gly Ser
```

<210> 28441
<211> 80
<212> PRT
<213> A.fumigatus

<400> 28441

```
Trp Ser Pro Gln Val Gln Glu Arg Pro Arg Pro Ser Leu Ala Val Gly
1               5                   10                  15
Lys Ile Asp Ile Gly Ser Ala Leu Tyr Arg Ser Arg Ile Leu Glu Leu
            20                  25                  30
Asn Ala Ser Asp Glu Arg Gly Ile Gly Ile Val Arg Arg Lys Ser Gln
        35                  40                  45
Gly Ile Arg Pro His Thr Thr Gln Pro Thr His Arg Thr Arg Leu Val
    50                  55                  60
Ile Phe Arg Thr Ile Pro Leu Pro Thr Val Gln Asp His His Pro Gly
65                  70                  75                  80
```

<210> 28442
<211> 62
<212> PRT
<213> A.fumigatus

<400> 28442

```
Thr Ile Arg Arg Tyr Ser Cys Gly Leu Ser Ala Leu Phe Asp His Lys
1               5                   10                  15
Asp Gly Ile Ser Gln Leu Asn Glu Ala Ser Cys Lys Gly Asn Lys Asn
            20                  25                  30
Arg Ala Tyr Leu Gln Asp Lys Leu Thr Arg Thr Pro Pro Ile Cys Asn
        35                  40                  45
Asn Ile Arg Asp Asp Gly Arg Asp Ser Leu Val Gly Arg Pro
    50                  55                  60
```

<210> 28443
<211> 300
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (203),(272)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28443

```
Leu Asn Arg His Ser Leu Ala Ala Ala Ser Ser Ser Ser Ser Ser His
1               5                   10                  15
Ser Ser His Pro Lys Val Val Phe Thr Ser Ala Arg Tyr Lys Met Ser
```

```
            20                  25                  30
Thr Pro Thr Val Ile Val Phe Gly Pro Thr Gly Arg Val Gly Ser Val
        35                  40                  45
Ala Ala Leu Ser Ala Gln Lys His Asn Ala Lys Val Ile Leu Ala Met
    50                  55                  60
Arg Asp Thr Thr Lys Ser Ile Pro Gly Leu Thr Ser Glu Gln Glu Thr
65                  70                  75                  80
Thr Gly Asn Phe Glu Arg Val Gln Val Asp Leu Thr Ser Pro Glu Ser
                85                  90                  95
Ile His Ala Ala Val Thr Lys Thr Gly Ala Lys His Ala Phe Ile Tyr
            100                 105                 110
Leu Ala Phe Gly Thr Ala Asp Ala Met Arg Ala Ser Ile Glu Ala Leu
        115                 120                 125
Lys Gly Ala Gly Ile Glu Leu Val Val Phe Leu Ser Thr Ile Ser Ile
    130                 135                 140
Ser Leu His Gly Ala Ala Asp Ala Val Pro Pro Ser Asp Phe Ile Ala
145                 150                 155                 160
Phe Thr His Ala Gln Val Glu Ala Asn Leu Arg Asp Val Phe Gly Asp
                165                 170                 175
Asp Tyr Val Ala Val Arg Pro Ala Phe Phe Ala Ser Asn Ser Leu Trp
            180                 185                 190
Trp Lys Ser Gly Val Leu Ala Gly Glu Val Xaa Gln Ala Tyr Pro Glu
        195                 200                 205
Ala Arg Phe Asp Phe Leu Ala Pro Glu Asp Ile Gly Ser Val Ala Gly
    210                 215                 220
Lys Phe Leu Val Lys Arg Leu Pro Thr Gly Gly Asp Gly Ser Gln Leu
225                 230                 235                 240
Lys Tyr Leu Glu Leu Val Gly Pro Glu Gln Met Leu Ile Thr Asp Ala
                245                 250                 255
Phe Gly Leu Ile Gly Lys Ile Val Arg Lys Glu Ile His Ile Pro Xaa
            260                 265                 270
Ile Tyr Asn His Asp Ala Arg Gln Asp Met Thr Lys Gly Gln Gly Val
        275                 280                 285
Pro Gly Ala Gly Phe Glu Gln Asn Ile Trp Leu Pro
    290                 295                 300
```

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<210> 28444
<211> 202
<212> PRT
<213> A.fumigatus

<400> 28444

```
Gly Gln Asp Ile Tyr Gly Thr Met Tyr Leu Val Leu Ser Thr Phe Ser
1               5                   10                  15
Ser Leu Trp Thr Arg Val Tyr Asn Glu Ser Thr Gly Ile Gly Gly Leu
            20                  25                  30
Asn Tyr Ile Ser Leu Gly Leu Gly Phe Trp Leu Gly Ser Gln Leu Cys
        35                  40                  45
Ala Pro Leu Asn Asp Arg Ile Tyr Arg Arg Leu Lys Ala Arg Asn Asn
    50                  55                  60
Asn Ile Gly Arg Pro Glu Phe Arg Val Pro Leu Leu Val Val Gly Ala
65                  70                  75                  80
Phe Leu Thr Pro Val Gly Leu Phe Ile Tyr Gly Trp Thr Ala Gln Phe
                85                  90                  95
Arg Arg His Trp Ile Ala Pro Asn Ile Gly Ala Cys Leu Phe Gly Ala
            100                 105                 110
```

```
Gly Asn Ile Ile Ala Phe Gln Cys Ile Gln Thr Tyr Met Val Asp Thr
        115                 120                 125
Tyr Thr Arg Phe Ala Ala Ser Ala Leu Ala Ala Val Ala Phe Leu Arg
    130                 135                 140
Cys Ile Cys Gly Phe Ala Phe Pro Leu Phe Ala Pro Tyr Met Tyr Asn
145                 150                 155                 160
Ala Leu His Tyr Gly Trp Gly Asn Ser Leu Leu Ala Phe Val Ser Ile
                165                 170                 175
Gly Leu Gly Ile Pro Ala Pro Ile Phe Leu Trp Lys Tyr Gly Glu Ile
            180                 185                 190
Leu Arg Lys Arg Ser Pro Tyr Ala Ala Gly
        195                 200
```

<210> 28445
<211> 88
<212> PRT
<213> A.fumigatus

<400> 28445

```
Gln Ser Ser Gly Pro Arg Thr Gly His Gly Met Tyr Ser Gln Arg Thr
1               5                   10                  15
Glu Ser Thr Ser Asn Pro Pro Leu Pro Arg Ser Val Ile His Asp Arg
            20                  25                  30
Leu Pro Asn Val Gly Asn Phe Ala Ile Glu Thr Lys Ala Phe Thr Asp
        35                  40                  45
Glu Tyr Pro His Asp Pro Leu Leu Asn Arg Arg Met Gln Ser Asp Leu
    50                  55                  60
Ala Pro Phe Pro Ser Pro Pro Pro Ser Pro Thr Pro Lys Leu Pro Gly
65                  70                  75                  80
Gln Asn Ser Ser Gln Thr Gln Ala
                85
```

<210> 28446
<211> 673
<212> PRT
<213> A.fumigatus

<400> 28446

```
His His Arg Arg Ser Phe Gln Pro Arg Gly Glu Asp Glu Ser Thr Gln
1               5                   10                  15
Ser Leu Val Lys Tyr Ser Gly Ser Ser Ser Ala Gly Tyr Ser Thr Asp
            20                  25                  30
Ser Leu Pro Ala Pro Thr Ala Glu Asn Glu Gln His Asn Pro Tyr Leu
        35                  40                  45
Asn Asn Ser Ala Gln Ala Arg Leu Gln Val Ser Asp Gln Ala Val Ser
    50                  55                  60
Ser Ser Cys Gly Leu Asp His Ala Glu Thr Asn Asn Val Gly Ser Gly
65                  70                  75                  80
Gln Ala Ser Ser Cys Leu Ser Lys Arg Pro Asp Glu Thr Pro Leu Ser
                85                  90                  95
Phe Ser Gly Glu Gly Ser Ser Gly Ser Arg Thr Thr Thr Glu Gln Ser
            100                 105                 110
Lys Thr Pro Gln Lys Lys Ser Lys Gly Phe Lys Trp Ser Phe Phe Gln
        115                 120                 125
Arg His Gly Asn Val Gln Lys Glu Lys Lys Pro Thr Arg Glu Pro Leu
    130                 135                 140
```

```
Val Ser Pro Asn Thr Pro Arg Leu His Ala Thr Val Ser Pro Ala Leu
145                 150                 155                 160
Val Ser Arg Pro Val Ala His Tyr Ala Leu Val Asp Ala Asp Ser Asp
                165                 170                 175
Pro Leu Glu Asp Ile Ile Asn His Val Glu Glu Ser Pro Pro Thr Glu
            180                 185                 190
Ile Glu Asp Leu Asp Ser Arg Val Glu Ile Pro Ala Ala Leu Asn Ile
        195                 200                 205
Arg Lys Pro Thr Gln Ser Ile Leu Leu Pro Ser Pro Pro Lys Leu Gln
    210                 215                 220
Gly Glu Phe Cys Arg Asp Arg Pro Ala Ser Pro Lys Val Tyr Phe Asn
225                 230                 235                 240
Lys Asp Pro Ser Leu Ser Asn Ser Glu Ala Ser Thr Ser Ser Gly Arg
                245                 250                 255
Pro Arg Arg Leu Ala Ser Val Gly Arg Ile Pro Glu Val Ile Pro Arg
            260                 265                 270
Arg Asp Arg Gln His Lys Pro Ala Leu Gln Ser Phe Ser Arg Pro Phe
        275                 280                 285
Ser Met Ala Asp Ser Pro Ser Ile Ile Ala Pro Ala Thr Val Asn Leu
    290                 295                 300
Leu Pro Glu Leu Gln Thr Ser Ser Gln Pro Thr Val Thr Ala Gln Ser
305                 310                 315                 320
Asn Glu Ala Pro Arg Arg Pro Leu Gly Leu Gly Phe Asp Leu Thr Cys
                325                 330                 335
Pro Phe Gly Asp Pro Glu Val Ala Thr Ala Leu Asn Phe Ile Ser Gly
            340                 345                 350
Pro Tyr Ser Lys Asp Glu Phe Leu Thr Phe Ser Pro Arg Lys Asp Ser
        355                 360                 365
Gly Val Ser Thr Ser Ser Gly Ser Glu Ala Ser Ala Thr Ile Thr Ala
    370                 375                 380
Val Val Pro Met Pro Gly Ser Asp Pro Thr Glu Asp Glu Val Trp Ala
385                 390                 395                 400
Glu Tyr Asp Asp Leu Ile Glu His Val Leu Ser Pro Glu Ala Pro Val
                405                 410                 415
Arg Ser Leu Ser Gly Glu Pro Thr Glu Asp Glu Lys Leu Glu Met Ala
            420                 425                 430
Thr Val Ala Ser Lys Ala Leu Gln Ala Glu Ile Asp Ser Asn Val Ser
        435                 440                 445
Lys His Ser Pro Val Pro Leu Val Asp Thr Pro Thr Val Ala Leu Thr
    450                 455                 460
Pro Ser Thr Pro Arg Pro Ser Asp Ser Ser Phe His Leu Arg Arg Ser
465                 470                 475                 480
Ala Ile Ala Ser Ala Leu His Thr Ser Ile Thr Pro Ser Ser Gln Pro
                485                 490                 495
Ser Phe Ser Asp Ile Ile Ala Ser Tyr Cys Tyr His Gln Asp Glu Lys
            500                 505                 510
Gln Thr Gly Asp Glu Lys Ile Asp Asp Asn Ser Ala Ser Leu Ala Pro
        515                 520                 525
Val Glu Gln Gln Ala Ala Phe Leu Ser Ser Ser Ser Leu Asp Leu Ser
    530                 535                 540
Glu Thr Phe Glu Thr Cys Arg Gln Arg Asn Thr Ile Leu Phe Asp Ile
545                 550                 555                 560
Ala Glu Arg Asp Arg Glu Gly Pro Thr Ala Gln Thr Asn Ile Arg Ser
                565                 570                 575
Gly Ser Leu Met Thr Ser Arg Trp Leu Ser Phe Gly Arg Val Leu Phe
            580                 585                 590
```

```
Ser Pro Ala His Asn His Val Lys Asn Gly Glu Gln Glu Arg Ile Leu
        595                 600                 605
Val Ile Asp Gly Leu Gly Asn Asp Asp Trp Ser Phe Tyr Cys Ala Leu
    610                 615                 620
Thr Tyr Pro Asn Ala Glu Ile Tyr Cys Ile Asn Asp Gly Pro Thr Lys
625                 630                 635                 640
Thr Thr Leu Lys His Pro Ala Ala Trp Gln Pro Pro Thr Asn His His
                645                 650                 655
Thr Ser Ser Pro Arg Gly Trp Lys Asp Arg Asp Gly Arg Cys Tyr Arg
            660                 665                 670
Arg
```

<210> 28447
<211> 297
<212> PRT
<213> A.fumigatus

<400> 28447

```
Arg Arg Ser Ser Pro Pro Arg Pro Lys Gln Glu Ala Lys Lys Pro Glu
1               5                   10                  15
Pro Pro Lys Glu Pro Glu Gln Asp Leu Phe Asp Phe Gly Glu Glu Glu
            20                  25                  30
Pro Val Thr Ala Ala Ser Thr Ser Thr Ala Ala Gly Lys Lys Pro Ala
        35                  40                  45
Ser Ser Asn Gly Leu Asp Ile Leu Glu Ser Lys Pro Ile Asp Asp Asp
    50                  55                  60
Asp Glu Phe Asp Glu Phe Gln Ser Ala Thr Pro Ala Pro Gln Pro Ala
65                  70                  75                  80
Ala Asn Gln Phe Thr Ile Pro Ala Pro Ala Ser Thr Val Ser Thr Thr
                85                  90                  95
Ser Ser Thr Gln Phe Ala Ala Pro Arg Pro Val Ser Gly Val Gln Gly
            100                 105                 110
Pro Asn Leu Asn Gly Leu Val Gly Phe Thr Ser Met Thr Pro Thr Pro
        115                 120                 125
Thr Ser Ser Thr Val Ala Ser Pro Thr Leu Ser Gln Asn Ser Met Val
    130                 135                 140
Pro Pro Ser Gln Gln Ala Lys Pro Ser Gln Pro Lys Pro Thr Gly Phe
145                 150                 155                 160
Gln Ala Ala Thr Pro Asn Tyr Phe Thr Ser Val Thr Thr Ala Thr Thr
                165                 170                 175
Gln Gln Pro Thr Ala Thr Thr Pro Gly His Arg Pro Gly Met Pro Ser
            180                 185                 190
Thr Ser Ser Phe Thr Ser Ala Arg Gly Thr Ser Ser Val Gly Gly Lys
        195                 200                 205
Pro Ala Ala Ser Lys Ser Ser Gly Asp Ala Phe Gly Ser Leu Trp Ser
    210                 215                 220
Thr Ala Ser Ala Ser Ala Gly Ile Gln Lys Ser Ser Ala Asn Ala Ser
225                 230                 235                 240
Lys Gly Pro Asn Leu Ala Ser Met Ala Lys Glu Lys Ala Ser Ala Gly
                245                 250                 255
Ile Trp Gly Ala Pro Ala Ser Ser Ser Ser Phe Thr Pro Thr Ser Pro
            260                 265                 270
Ser Pro Ser Val Ser Ser Ser Thr Gln Gln Gln Gly Thr Lys Thr Gly
        275                 280                 285
Ser Ser Gly Leu Asp Asp Leu Leu Gly
```

290 295

<210> 28448
<211> 96
<212> PRT
<213> A.fumigatus

<400> 28448
Ile Pro Val Arg Asn Ala Ser Thr Ala Ala Arg Ser Gln Pro Ile Tyr
1 5 10 15
Tyr Ser Arg Thr Arg Val His Ser Gln Tyr Asp Leu Glu Tyr Pro Val
20 25 30
Cys Arg Ser Pro Ala Arg Leu Trp Cys Ala Arg Ala Glu Ser Glu Trp
35 40 45
Val Gly Arg Ile Tyr Ile Asn Asp Pro Asp Ser Asp Ile Glu His Gly
50 55 60
Cys Val Ser His Thr Phe Ser Glu Leu Tyr Gly Ala Ala Ile Ala Ala
65 70 75 80
Gly Lys Ala Leu Thr Ala Gln Thr Asp Gly Leu Pro Ser Arg His Ser
85 90 95

<210> 28449
<211> 69
<212> PRT
<213> A.fumigatus

<400> 28449
Arg Gly Asn Ser Arg Gly Ala Ala His Glu Met Thr Gly Gly Thr Gly
1 5 10 15
Gly Glu Tyr Cys Val Asn Met Gln Ser Glu Leu Ser Thr Tyr Leu Leu
20 25 30
Cys Lys Tyr Val Leu Gly Gly Glu Thr Ala Gly Arg Ser His Gly Pro
35 40 45
Tyr Val Pro Leu Leu Ala Asn Val Lys Thr Thr Met Trp Tyr Tyr Val
50 55 60
Glu Asp Val Arg Pro
65

<210> 28450
<211> 225
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (129),(131),(153),(189),(190),(193),(194),(197),(203),(213),(214)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28450
Arg Gln Cys Ile Ser Leu Lys Asp Pro Cys Lys Ser Glu Ile Phe Val
1 5 10 15
Arg Trp Pro Arg Met Ser Gly Ser Ala Met His Asp Trp Cys Ser Asn
20 25 30
Ala Cys Phe Ala Ser Leu Arg Gly Arg Gly Gly Asn Cys Phe Trp Ser
35 40 45
Ile Ile Leu Leu Ala Gly Asn Pro Cys Ile Pro Ala Ser Asp Gly Leu

```
    50                  55                  60
Gly Asn Ala Gln Glu Leu Leu Cys Pro Arg Asn Phe Met Trp Pro Phe
65                  70                  75                  80
Arg Thr Phe Ser Ile Glu Pro Asp Pro Phe Cys Arg Ala Gly Pro Pro
                85                  90                  95
Pro Pro Pro Pro Ala Pro Tyr Leu Leu Pro Thr Asn Gly Leu Val Ser
            100                 105                 110
Val Ile Cys Leu Pro Pro Pro Ala Ala Arg Thr Pro Pro Met Ser Pro
        115                 120                 125
Xaa Thr Xaa Leu Ala Thr Pro Pro Pro Leu Ser Leu Val Cys Ala Gln
    130                 135                 140
Asn Arg Lys Pro Phe Ser Ala Ser Xaa Gln Glu Arg Pro Pro Pro Ile
145                 150                 155                 160
Asp Cys Pro Pro Pro Ser Leu Leu Ser Arg Pro Asp Leu Phe Arg Asp
                165                 170                 175
Ser Pro Thr Gly Lys Glu Pro Leu Leu Leu His Gly Xaa Xaa Thr Lys
            180                 185                 190
Xaa Xaa Phe Leu Xaa Lys Gln Ile His Lys Xaa Val Glu Gln Arg Gly
        195                 200                 205
Gly Ile Gly Glu Xaa Xaa Leu His Tyr Gly Ala Phe Pro Thr Ser Pro
    210                 215                 220
Pro
225
```

<210> 28451
<211> 70
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (9),(10),(20),(26),(29),(30),(33),(34),(70)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28451

```
Ser Gly Glu Arg Ser Ile Met Gln Xaa Xaa Phe Pro Asp Thr Pro Pro
1               5                   10                  15
Leu Phe Asn Xaa Leu Met Asn Leu Phe Xaa Gln Lys Xaa Xaa Phe Arg
            20                  25                  30
Xaa Xaa Pro Met Gln Gln Glu Trp Phe Leu Ser Arg Trp Thr Val Pro
        35                  40                  45
Glu Lys Ile Gly Ala Gly Glu Gln Gly Gly Arg Gly Ala Val Asp Gly
    50                  55                  60
Gly Gly Ser Phe Leu Xaa
65                  70
```

<210> 28452
<211> 200
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (4),(6),(7),(10),(11),(48),(70),(71)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28452
Ile Cys Phe Xaa Arg Xaa Xaa Phe Phe Xaa Xaa Pro Pro Cys Asn Lys
1 5 10 15
Ser Gly Ser Phe Pro Val Gly Leu Ser Leu Lys Arg Ser Gly Arg Glu
20 25 30
Ser Lys Glu Gly Gly Gly Gln Ser Met Gly Gly Gly Arg Ser Cys Xaa
35 40 45
Glu Ala Leu Asn Gly Phe Arg Phe Trp Ala Gln Thr Ser Asp Ser Gly
50 55 60
Gly Gly Val Ala Arg Xaa Xaa Arg Gly Asp Met Gly Gly Val Arg Ala
65 70 75 80
Ala Gly Gly Gly Arg Gln Ile Thr Glu Thr Arg Pro Leu Val Gly Ser
85 90 95
Lys Tyr Gly Ala Gly Gly Gly Gly Gly Gly Pro Ala Leu Gln Lys Gly
100 105 110
Ser Gly Ser Ile Leu Asn Val Leu Lys Gly His Ile Lys Phe Leu Gly
115 120 125
His Ser Ser Ser Cys Ala Phe Pro Arg Pro Ser Asp Ala Gly Met His
130 135 140
Gly Leu Pro Ala Ser Ser Met Ile Leu Gln Lys Gln Phe Pro Pro Leu
145 150 155 160
Pro Leu Lys Asp Ala Lys His Ala Leu Leu His Gln Ser Cys Ile Ala
165 170 175
Leu Pro Asp Ile Leu Gly Gln Arg Thr Lys Ile Ser Asp Leu Gln Gly
180 185 190
Ser Phe Arg Leu Met His Cys Leu
195 200

<210> 28453
<211> 61
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (42)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28453
Gly Asp Val Pro Leu Asn Phe Arg Asn Pro Ile Phe Ile His Pro His
1 5 10 15
Pro Pro Pro Ala Gly Phe Gly Pro Phe Glu Pro Arg Glu Asn Tyr Pro
20 25 30
Met Ala Pro Pro Val Ser Lys Glu Pro Xaa Thr Gly Arg Asn Glu Asn
35 40 45
Lys Pro Gly Phe Ser Gln Thr Phe Phe Ile Pro Ser Leu
50 55 60

<210> 28454
<211> 66
<212> PRT
<213> A.fumigatus

<400> 28454
Thr Ala Thr Gly His Tyr Phe Lys Gly Arg Phe Val Asn Thr Glu Leu
1 5 10 15

```
Lys Gln Arg Leu Met Thr Gln Ser Leu Ile Val Leu Asp Cys Ser Val
            20                  25                  30
Arg Thr Leu Tyr Thr Ala Val Leu Asn Gln Ser Glu Glu Arg Lys Thr
        35                  40                  45
Arg Phe Ala Phe Ile Leu Arg Phe Gly Ile Asp Cys Lys Cys Thr Val
    50                  55                  60
Thr Ala
65
```

<210> 28455
<211> 306
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (235),(287)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28455

```
Ile Ala Ala Gln Asp Asn Gly Ala Lys Asp Ile Ser Thr Ser Val Ser
1               5                   10                  15
Ser Gly Phe Leu Ala Ile Ser Ile Val Leu Pro Gln His Leu Thr Met
            20                  25                  30
Thr Ile Val Asp Trp Gln Glu Lys Ala Gln Leu Lys Gln Ser Glu Ala
        35                  40                  45
Ala Ser Lys Ile Pro Pro Glu Trp Arg Leu Ser Leu Asp Ile Leu Thr
    50                  55                  60
Ala Ile Ser Asn Glu Ser Asn Val Leu Asp Ile Pro Thr Lys Cys Gly
65                  70                  75                  80
Ile Leu Ser Ala Arg Glu Leu Asp Ile Thr Glu His Tyr Asp Ala Thr
                85                  90                  95
Asp Leu Leu Gln Arg Leu Ala Ser Lys Glu Leu Ser Ala Val Glu Val
            100                 105                 110
Thr Thr Ala Phe Cys Lys Arg Ala Ala Ile Ala Gln Gln Leu Thr Phe
        115                 120                 125
Cys Leu Thr Glu Thr Phe Phe Asp Gln Ala Leu Ala Arg Ala Arg Gln
    130                 135                 140
Leu Asp Asp His Leu Thr Ala Thr Gly Gln Thr Val Gly Pro Leu His
145                 150                 155                 160
Gly Leu Pro Ile Ser Leu Lys Asp Cys Phe Asn Val Ala Gly Val Pro
                165                 170                 175
Thr Ser Leu Gly Phe Val Ser Tyr Leu Asp Arg Pro Ala Pro Thr Thr
            180                 185                 190
Asn Ser Ser Leu Val Asp Ile Leu Leu Ala Ala Gly Ala Val Leu Tyr
        195                 200                 205
Val Lys Thr Asn Val Pro Gln Thr Met Met Thr Ala Asp Ser His Asn
    210                 215                 220
Asn Val Phe Gly Arg Val Leu Asn Pro Tyr Xaa Arg Asn Leu Thr Ala
225                 230                 235                 240
Gly Gly Ser Ser Gly Gly Glu Gly Ala Leu Ile Ala Leu His Gly Ser
                245                 250                 255
Val Leu Gly Ile Gly Thr Asp Asn Ala Gly Ser Ile Arg Ile Pro Ala
            260                 265                 270
Leu Cys Trp Arg Asp Asp Pro Leu Ser Ser Leu Leu Val Arg Xaa Trp
        275                 280                 285
```

```
His Thr Gly Gly Gln Thr Ala Gly Gly Arg Ser Arg Asp Gly Arg Asn
    290                 295                 300
Tyr Gly
305

<210> 28456
<211> 63
<212> PRT
<213> A.fumigatus

<400> 28456
Gln Gln Tyr Pro Gly Gly Gly Gly Phe Val Pro Gly Ile Val Phe Asn
1               5                  10                  15
Pro Ser Ala Lys Gly Leu Ala Tyr Ala Arg Thr Asp Ile Gly Gly Ala
            20                  25                  30
Tyr Arg Leu Asn Ser Asp Asp Thr Trp Thr Pro Leu Gln Asp Ser Val
        35                  40                  45
Gly Asn Ser Asn Trp Tyr Val Thr Cys Ser Val Ser Glu Ile Asp
    50                  55                  60

<210> 28457
<211> 86
<212> PRT
<213> A.fumigatus

<400> 28457
Arg Phe Arg His Asp Trp Gly Val Asp Ala Leu Ala Thr Asp Pro Ile
1               5                  10                  15
Asp Thr Ser Arg Leu Tyr Leu Ala Val Gly Met Tyr Thr Asn Glu Trp
            20                  25                  30
Asp Pro Asn Ala Gly Ser Ile Met Arg Ser Thr Asp Gln Gly Asn Thr
        35                  40                  45
Trp Ser Glu Thr Lys Leu Pro Phe Lys Val Gly Gly Asn Met Pro Gly
    50                  55                  60
Arg Gly Met Gly Glu Val Gly Asn Ser Pro Phe Pro Cys Ile Ala Cys
65                  70                  75                  80
Phe Ser Ala Lys Thr Met
                85

<210> 28458
<211> 61
<212> PRT
<213> A.fumigatus

<400> 28458
Ile Ser Phe Val Asp Ser Trp Glu Asp Ser Gly His Leu Tyr Ile Gln
1               5                  10                  15
Thr Glu Phe Cys Glu Glu Gly Ser Leu Asp Val Phe Leu Ala Gln Val
            20                  25                  30
Gly Leu Lys Ala Arg Leu Asp Asp Phe Arg Ile Trp Lys Ile Leu Leu
        35                  40                  45
Glu Leu Ser Leu Val Cys His Pro Ile Tyr Val Ser Cys
    50                  55                  60

<210> 28459
<211> 94
```

<212> PRT
<213> A.fumigatus

<400> 28459
Ala Arg Ala Asn Leu Gln Gln Gly Leu Lys His Ile His Asp Ser Gly
1 5 10 15
Phe Ile His Leu Asp Leu Lys Pro Ala Asn Ile Leu Ile Thr Phe Glu
20 25 30
Gly Val Leu Lys Ile Ala Asp Phe Gly Met Ala Ala Arg Trp Pro Ala
35 40 45
Glu Asp Gly Ile Glu Gly Glu Gly Asp Arg Glu Tyr Ile Gly Pro Glu
50 55 60
Ile Leu Met Gly Arg Phe Asp Lys Pro Ala Asp Ile Phe Ser Leu Gly
65 70 75 80
Leu Ile Met Phe Glu Ile Ala Gly Asn Val Glu Leu Pro Arg
85 90

<210> 28460
<211> 166
<212> PRT
<213> A.fumigatus

<400> 28460
Cys Ser Lys Leu Arg Ala Met Trp Asn Phe Pro Asp Asn Gly Leu Ser
1 5 10 15
Trp Gln Lys Leu Arg Asn Gly Asp Met Ser Asp Val Pro Ser Leu Thr
20 25 30
Trp Ser Ser Glu Thr Ser Ile Phe Arg Asp Ala Ser Gly Asn Pro Ile
35 40 45
Ser Glu Glu Pro Ser Phe Glu Glu Leu Cys Ala Ser Asp Leu Gly Asp
50 55 60
Asp Asp Phe Gly Glu Asp Ser Phe Leu Asp Ser Arg Leu Arg Gln Ala
65 70 75 80
Val Leu Leu Ala Arg Ser Gly Glu Leu Val Asn Pro Pro Ser Phe Met
85 90 95
Ile Asp Ala Ser His Glu Gln Ala Leu Asp Lys Ile Val Arg Trp Met
100 105 110
Ile Ser Pro Asp Pro Ser Asp Arg Pro Thr Ala Asp Arg Val Leu Gln
115 120 125
Thr His Gly Val Gln Phe Val Glu Arg Arg Arg Arg Ala Gly Ala Thr
130 135 140
Val Tyr Glu Gly Asn Trp Gly Pro Ala Asp Glu Ile Leu Ala Glu Asp
145 150 155 160
Ala Glu Met Ile Asp Val
165

<210> 28461
<211> 104
<212> PRT
<213> A.fumigatus

<400> 28461
Glu Ala Arg Lys Ile Ile Phe Glu Ala Ala Ser Gln Leu Thr Arg Arg
1 5 10 15
Ser Ala Gly Leu Pro Ala Leu Ala Thr Gly Ile Leu Leu Ser Lys Pro
20 25 30

```
Gly Gly Pro Leu Phe Arg Gln Val Met Asp Glu Leu His Glu Ile Ser
        35                  40                  45
His Leu Pro Ala Glu Gln Asp Leu Val Lys Gln Lys Val Glu Leu Pro
    50                  55                  60
Gln Val His Ala Thr Asn Cys Leu Lys Asp Ile Phe Thr Asn Thr Lys
65                  70                  75                  80
Leu Gly Pro Phe Thr Glu Ser Tyr Ile Met Pro Ala Leu Thr Leu Ser
                85                  90                  95
Ala Glu Gln Leu Gly Ser Pro Met
            100
```

<210> 28462
<211> 201
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (148)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28462

```
Ser Lys Ser Ser Leu Thr Glu Glu His Ile Ser Lys Leu Thr Phe Pro
1               5                   10                  15
Ser Pro Leu His Gly Tyr Glu Ser Asp Ile Ser Lys Gln Arg Ala Pro
            20                  25                  30
Tyr Thr Ser Arg Thr Thr Ile Ile Lys Leu Leu Thr Met Thr Leu Pro
        35                  40                  45
Ile Pro Pro Asn Ile Met Phe Ser Phe Asn Ser Leu Arg Gly His Gly
    50                  55                  60
Leu Thr Ile Gly Ile Thr Ala Cys Cys Gly Val Ser Phe Met Leu Phe
65                  70                  75                  80
Gly Tyr Asp Gln Gly Val Phe Gly Gly Ile Leu Ser Asn Pro Thr Phe
                85                  90                  95
Gln Lys Gln Phe Asp His Pro Asn Thr Thr Met Gln Gly Gln Ile Val
            100                 105                 110
Ser Ile Tyr Val Leu Gly Cys Val Ala Gly Ala Phe Leu Ser Met Tyr
        115                 120                 125
Thr Gly Asp Arg Leu Gly Arg Gln Arg Ser Val Leu Leu Ala Ser Ala
    130                 135                 140
Phe Leu Thr Xaa Gly Gly Ile Leu Gln Ser Val Ala Phe Thr Leu Pro
145                 150                 155                 160
His Leu Ile Val Gly Arg Ile Val Ala Gly Leu Gly Val Gly Met Asn
                165                 170                 175
Thr Thr Thr Val Pro Met Trp Gln Ser Glu Thr Cys Leu His His Gly
            180                 185                 190
Ala Gly Arg Ile Arg Gly Gly Ala Leu
        195                 200
```

<210> 28463
<211> 67
<212> PRT
<213> A.fumigatus

<400> 28463

```
Glu Trp Leu Thr Ile Gln Arg Leu Ala Lys Met Cys Cys Met Arg Lys
```

```
1               5                   10                  15
Glu Ser Lys Gly Asn Asn Ala Ile Ile Phe Ala Lys Leu Gln Glu Phe
            20                  25                  30
Asp Ser Glu Met Arg Ala Met Ala Ile Lys Tyr Lys Tyr Leu Phe Leu
        35                  40                  45
Pro Leu Leu Cys Thr Leu Val Cys Cys Ile Asn Lys Ala Leu Lys Pro
    50                  55                  60
Leu Asn Ser
65
```

<210> 28464
<211> 128
<212> PRT
<213> A.fumigatus

<400> 28464

```
Thr Leu Phe Cys Arg His Glu Asp Arg Ser Phe Pro Pro Ile Arg Phe
1               5                   10                  15
Gly Lys Ala Thr Pro Arg Arg Gly Leu Ala Leu Glu Lys His Gly Glu
            20                  25                  30
Ile Arg Gly Ser Tyr Arg Val Ser Val Thr Lys Ala Pro Pro His Arg
        35                  40                  45
Ser Ala Leu Arg Val Ser His Ser Glu Thr Thr Asn His Thr Glu Ser
    50                  55                  60
Thr Ile Phe Gln Phe Asp Tyr Leu Lys Leu Phe Lys Pro Pro Asn Met
65                  70                  75                  80
Pro Lys Ser Ser Lys Asn Asn Glu Ser Tyr Leu Leu Lys Ala Cys Glu
                85                  90                  95
Ala Ala Gln Ala Gln Lys Lys Pro Asn Ile Ser Lys Ile Thr Arg Glu
            100                 105                 110
Tyr Gly Ile Pro Tyr Ile Ile Leu Tyr Asn Tyr Val Lys Lys Gly Arg
        115                 120                 125
```

<210> 28465
<211> 191
<212> PRT
<213> A.fumigatus

<400> 28465

```
Val Pro Asn Asp Phe Ser Leu Pro Leu Asn Asn Asn Leu Cys Ser Leu
1               5                   10                  15
Pro Lys Gly Asn Gly Ile Phe Met Glu Ser Trp Phe Asn Glu Ser Glu
            20                  25                  30
Ala Leu Pro Pro Asp Thr Thr Ile Ala Thr Ser Pro Asn Gly Trp Ile
        35                  40                  45
Ser Asp Glu Leu Ala Val Gln Trp Leu Gln Ser Phe Ile Asn Ala Thr
    50                  55                  60
Asn Glu Arg Thr Lys Lys Gly Glu Lys Gln Ile Leu Ile Phe Asp Gly
65                  70                  75                  80
His Gly Ser His Leu Thr Val Lys Phe Leu Gln Leu Cys Glu Asp Asn
                85                  90                  95
Gly Val Ile Pro Phe Arg Phe Leu Pro His Thr Thr His Leu Cys Gln
            100                 105                 110
Pro Leu Asp Gly Lys Pro Phe Leu Ser Tyr Lys Gln Tyr Phe Tyr Tyr
        115                 120                 125
Met Asn Asn Lys Leu Ser Tyr Trp Ala Gly Lys Pro Val Gly Lys Leu
```

```
    130                 135                 140
Glu Phe Leu Tyr Met Ile Arg Pro Val Gln Glu Lys Ala Phe Asn Gln
145                 150                 155                 160
Arg Ile Ile Arg Glu Ala Phe Lys Asp Arg Gly Ile Trp Pro Val Asn
                165                 170                 175
Ser Lys Ile Ala Asn Asn Leu Gly Val Pro Leu Cys Leu Phe His
            180                 185                 190

<210> 28466
<211> 134
<212> PRT
<213> A.fumigatus

<400> 28466
His Pro Arg Gly Ser Phe Gln Pro Arg Gly Glu Asp Val Leu Ala Arg
1               5                   10                  15
Ala Ala Asn Glu Glu Ala Val Trp Leu Met Pro Asp Phe Gly Tyr Trp
            20                  25                  30
Ala Trp Asp Asn Pro Asp Asn Ala Ile Gly Pro Phe Asp Gln Val Val
        35                  40                  45
Ala Arg Ile Gln Arg Ala Asp Ile Pro Trp Glu Ala Lys Lys Gln Gln
    50                  55                  60
Leu Val Trp Arg Gly Lys Pro Ser Phe Ala Pro Lys Leu Arg Arg Ala
65                  70                  75                  80
Leu Ile Glu Ala Thr Arg Asp Gln Pro Trp Gly Asp Val Lys Gln Val
                85                  90                  95
Ser Trp Pro Asp Arg Thr Asn Val Leu Ser Met Glu Asp His Cys Gln
            100                 105                 110
Tyr Met Phe Ile Ala His Val Glu Gly Arg Ser Ser Arg Phe Ile Phe
        115                 120                 125
Leu Arg Leu Asp Asp Ser
    130

<210> 28467
<211> 158
<212> PRT
<213> A.fumigatus

<400> 28467
His Tyr Ser Leu Thr Asp Pro Ile Phe Lys Ile Thr Ile Leu Gly His
1               5                   10                  15
Asp Ile Val Phe Ile Thr Ser Ala Lys Leu Leu Glu Glu Ile Cys Asp
            20                  25                  30
Glu Lys Arg Phe Arg Lys Cys Val Thr Gly Pro Ile Val Glu Ile Arg
        35                  40                  45
Glu Ala Val His Asp Ser Leu Phe Thr Ala Tyr His Asp Glu Glu Ser
    50                  55                  60
Trp Gly Ile Ala His Arg Ile Met Ala Ser Leu Met Thr Pro Glu Ala
65                  70                  75                  80
Val Ile Asp Ala Phe Ala Gly Met Arg Glu Thr Ala Thr Asp Leu Val
                85                  90                  95
Lys Lys Trp Thr Ala Gly Pro Arg Gln Arg Ile Asn Val Ser Asn Asp
            100                 105                 110
Met Asp Arg Leu Asn His Ala Ala Asn Met Leu Cys Phe Phe Asp Gln
        115                 120                 125
Arg Ile His Cys Leu Glu Gly Pro Glu Pro Ser Val Leu Gln Ala Ile
```

```
    130                 135                 140
Gly Gly Cys Val Phe Tyr Arg Arg Arg Arg Arg Pro Ser Ala
145                 150                 155

<210> 28468
<211> 435
<212> PRT
<213> A.fumigatus

<400> 28468
Gly His Thr His Ser Ser Thr Leu Arg His Gly Ser Leu Thr Gln Ser
1               5                   10                  15
Glu Gln Leu Asn Cys His Ser Arg Pro Pro Ser Ile Ala Ser Glu Leu
            20                  25                  30
Thr Val Ser Gly Asn Gly Gly Asp Leu Arg Gln Asp Ile Pro Asn Pro
        35                  40                  45
Cys Leu Trp Ser Arg Arg Asp Val Arg Glu Glu Asn Gln Phe Phe Arg
    50                  55                  60
Thr Asn Ala Trp Cys Ile Asp Asp Val Thr Leu Thr Asn Ser Ser Lys
65                  70                  75                  80
Ala Leu Asp Thr Tyr Arg Leu Arg His Asp Tyr Asn Thr Val Tyr Phe
                85                  90                  95
Asp Met Ser Arg Ser Ser Pro Val Pro Ser Ala Ala Leu Ser Ser Pro
            100                 105                 110
Ser Ser Ser Val Lys His Gln Ser Gln Phe Thr Tyr Arg Gln Leu Gln
        115                 120                 125
Leu Leu Arg Gln Gly Ser Thr Ala Thr Pro Leu Arg Val Ile Ala His
    130                 135                 140
Ile Asp Leu Asp Ala Phe Tyr Ala Gln Cys Glu Met Val Arg Leu Gly
145                 150                 155                 160
Thr Pro Lys Glu Ala Pro Leu Ala Val Arg Gln Trp Asp Ser Leu Ile
                165                 170                 175
Ala Ile Asn Tyr Pro Ala Arg Ser Phe Gly Ile Ser Arg Met Met Ser
            180                 185                 190
Ala Ser Glu Ala Gln Lys His Cys Pro Glu Ile Val Leu Gln His Val
        195                 200                 205
Ala Thr Phe Arg Glu Gly Glu Gly Gly Lys Trp Ala Tyr Arg Lys Asp
    210                 215                 220
Ala Phe Lys Asn Ile Ser Thr Asp Lys Val Cys Leu Asp Pro Tyr Arg
225                 230                 235                 240
Ala Glu Ser Arg Lys Ile Leu Lys Val Met Lys Glu Glu Leu Ser Arg
                245                 250                 255
Trp His Ala Gly Leu Val Asp Ser Glu His Glu Pro Tyr Ser His Tyr
            260                 265                 270
Gln Val Gln Pro Ser Ser Leu Glu Lys Ala Ser Ile Asp Glu Val Phe
        275                 280                 285
Ile Asp Leu Ser Ser Leu Val Tyr Ala Leu Leu Leu Gln Arg Tyr Pro
    290                 295                 300
Glu Leu Arg Ile Glu Pro Gln Gly Asp Gly Arg Ser Thr Pro Leu Pro
305                 310                 315                 320
Arg Pro Pro Thr Thr Ala Leu Glu Trp Asn Thr Glu Asp Cys Leu Ile
                325                 330                 335
Asp Leu Asp Glu Asn Glu Thr Glu Val Asp Asp Pro Asp Trp Asp Asp
            340                 345                 350
Ile Ala Met Leu Ile Gly Ser Glu Ile Val Arg Ser Val Arg Thr Ala
        355                 360                 365
```

```
Val Trp Asn Lys Leu Ser Tyr Thr Cys Ser Gly Gly Val Ala Arg Asn
    370                 375                 380
Lys Met Met Ala Lys Leu Gly Ser Ala Cys His Lys Pro Asn Lys Gln
385                 390                 395                 400
Thr Ile Val Arg Asn Arg Ala Ile His Asn Phe Leu Gly Ser Phe Lys
                405                 410                 415
Phe Thr Lys Ile Arg Met Leu Gly Gly Lys Leu Gly Asp Gln Val Ala
            420                 425                 430
Thr Leu Phe
        435
```

<210> 28469
<211> 64
<212> PRT
<213> A.fumigatus

<400> 28469

```
Pro Pro Val Asn Leu Leu Ala Val Leu Tyr Asp His His Gly Lys Gly
1               5                   10                  15
Gly Ile Ala Asp Ile Thr Glu Ala Glu Lys Trp Thr Asn Val Asn Val
            20                  25                  30
Asn Phe Asn Ile Met Cys Asp Tyr Gly Thr His Asn Gly Ile Ser Ala
        35                  40                  45
Ile Thr Leu Pro Gln Pro Lys Arg Ile Pro His Arg Leu Asn Arg Gln
    50                  55                  60
```

<210> 28470
<211> 70
<212> PRT
<213> A.fumigatus

<400> 28470

```
Asp Ile Ile Ser Leu Ile Ser Val Arg Asp Val Tyr Thr His Thr Glu
1               5                   10                  15
Asn Leu Arg Gly Leu Gly Ile Phe Pro His Glu Ile Asp Leu Ile Leu
            20                  25                  30
Ala Lys Ser Leu Leu Phe Val Ser Thr Leu Asp Leu Asp Asn Ile Arg
        35                  40                  45
Phe Tyr Leu Ser Thr Lys Lys Lys Pro Cys Gln Val Leu Trp Arg Pro
    50                  55                  60
Trp Ser Ala Arg Glu Phe
65                  70
```

<210> 28471
<211> 218
<212> PRT
<213> A.fumigatus

<400> 28471

```
Pro Glu Ser Pro His Thr Gly Glu Thr Gln Gly Val Gln Thr Arg Leu
1               5                   10                  15
Leu Pro Ile Gln Ser Val Arg Tyr Ser Leu Trp Leu Gly Gln Cys Tyr
            20                  25                  30
Cys Ala Asp Ser Ile Val Ser Ser Val Ile Ala His Asp Val Lys Ile
        35                  40                  45
Asp Ile Asp Val Arg Pro Phe Phe Ser Leu Gly Asp Val Gly Asp Thr
```

```
    50                  55                  60
Ala Leu Ala Met Met Val Val Lys Asn Cys Glu Glu Ile Asp Gly Gly
65                  70                  75                  80
Leu Pro Ala Arg Leu Arg Met Ile Met Met Ile Asn Val Leu Ile Asp
                85                  90                  95
Phe Val Ile Gly Leu Val Pro Phe Ile Gly Asp Val Ala Asp Ala Val
            100                 105                 110
Tyr Lys Cys Asn Thr Arg Asn Ala Val Ile Leu Glu Lys His Leu Arg
        115                 120                 125
Glu Lys Gly Ala Lys Val Leu Lys Ala Gln Ser Arg Thr Pro Glu Gly
    130                 135                 140
Ile Ile Asp Thr Ser Leu Pro Glu Glu Phe Asp Arg Tyr Asp Gln Ser
145                 150                 155                 160
Ala Ser Asp Glu Pro Pro Arg Tyr Glu Ser Gln Ala Gln Thr Gly Pro
                165                 170                 175
Ala Arg Pro Glu Pro Ala Arg His Pro Lys Arg Asp Arg Ser Gln Lys
            180                 185                 190
Gly Trp Phe Gly Lys Ser Ser Asp Arg Ala Gly Asp Leu Glu Ala Gly
        195                 200                 205
Val Ala Asp Asn Ser Gln Ser Arg Val Gln
    210                 215

<210> 28472
<211> 190
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (190)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28472
Leu Thr Cys Lys Ala Gly Ile Leu Ala Ala Leu Leu Ala Cys Lys Thr
1               5                   10                  15
Glu Glu Leu Asn Asp Gly Ala Ser His Asp Tyr Phe Pro Trp Ile Ala
            20                  25                  30
Glu Thr Val Leu Gly Leu Cys Arg Leu Cys Ile Ala Asn Asn Gly His
        35                  40                  45
Leu Pro Thr Thr Ile Pro Pro Arg Gln Ser Thr Arg Arg Ala Ser Pro
    50                  55                  60
Leu Val Gln Ile Cys His Gly Ser Pro Ala Ile Leu Leu Leu Leu Gly
65                  70                  75                  80
Cys Ala Arg Arg Asn Arg Tyr Leu Val Ser Asn Phe Trp Gln Pro Glu
                85                  90                  95
Trp Asp Lys Ala Ile Phe Leu Ala Thr Glu Arg Val Trp Glu Glu Gly
            100                 105                 110
Leu Leu Ser Lys Gly Gly Ser Leu Cys His Gly Ile Ala Gly Asn Ala
        115                 120                 125
Trp Pro Leu Leu Leu Leu His Asp Ser Cys Glu Tyr Asp Asp Glu Leu
    130                 135                 140
Val Glu Thr Ala Lys Arg Asn Tyr Gly Glu Arg Ala Lys Asn Thr Thr
145                 150                 155                 160
Val Glu Gln Pro Gln Pro Ala Leu Thr Gly Asp Tyr Phe Leu Ser Arg
                165                 170                 175
Ala Leu Ala Leu Leu Leu His Ala Ser Ser Pro Arg Gly Xaa
```

180 185 190

<210> 28473
<211> 146
<212> PRT
<213> A.fumigatus

<400> 28473
Cys Ile Ser Ile Ala Cys Ser Met Ser Phe Leu His Leu His Pro Arg
1 5 10 15
Ala Thr Glu Leu Phe Ala Ile Thr Ser Gly Arg Val Leu Ser Glu Met
20 25 30
Ile Pro Glu Thr Gly Val Leu Asp Ser Glu Gly His Gln Arg Val Ile
35 40 45
Arg Ala Glu Leu Gly Pro Gly Met Leu Thr Val Phe Pro Ala Gly Ser
50 55 60
Phe His Thr Gln Val Asn Pro Asp Cys Glu Pro Ala Asn Phe Thr Ala
65 70 75 80
Ala Phe Thr Ser Asp Glu Phe Ala Val Gly Ile Val Ala Ala Gln Thr
85 90 95
Phe Ser Phe Ser Asp Asp Val Ile Ala Ala Thr Phe Gly Glu Thr Ile
100 105 110
Ala Gly Glu Asp Ile Asp Lys Val Arg His Ala Ile Pro Ala Thr Met
115 120 125
Ala Ile Lys Val Glu Glu Cys Leu Thr Lys Cys Gly Lys Gln Lys Arg
130 135 140
Gln Ala
145

<210> 28474
<211> 97
<212> PRT
<213> A.fumigatus

<400> 28474
Pro Ile Gln Ser Cys Glu Gln Met Thr Tyr Ile Glu His Pro Thr Gly
1 5 10 15
Ser Gln Val Val Gln Thr Ala Phe Ala Ile Ile Ala Val Leu Ser Val
20 25 30
Asp Tyr Pro Asp Val Glu Pro Ile His Arg Gly Val Arg Met Ile Met
35 40 45
Ser Arg Gln Gln Arg Asn Gly Glu Trp Leu Gln Glu Gly Ile Glu Gly
50 55 60
Ile Phe Asn Lys Ser Cys Ala Ile Thr Tyr Pro Asn Tyr Lys Phe Ile
65 70 75 80
Phe Pro Ile Leu Ala Leu Gly Lys Phe Gly Arg Lys Tyr Pro His Leu
85 90 95
Val

<210> 28475
<211> 350
<212> PRT
<213> A.fumigatus

<400> 28475

```
Arg Pro Thr Arg Ala Glu Asp Trp Val Ser Lys Leu Ile Asp Met Glu
1               5                  10                  15
Asp Ala Asn Ser Asp Tyr Ala Asp Leu Ala Ser Val Asn Gly Pro Leu
            20                  25                  30
Asn Met Ile Val Cys Tyr Ile Arg Asp Gly Pro Asp Ser Tyr Ser Val
        35                  40                  45
Arg Arg His Arg Glu Arg Met Glu Glu Phe Leu Trp Val Asn Lys Glu
    50                  55                  60
Gly Met Leu Ala Asn Gly Thr Asn Gly Val Gln Cys Trp Asp Thr Ala
65                  70                  75                  80
Phe Leu Ile Gln Ala Val Trp Ser Ala Gly Leu Ala Glu Asp Ala Gln
                85                  90                  95
Phe Lys Pro Met Leu Val Gln Ala Leu Glu Phe Leu Asp Arg Gln Gln
            100                 105                 110
Ile Arg Glu Asn Cys Gln Asp Gln Gly Val Cys Tyr Arg His Val Arg
        115                 120                 125
Lys Gly Ala Trp Ala Phe Ser Asn Arg Asp Gln Gly Tyr Gly Val Ser
    130                 135                 140
Asp Cys Ile Ser Glu Ala Leu Lys Ala Val Ile Val Leu Gln Lys Glu
145                 150                 155                 160
Ala Asp Gly Tyr Pro Gln Leu Leu Glu Asp Gln Arg Ile Phe Asp Ala
                165                 170                 175
Val Asp Thr Leu Leu Thr Tyr Gln Asn Pro Ser Gly Gly Cys Ala Ser
            180                 185                 190
Tyr Glu Pro Thr Arg Gly Ser Glu Tyr Leu Glu Met Leu Asn Thr Ala
        195                 200                 205
Glu Val Phe Gly Arg Ile Met Val Glu Tyr Asp Tyr Pro Glu Cys Thr
    210                 215                 220
Ser Ala Val Leu Thr Ala Leu Val Leu Phe Ser Lys His Trp Pro Asp
225                 230                 235                 240
Tyr Arg Arg Glu Glu Ile Gln Thr Phe Ile Gln Arg Gly Val Asp Phe
                245                 250                 255
Ile Lys Arg Ala Gln Arg Pro Asp Gly Ser Trp Tyr Gly Ser Trp Ala
            260                 265                 270
Val Cys Phe Thr Tyr Gly Thr Met Phe Ala Leu Glu Cys Leu Arg Ser
        275                 280                 285
Ala Gly Glu Thr Tyr Glu Asn Ser Glu His Val Arg Arg Gly Cys Glu
    290                 295                 300
Phe Leu Leu Ser Lys Gln Arg Glu Asp Gly Gly Trp Ser Glu Ser Phe
305                 310                 315                 320
Gln Val Ser Thr Glu Ile Asn Lys Pro Leu His Tyr Pro Tyr Ala Ser
                325                 330                 335
Ile Arg Tyr Leu Lys Thr Asn Pro Phe Arg Ala Ala Asn Lys
            340                 345                 350
```

<210> 28476
<211> 61
<212> PRT
<213> A.fumigatus

<400> 28476

```
Pro Ser Ala Pro Leu Val Lys Ile Gln Phe Ala Leu Gly Gly Asn Ser
1               5                  10                  15
Lys Thr Leu Met Phe Val Met Cys Ser Pro Leu Gln Ala His Leu Ala
            20                  25                  30
Glu Thr Leu Thr Ser Leu Lys Phe Ala Thr Lys Val His Asn Thr His
```

```
        35                  40                  45
Ile Gly Thr Ala Lys Arg Gln Thr Arg Val Arg Asp Val
    50                  55                  60

<210> 28477
<211> 489
<212> PRT
<213> A.fumigatus

<400> 28477
Leu Lys Asp Ser His His Leu Ala Pro Ile Ser Gly Thr Ile Asp Pro
1               5                  10                  15
Thr Asp Lys Asp Pro Leu Thr Ala Ala Trp Arg Glu Leu His Glu Glu
            20                  25                  30
Thr Thr Leu Ser Pro Ala Asn Leu Thr Leu Trp Arg Ile Gly Lys Pro
        35                  40                  45
Phe Thr Phe Ser Asp Leu Ala Leu Asn Arg Glu Trp Thr Val His Pro
    50                  55                  60
Phe Ala Phe Lys Leu Lys Pro Ala Ser Gln Gly Gly Gln Gly Glu Ala
65                  70                  75                  80
Ala Ile Lys Thr Glu Trp Glu His Glu Ser Trp Glu Trp His Asp Pro
                85                  90                  95
Ala Ser Ile Val Asp Asp Glu Ala Phe Gly Gly Val Pro Arg Leu His
            100                 105                 110
Glu Thr Leu Arg Arg Val Phe Pro Glu Cys Glu Met Asp Glu Arg Ala
        115                 120                 125
Gly Glu Thr Leu Ala Arg Gly Leu Glu Arg Leu Gln Gln Asp His Lys
    130                 135                 140
Ser Gly Ala His Glu Leu Thr Gly Ile Ala Leu Ala Ile Phe Arg Glu
145                 150                 155                 160
Ile Ile Ala Gln Thr His Lys Ile Asp Glu Gly Trp Trp Arg Thr Val
                165                 170                 175
Arg Met Ala Ala Trp His Leu Ile Lys Asn Gly Arg Glu Ser Met Gly
            180                 185                 190
Ala Ala Thr Leu Asn Ala Leu Leu Ser Ile Leu Val Thr Leu Asp Asp
        195                 200                 205
Ile Val His Gln Thr Thr Gly Ala Glu Gln Asp Gln Lys Arg Asp Arg
    210                 215                 220
Ile Leu Ser Thr Ile Asp Ser His Ile Ala Asn Gly Thr Ala Asn Thr
225                 230                 235                 240
Thr Arg Leu Lys Asp Ala Phe Thr Ser Tyr Val Gln Thr Thr Phe Leu
                245                 250                 255
Ala Thr Gln Pro Lys Arg Asp Arg Val Gly Met Leu Thr Leu Ser Ala
            260                 265                 270
Ser Ser Thr Thr Arg Asn Ile Ile Leu Asp Ala Phe Asp Ser Phe Asp
        275                 280                 285
Val Pro Thr Leu Glu Leu Arg Val Leu Glu Ser Arg Pro Val Phe Glu
    290                 295                 300
Gly Ala Asn Leu Gly Ser Ser Ile Tyr Ser Arg Phe Gln Ser Gln Phe
305                 310                 315                 320
Gly Ser Thr Asp Lys Lys Leu Glu Ile Lys Ile Tyr Thr Asp Ala Ala
                325                 330                 335
Ala Ala Leu Ala Ala Gln Asp Ile Asp Val Val Leu Leu Gly Ala Asp
            340                 345                 350
Arg Ile Cys Ser Ser Lys Gly Val Ser Asn Lys Thr Gly Ser Leu Pro
        355                 360                 365
```

```
Val Val Leu Ser Ala Lys His Val Met Pro Ser Ala Lys Ile Leu Val
    370                 375                 380
Ile Ser Gln Leu Glu Lys Val Val Gly Asp Asp Gly Ile Leu Glu Asp
385                 390                 395                 400
Lys Val Glu Asp Asn Asp Pro Asp Glu Val Phe Ser Ala Trp Arg Asn
                405                 410                 415
Glu Arg Val Glu Gly Ser Gln Val Leu Glu Asp Ser Phe Arg Asp Ser
            420                 425                 430
Lys Thr Asn Lys Asp Asn Pro Ala Thr Ile Gln Ile Lys Asn Ile Tyr
        435                 440                 445
Phe Glu Trp Val Pro Leu Thr Leu Val Asp Ala Phe Val Ser Asp Glu
    450                 455                 460
Gly Val Leu Asp Glu Ala Ala Ile Gln Asn Lys Ser Gln Gln Leu Arg
465                 470                 475                 480
Lys Leu Ala Arg Lys Tyr Phe Asp Phe
                485
```

<210> 28478
<211> 109
<212> PRT
<213> A.fumigatus

```
<400> 28478
Arg Ser Gly Ala Ser Ala Asn Arg Ser Pro Ser Ala Thr Ser Leu Ser
1               5                   10                  15
Thr Ala Asn Gly Pro Ser Thr Leu Ser Pro Ser Asn Ser Asn Pro Gln
            20                  25                  30
Ala Arg Ala Ala Lys Ala Arg Gln Pro Leu Lys Gln Asn Gly Ser Thr
        35                  40                  45
Lys Ala Gly Asn Gly Thr Ile Arg Pro Pro Ser Ser Thr Thr Arg Pro
    50                  55                  60
Ser Ala Ala Cys Arg Val Ser Thr Arg Arg Ser Ala Glu Ser Ser Gln
65                  70                  75                  80
Ser Val Arg Trp Thr Ser Ala Arg Gly Arg Pro Ser Gln Gly Gly Trp
                85                  90                  95
Lys Gly Cys Ser Arg Thr Ile Arg Ala Gly Arg Thr Ser
            100                 105
```

<210> 28479
<211> 198
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (197)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 28479
Gly Tyr Val His Cys Gln Glu Arg Val Lys Phe Pro Phe Val Pro Asn
1               5                   10                  15
Leu Leu His Gln Leu Leu Tyr Ser Leu Asp Cys Glu Glu Asp Arg Ile
            20                  25                  30
Ala Ile Leu Gln Thr Leu Leu Leu Met Thr Tyr Trp Ser Asp His Val
        35                  40                  45
Asn Asn Pro Gln Arg Asp Ile Trp Asp Trp Ile Gly Ile Cys Asn Thr
```

```
    50                  55                  60
Gln Ala His Ser Ile Gly Leu Asn Arg Asp Pro Thr Thr Ser Asp Met
65                  70                  75                  80
Asp Pro Arg Met Lys Arg Leu Arg Val Arg Leu Trp Trp Ser Leu Tyr
                85                  90                  95
Cys Arg Asp Arg Leu Ile Ala Met Gly Leu Arg Arg Pro Thr Gln Ile
            100                 105                 110
Asn Glu Gly Thr Ser Ser Val Pro Met Leu Arg Leu Asp Asp Phe Asp
        115                 120                 125
Phe Glu Pro Phe His Pro Ser Val Ile Glu Ile Phe Arg Cys Arg Gln
    130                 135                 140
Leu Glu Asp Val Ser His Gln Lys Arg Leu Ala Thr Met Phe Ile Glu
145                 150                 155                 160
Lys Ala Lys Leu Cys Gln Ser Ile Gly Arg Val Leu Phe Ala Gln Tyr
                165                 170                 175
Ala Thr Ser Gln Cys Gln Phe Gly Leu His His Gly Ala Gly Ser Ile
            180                 185                 190
His Gly Ser Gln Xaa Pro
        195
```

<210> 28480
<211> 242
<212> PRT
<213> A.fumigatus

<400> 28480

```
Ser Pro Ser Ser Phe Phe Ser Ser Arg Ser Tyr Pro Val His Val Tyr
1               5                   10                  15
Gln Ile Thr Ser Phe Phe Cys Arg Cys Ser His Leu Gln Val Ala Ser
            20                  25                  30
Leu Arg Met Val Thr Thr Lys Arg Lys Leu Ser Ser Val Asp Ile Asp
        35                  40                  45
Ala Glu Leu Pro Asn Thr Lys Lys Ser Asn Leu Leu Gly Tyr Asp Ala
    50                  55                  60
Arg Thr Pro Trp Leu Phe Asp Ser Lys Pro Ser Ser Leu Gly Arg Arg
65                  70                  75                  80
Thr Ala Gly Asn Pro Ala Val Gln His Ser Leu Pro Leu Ala Asn Met
                85                  90                  95
Val Ser Thr Val Gln Asp Leu Ile Asp Pro Asp Phe Asp Pro Leu Ile
            100                 105                 110
Ala Ile Leu Asp Asp Glu Pro Arg Phe Leu Lys Pro Leu Pro Ser Arg
        115                 120                 125
Ile Ser Ser Glu Asp Leu Glu Phe Leu Arg Phe Arg Gly Ala Leu Ser
    130                 135                 140
Ile Pro Glu Ser Gly Leu Arg Asn Glu Leu Leu Arg Cys Tyr Ile Gln
145                 150                 155                 160
Trp Val His Ser Phe Met Pro Val Leu Asn Leu Gln Glu Phe Leu Arg
                165                 170                 175
Cys Val Ala Glu Asn Asp Pro Glu Gly Asn Ile Ser Leu Leu Leu Phe
            180                 185                 190
Gln Ala Val Met Phe Val Ala Thr Ala Phe Val Asp Phe Lys His Leu
        195                 200                 205
Gln Asp Ala Gly Tyr Lys Thr Arg Lys Ser Ala Arg Asn Ala Phe Tyr
    210                 215                 220
Glu Arg Leu Arg Val Cys Thr Leu Ser Arg Lys Gly Gln Val Pro Val
225                 230                 235                 240
```

Arg Ala

<210> 28481
<211> 244
<212> PRT
<213> A.fumigatus

<400> 28481
His Arg Pro Ser Pro Lys Thr Leu Phe Pro Lys Ile Gly Ser Ser Leu
1 5 10 15
Val Gln Val Tyr Ser Gly Asp Asp His Asp Tyr Cys Glu Ile Ser His
20 25 30
Arg Glu Phe Ser Gly Ser Pro Lys Glu Ile Thr Val Lys Ser Leu Ser
35 40 45
Trp Ala Met Gly Val Arg His Pro Gly Phe Leu Leu Thr Ser Leu Trp
50 55 60
Asn Pro Ile Asp Leu Thr Thr Gly Lys Pro Arg Glu His Ser Ser Ser
65 70 75 80
Thr Ile Gln Asn His Leu Cys Leu Leu Pro Asp Gln Leu Gly Ile Phe
85 90 95
Ile His Tyr Gly Ala Leu Phe Gly Phe Thr Leu Ala Ile Leu Leu Ile
100 105 110
Arg Ala Ile Val Leu Val Leu Tyr Phe Pro Arg Pro Thr Ser Pro Asp
115 120 125
Pro Val Leu Pro Leu Ser Glu Gln Asp Leu His Asn Ser Ser Pro Ser
130 135 140
Val Thr Ser Leu Pro Pro Phe Ser Ser Thr Ser Ser Ser Thr Leu Pro
145 150 155 160
Ser Pro Arg Gly Leu Ala Ser Arg Ala Val Asn Ala Pro Pro Arg Pro
165 170 175
Lys Pro Tyr His Asp Ala Tyr Pro Gly Leu Ala Glu Tyr Glu Ala Glu
180 185 190
Gln Asn Ser Lys Trp Arg Pro Ser Arg Asp Glu Tyr Arg Arg Lys Pro
195 200 205
Gly Ala Gly Arg Ser Ala Leu Ala Arg Ile Arg Arg Glu Leu Ile Gly
210 215 220
Ser Val Gln Tyr Val Ala Ser Val Val Leu Ala Trp Tyr Phe Phe Leu
225 230 235 240
Ile Trp Arg Trp

<210> 28482
<211> 262
<212> PRT
<213> A.fumigatus

<400> 28482
Arg Pro Leu Thr Val Arg Tyr Thr Asp Gln Tyr Met Arg Arg Ser Phe
1 5 10 15
Thr Ser Ile Gln Arg Ser Leu Gly Pro Asp Ser Val Val Phe Leu Gly
20 25 30
Asp Leu Phe Asp Gly Gly Arg Glu Trp Gly Thr Ser Ser Thr Thr Ser
35 40 45
Pro Glu Lys Arg Tyr Gln Gln Tyr Lys Asp Ser Phe Trp Lys Gln Glu
50 55 60

```
Tyr His Arg Phe Val Lys Ile Phe Ser Asp Gln Phe His Glu Gly Asp
65                  70                  75                  80
Gly Gln Ser Thr Glu Pro Arg Gly Arg Arg Met Ile Ala Ser Leu Pro
                85                  90                  95
Gly Asn His Asp Leu Gly Phe Gly Ser Gly Val Gln Val Pro Val Arg
            100                 105                 110
Asp Arg Phe Gln Ser Phe Phe Gly Pro Gly Asn Arg Val Asp Val Ile
        115                 120                 125
Gly Asn His Thr Phe Val Ser Ile Asp Thr Val Ser Leu Ser Ala Met
    130                 135                 140
Asp Gln Pro Asp Pro Arg Thr Gly Ser Ser Gly Thr Gly Ala Gly Asp
145                 150                 155                 160
Gly Glu Gln Pro Asn Glu Arg Ile Trp Arg Glu Ala Lys Asp Phe Leu
                165                 170                 175
Asp Glu Val Pro Arg His Met Ala Lys Ala Glu Thr Glu Glu Leu Leu
            180                 185                 190
Met Leu Arg Asn Glu Thr Gln Ala Ser Lys Gly Arg Leu Phe Lys His
        195                 200                 205
Asp Ala Val Gln Val Leu Glu Asn Ala Ile Val Lys Glu Pro Gln Trp
    210                 215                 220
Glu Ala Leu Gly Leu Pro Thr Ile Leu Leu Thr His Val Pro Leu Tyr
225                 230                 235                 240
Arg Arg Pro Gly Tyr Thr Val Trp Ala Ser Gln Arg Thr Leu Ser Thr
                245                 250                 255
Leu Ile Arg Trp Gly Ala
            260
```

<210> 28483
<211> 68
<212> PRT
<213> A.fumigatus

<400> 28483

```
Ser Ile Ser Arg Leu His Ser Asn Ala Ile Val Tyr Arg Cys Arg Glu
1               5                   10                  15
Asp Glu Ile Ser Leu Tyr Glu Ile Ile Thr Leu Asn Ile Ile Ile Leu
            20                  25                  30
Cys Leu Asn Lys Gly Leu Leu Phe Tyr Gln Gly Ser Arg Ile Thr Thr
        35                  40                  45
Ala Arg Leu Lys Arg Ser Thr Met Pro Thr Arg Arg Trp Pro His Thr
    50                  55                  60
Ala Pro Asn Gln
65
```

<210> 28484
<211> 158
<212> PRT
<213> A.fumigatus

<400> 28484

```
Val Val Asp Arg Met Gln Lys Asp Gln Asp Arg Asn Ile Asp Val Phe
1               5                   10                  15
Ile Thr Gly Ile Ser Ser Gln Leu Met Ser Thr Phe Asp Ser Ala Leu
            20                  25                  30
His Leu Asp Asp Gln Leu Thr Ser Asp Leu Ser Arg Glu Leu Glu Asn
        35                  40                  45
```

```
Gly Arg Leu Val Arg Leu Met Ala Lys Leu Asn Phe Val Asn Glu Arg
    50                  55                  60
Pro Glu Tyr Glu His Asp Arg Gln Trp Ser Glu Asn Gly Glu Arg Tyr
65                  70                  75                  80
Phe Leu Lys Ile Phe Arg Asp Tyr Val Phe His Gln Val Asp Ala Gln
                85                  90                  95
Gly Asp Pro Val Val Asp Leu Gly His Val Ile Thr Cys Leu Asn Lys
            100                 105                 110
Leu Asp Ala Gly Thr Glu Glu Lys Ile Thr Leu Ile Ser Arg Asp Glu
        115                 120                 125
Gln Ser Cys Phe Ile Val Ser Tyr Lys Glu Leu Lys Lys Ala Leu Glu
    130                 135                 140
Ser Ser Phe Gln Ala Leu Met Lys Pro Ala Arg Arg Met His
145                 150                 155
```

<210> 28485
<211> 248
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (40),(41),(60),(124)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28485

```
Ala His Phe Pro Gly Ile Ser Thr Gly Asp Ala Thr Asp Leu His Thr
1               5                   10                  15
Gln Gly Ala Thr Asn Gly Ile Ile His Gly Ile Asn Ala Ile Leu Ile
            20                  25                  30
Pro Pro Pro Glu Thr Leu Thr Xaa Xaa Thr Ile Val Pro Ser Glu Phe
        35                  40                  45
Ser Thr Phe Thr Leu Gly Leu Tyr Lys Thr Gly Xaa Ala Thr Ala Leu
    50                  55                  60
Asn Lys Ser Ser Thr Pro His His His Gly Gly Thr Met Phe Ala Pro
65                  70                  75                  80
Ser Asn Ser Ala Phe Lys His Leu Gly Leu Lys Ile Asn Ala Phe Leu
                85                  90                  95
Phe Ser Pro Ile Gly Glu Lys Tyr Leu Arg Ala Leu Leu Gln Tyr His
            100                 105                 110
Ile Val Gln Asn Arg Thr Leu Tyr Ser Asp Val Xaa Tyr Thr Ala Gln
        115                 120                 125
Gly Glu Ile Lys Pro Phe Gly Val Lys Gly Phe Thr His Leu Asp Leu
    130                 135                 140
Pro Thr Leu Leu His Gly Arg Lys Leu Ala Val Asp Val Ala Arg Phe
145                 150                 155                 160
Gly Pro Phe Ala Ser Leu Lys Ile Asn Gly Phe Gln Arg Val Ala Phe
                165                 170                 175
Ala Asp Ala Leu Ala Lys Asp Gly Thr Val His Val Val Asp Arg Val
            180                 185                 190
Leu Ile Pro Pro Arg Lys Val Asp Asp Ser Ala Pro Asp Trp Thr Gly
        195                 200                 205
Asn Asp Asp Glu Leu Thr Val Glu Asp Leu Lys Ser Arg Leu Gly Asp
    210                 215                 220
Trp Leu Ala Glu Asp Glu Gly Val Asp Glu Val Glu Met Met His Asp
225                 230                 235                 240
```

Ile Leu Ala His Gly Ala Glu Leu
245

<210> 28486
<211> 107
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (4)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28486
Ile Pro Arg Xaa Arg Phe Ser Leu Gln Pro Gly Gly Glu Asp Pro Pro
1 5 10 15
Phe Pro Pro His His Pro Ser Phe Asn Lys Thr Ile Tyr Glu Leu Ile
20 25 30
Lys Ser Ser Lys Tyr Thr Thr Ile Leu Ala Lys Ile Ile Asp Glu Asp
35 40 45
Asp Glu Leu Val Gln Phe Leu Asn Ser Thr Asp Ala Asn His Thr Phe
50 55 60
Phe Ala Pro Thr Asn Glu Ala Phe Ser Lys Ile Pro His His Cys Pro
65 70 75 80
Gly Arg Asp His Asp His Asp Gly Asp Asp His His Lys His His Lys
85 90 95
Val Pro Lys Glu Val Ile Arg Ala Ile Phe His
100 105

<210> 28487
<211> 70
<212> PRT
<213> A.fumigatus

<400> 28487
His Val Ala Pro Gly Arg Tyr Ser Ala Ala Asp Val Phe His Asn His
1 5 10 15
Thr Val Pro Thr Ala Leu Lys Glu Ser Ala Leu Gly His Asp Leu Pro
20 25 30
Gln Arg Leu Ala Val Arg Val Arg Trp Lys Gly Leu Thr Leu Asn Tyr
35 40 45
Tyr Ser His Ile Val Ala Ala Asp Ile Val Ser Ser Leu Pro Arg Asp
50 55 60
Ile Asn Arg Gly Arg Asn
65 70

<210> 28488
<211> 98
<212> PRT
<213> A.fumigatus

<400> 28488
Val Tyr Tyr Pro Gly Asp Trp Asp Gly Ala Asp Ser Thr Gly Val Ile
1 5 10 15
Leu Asp Tyr Asp Leu Ala Cys Lys Arg Ser Leu Glu Pro Leu Arg Gln
20 25 30

```
Phe Asp Phe Val Ala Pro Ala Ala His Thr Ala Gly Leu Ser Ile Gly
        35                  40                  45
Met Met Leu Ala Ser Thr Gly Asn Pro Tyr Val Lys Ala Leu Val Asp
    50                  55                  60
Asn Leu Pro Leu Tyr Asn Arg Arg Trp Leu Tyr Leu Pro Tyr Val Thr
65                  70                  75                  80
Val Met Phe Ser Thr Gly Cys His Tyr Ala Ser Tyr Gly Phe Pro Pro
                85                  90                  95
Thr Arg
```

<210> 28489
<211> 78
<212> PRT
<213> A.fumigatus

<400> 28489

```
Trp Leu Glu Ala Arg Glu Leu Cys Val Lys His His Ala Ser Trp Ser
1               5                   10                  15
Thr Phe Val Trp Asn Glu Glu Ser Ala Asn Lys Leu Val Arg Glu Asp
            20                  25                  30
Phe Pro His Leu Tyr Glu Met Trp Lys Gly Tyr Pro Tyr Met Ile Gln
        35                  40                  45
Arg Val Asp Ala Leu Arg Tyr Met Ile Leu His Lys His Gly Gly Glu
    50                  55                  60
Ser Ile Thr Arg Glu Ile Gly Met Glu Leu Thr Arg Gln Ala
65                  70                  75
```

<210> 28490
<211> 69
<212> PRT
<213> A.fumigatus

<400> 28490

```
Ser Leu Gly Gly Pro Ser Ser Lys Ser Gln Arg Cys Glu Gly Leu Pro
1               5                   10                  15
Thr Thr Ser Ser Ser Lys Asp Val Phe Leu Arg Gln Pro Thr Leu Leu
            20                  25                  30
Ile Ala Gly Glu Asn Ala Gly Ser Leu Trp Tyr Lys Gly Asn Leu Asp
        35                  40                  45
Asn Lys Ile Gly Gly Ala Thr Lys Lys Val Ile Val Pro Asn Ala Val
    50                  55                  60
Gln Met Gly Leu Leu
65
```

<210> 28491
<211> 124
<212> PRT
<213> A.fumigatus

<400> 28491

```
Thr Thr Gln Gly Phe Ser Arg Lys Gln Ser Gly Thr Tyr Ile Leu Phe
1               5                   10                  15
Asn Ser Ala Ile Pro Ser His Pro Pro Ser Cys Arg Pro Cys Arg Ser
            20                  25                  30
Thr Lys Asp Glu Phe Arg Leu Pro Ala Cys Cys Thr Ser Leu Gln Arg
```

```
        35                  40                  45
His Pro Thr Leu Leu Ala Ile Val Ile Val His Pro Gly Gly Gly Val
    50                  55                  60
Lys Glu Gln Thr Ala Gly Leu His Arg Arg Ser Ser Arg Lys Lys Ala
65                  70                  75                  80
Leu Ser Pro Ser Pro Thr Met Pro Leu His Gln Ala Glu Ser Arg Gly
                85                  90                  95
Glu Pro Asn Leu Ser Val Asp Pro Ala Ala Arg Val Ser Asp Val Lys
            100                 105                 110
Gly Cys Arg Leu Pro Arg Ala Ala Arg Met Cys Ser
        115                 120
```

<210> 28492
<211> 328
<212> PRT
<213> A.fumigatus

<400> 28492

```
Tyr Ser Ile Ser Leu Ile Met Cys Leu Leu Ser Lys Ile Ser Ala Ser
1               5                   10                  15
Leu Leu Leu Ala Met Ala Ala Pro Ser Leu Ser Tyr Pro Thr Gly Ile
            20                  25                  30
Gln Ser Tyr Thr Asn Pro Leu Phe Pro Gly Trp His Ser Asp Pro Ser
        35                  40                  45
Cys Ala Tyr Val Ala Glu Gln Asp Thr Phe Phe Cys Val Thr Ser Thr
    50                  55                  60
Phe Ile Ala Phe Pro Gly Leu Pro Leu Tyr Ala Ser Arg Asp Leu Gln
65                  70                  75                  80
Asn Trp Lys Leu Ala Ser Asn Ile Phe Asn Arg Pro Ser Gln Ile Pro
                85                  90                  95
Asp Leu Arg Val Thr Asp Gly Gln Gln Ser Gly Ile Tyr Ala Pro Thr
            100                 105                 110
Leu Arg Tyr His Glu Gly Gln Phe Tyr Leu Ile Val Ser Tyr Leu Gly
        115                 120                 125
Pro Gln Thr Lys Gly Leu Leu Phe Thr Ser Ser Asp Pro Tyr Asp Asp
    130                 135                 140
Ala Ala Trp Ser Asp Pro Leu Glu Phe Ala Val His Gly Ile Asp Pro
145                 150                 155                 160
Asp Ile Phe Trp Asp His Asp Gly Thr Val Tyr Val Thr Ser Ala Glu
                165                 170                 175
Asp Gln Met Ile Lys Gln Tyr Thr Leu Asp Leu Lys Thr Gly Ala Ile
            180                 185                 190
Gly Pro Val Asp Tyr Leu Trp Asn Gly Thr Gly Gly Ile Trp Pro Glu
        195                 200                 205
Gly Pro His Ile Tyr Lys Arg Asp Gly Tyr Tyr Tyr Leu Met Ile Ala
    210                 215                 220
Glu Gly Gly Thr Glu Leu Gly His Ser Glu Thr Met Ala Arg Ser Arg
225                 230                 235                 240
Thr Arg Thr Gly Pro Trp Glu Pro Tyr Pro His Asn Pro Leu Leu Ser
                245                 250                 255
Asn Lys Gly Thr Ser Glu Tyr Phe Gln Thr Val Gly His Ala Asp Leu
            260                 265                 270
Phe Gln Asp Gly Asn Gly Asn Trp Trp Ala Val Ala Leu Ser Thr Arg
        275                 280                 285
Ser Gly Pro Ala Trp Gln Asn Tyr Pro Met Gly Arg Glu Thr Val Leu
    290                 295                 300
```

```
Ala Pro Ala Ala Trp Glu Lys Gly Asp Trp Pro Val Ile Arg Tyr Gln
305                 310                 315                 320
Pro Pro Asp Gly Arg Tyr Thr Ser
                325
```

<210> 28493
<211> 136
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (69)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28493

```
Pro Trp Val Ser Gln Gly Pro Gly Ser Leu Pro Phe Leu Arg Thr Gly
1               5                   10                  15
Thr Lys Leu Ala Pro Ser Leu Lys Ala Lys Leu Gly Pro Lys Arg Asn
            20                  25                  30
Pro Arg Ala Ser Ser Pro Thr Ile Thr Ser Gly Phe Trp Leu Pro Trp
        35                  40                  45
Val Ser Arg Met Cys Ser Ser Arg Gln Arg Arg Arg Ala Ser Cys Arg
    50                  55                  60
Val Gly Ser Ala Xaa Asn Arg Lys Ile Ser Ser Lys Arg Met Pro Gly
65                  70                  75                  80
Asp Arg Lys Ser Gly Asn Trp Arg Gln Ala Ala Arg Asp Ser Tyr Phe
                85                  90                  95
Lys Asn Arg Arg Ile Arg Trp Leu Pro Glu Gly Asp Gly Glu Arg Gly
            100                 105                 110
Val Pro Ala Asn Leu Gly Gly Arg Arg Ala Ser Gly Ser Phe Ala Leu
        115                 120                 125
Asp Leu Arg Lys Gln Phe Asp Trp
    130                 135
```

<210> 28494
<211> 154
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (25)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28494

```
Glu Ser Arg Ala Ala Trp Arg Gln Phe Pro Asp Phe Arg Ser Pro Gly
1               5                   10                  15
Ile Leu Phe Glu Asp Ile Phe Leu Xaa Phe Ala Asp Pro Thr Leu His
            20                  25                  30
Glu Ala Leu Leu Arg Cys Leu Glu Leu His Ile Leu Glu Thr His Gly
        35                  40                  45
Asn Gln Lys Pro Asp Val Ile Val Gly Leu Glu Ala Arg Gly Phe Leu
    50                  55                  60
Phe Gly Pro Ser Leu Ala Leu Arg Leu Gly Ala Ser Phe Val Pro Val
65                  70                  75                  80
```

```
Arg Lys Lys Gly Lys Leu Pro Gly Pro Cys Glu Thr Gln Gly Tyr Glu
                85                  90                  95
Lys Glu Tyr Gly Gln Asp Phe Phe Gln Met Gln Ala Asp Ala Ile Lys
            100                 105                 110
Pro Gly Gln Lys Val Ile Val Val Asp Asp Ile Ile Ala Thr Gly Glu
        115                 120                 125
Phe Asp Leu Phe Gln Glu Asn Thr Leu His His Ser Leu Thr Trp Leu
    130                 135                 140
Gln Ala Ala Leu Pro Thr Leu Pro Glu Ser
145                 150
```

<210> 28495
<211> 67
<212> PRT
<213> A.fumigatus

<400> 28495

```
Phe Ile Ser Gly Lys Tyr Ser Ser Ser Phe Ile Asp Val Val Thr Gly
1               5                   10                  15
Gly Ser Ala Tyr Ala Ala Gly Glu Leu Ile Arg Lys Met Gly Gly Glu
            20                  25                  30
Leu Met Gly Phe Ile Phe Ile Leu Glu Leu Glu Phe Leu Asn Gly Arg
        35                  40                  45
Asp Lys Leu Pro Ala Pro Val Tyr Thr Leu Leu Ser Gly Gln Glu Ser
    50                  55                  60
Lys Tyr Gln
65
```

<210> 28496
<211> 115
<212> PRT
<213> A.fumigatus

<400> 28496

```
Arg His Thr Asp Lys Asp Leu Gly Val Lys Ile His Ala Thr Gly Asp
1               5                   10                  15
Val Arg Asn Gly Phe Glu Phe Glu Ile Lys Arg Ser Ser Asn Phe Arg
            20                  25                  30
Thr Asn Glu Leu Pro Pro Thr Lys Arg Ile Pro Leu Gln Trp Val Tyr
        35                  40                  45
Gly Gln Tyr Phe Asp Glu Lys Ala Met Ser Asn Asn Gly Glu His Lys
    50                  55                  60
Ile Asp Asn Val Pro Val Cys Gln Phe Glu Ala Ser Ala His Lys Ile
65                  70                  75                  80
Lys Ala Pro Gly Lys Ser Leu Asn Thr Thr Ser Asp Ala Val Ser Pro
                85                  90                  95
Asn Tyr Ile Ser His Ala Ala Ser Cys Ser Val Ser Val Ser Gly Asn
            100                 105                 110
His Ile Phe
        115
```

<210> 28497
<211> 162
<212> PRT
<213> A.fumigatus

<400> 28497
Leu Glu Asn Cys Leu Gln Ala Ser Leu Leu Arg Glu Ala Ala Arg Lys
1 5 10 15
Gly His Ala Gly Val Val Gln Gln Leu Leu Ala Val Ala Gly Val Asn
20 25 30
Pro Ala Ala Val Asp Arg His His Ser Thr Pro Leu Ile Val Ala Asp
35 40 45
Leu Gln Gly His Ala Glu Val Val Lys Leu Leu Leu Ala Thr Gly Arg
50 55 60
Val Gln Leu Asn Thr Arg Asp Asn Lys Gly Met Thr Pro Leu Met Tyr
65 70 75 80
Ala Ala Lys Phe Gln Arg Asn Pro Val Val Glu Phe Leu Leu Ser Thr
85 90 95
Gly Gln Val Gln Val Asp Phe Asp Leu Arg Lys Leu Ser Lys Gly Pro
100 105 110
Arg Ser Leu Asn Gln Gln Asn Pro Thr Leu Asp Gln Ser Leu Val Glu
115 120 125
Val Ile Asp Ala Tyr Lys Arg Asp Asn Ala Ser Pro Lys Ser Gly Leu
130 135 140
Leu Leu Lys Gly Gln Lys Pro Met Phe Leu Ile Val Leu Cys Pro Pro
145 150 155 160
Pro Pro

<210> 28498
<211> 62
<212> PRT
<213> A.fumigatus

<400> 28498
Val Lys Asp Ile Glu Arg Thr Tyr His Asn Thr Asn Ile Pro Tyr Ile
1 5 10 15
Asp Arg Val Thr Pro Ile Asp Phe Gln His His Phe Arg Arg Ser Ile
20 25 30
Asn Ile Trp Leu Arg Ile Val Ile Ser Pro Leu Ile Ser Thr Tyr Gly
35 40 45
Arg Ala Lys Ile Thr Gln His Cys Ser Thr Lys His Leu Trp
50 55 60

<210> 28499
<211> 95
<212> PRT
<213> A.fumigatus

<400> 28499
Ala Val Leu Ser Asp Phe Gly Ser Ala Val Arg Gly Asp Gln Arg Arg
1 5 10 15
Asn His Asp Ala Gln Pro Asn Val Tyr Arg Ser Pro Glu Val Met Leu
20 25 30
Lys Val Asp Trp Ser Tyr Pro Val Asp Ile Trp Asn Val Gly Val Met
35 40 45
Val Cys Pro Leu Asp Ile Leu Tyr Ser Pro Val Gly Asn Asn Val Tyr
50 55 60
Arg Cys Gly Ile Cys Leu Arg Gly Ser Ile Phe Ser Met Glu Met Thr
65 70 75 80
Gln Met Ala Lys Gly Ile Gln Pro Gly Arg Thr Leu Arg Lys Leu

85 90 95

<210> 28500
<211> 199
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (199)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28500
Val Arg Leu Ala Lys His Thr Arg Met Ile Leu Ala Glu Ile Asn Ile
1 5 10 15
Tyr Ala Glu Asp Gly Ser Phe His Gly Asn Gly Phe Phe Met His Met
20 25 30
Pro Gly Ala Lys Lys Pro Phe Ile Leu Thr Ala Ala His Asn Ile Ile
35 40 45
Ser Lys Asn Gly Asp Pro Ser Glu Asn Ile Val Met Arg Val Met Gly
50 55 60
Ser Lys Lys Arg Phe Pro Ile His Gly Ser Thr Val Arg Ile Cys Pro
65 70 75 80
Ala Tyr Glu Gln Asn Pro Thr Thr Ala Ala Glu Glu Ala Asp Trp Ala
85 90 95
Leu Ile Phe Ala Pro Asp Glu Leu Glu Gln Asp Pro Ala Arg Ala Gly
100 105 110
Ile Gly Pro Leu Gly Phe Ala Leu Lys Leu Ala Tyr Glu Glu Arg Leu
115 120 125
Asp Cys Glu Met Arg Val Thr Gly Val Pro Val Ser Ser Lys Lys Asn
130 135 140
Ser Pro Asn Ala Thr Thr Met Gly Pro Val Thr Thr Thr Gly Lys Cys
145 150 155 160
Leu Asn Pro Ile Val Leu Pro Ala Gln Leu Glu Tyr Thr Ala Lys Thr
165 170 175
Asp Lys Gly Leu Ser Gly Ser Pro Val Trp Thr Met Tyr His Gly Val
180 185 190
Pro Thr Val Leu Ala Ile Xaa
195

<210> 28501
<211> 265
<212> PRT
<213> A.fumigatus

<400> 28501
Val Arg Arg Lys Gly Leu Leu Phe Ile Pro Ala Pro Thr Val Ala Gly
1 5 10 15
Ala Asp Lys Tyr Arg Asn Trp Thr Asn Trp Gly Thr Thr Trp Ser Ser
20 25 30
Trp Thr Lys Tyr His Gly Gly Asn Asp Thr Ile Glu Glu Leu Pro Trp
35 40 45
Gln Gly Thr Lys Gly Gln Arg Trp Glu Gly Lys His Val Arg Val Glu
50 55 60
Tyr Trp Ser Gly Leu Thr Gly Ser Ser Asp Tyr Tyr Gln Glu Gly Asp
65 70 75 80

```
Val Gly Trp Pro His Gln Val Pro Arg Arg Phe Pro His Ile His Phe
                85                  90                  95
Asn Gly Pro Phe Asn Gln Phe Gly Tyr Asp Gly Gly Leu Pro Asn Lys
            100                 105                 110
Leu Lys Leu Asp Thr Thr Thr Gly His Trp Lys Tyr His Phe Thr Tyr
        115                 120                 125
Glu Trp Pro Ala Gln Ala Gln Ile Asn Val Trp Gly Met Asn Pro Asp
    130                 135                 140
Gly Arg Pro Asp Gln Ser Trp Val Leu Gly Asp Ile Asp Gly Asp His
145                 150                 155                 160
Val Leu Asp Arg Met Pro Pro Ser Ser Leu Ser Ala Thr Met Ile Asn
                165                 170                 175
Ile Thr Asp Leu Pro Pro Ser Pro His Leu Ala Trp Ile Ile Ser Ile
            180                 185                 190
Asn Asp Gly Thr Met Arg Tyr Thr Leu Glu Pro Thr Gly Asp Gln Ser
        195                 200                 205
Thr Gln Met Ala Met Tyr Ile Leu Phe Trp Ile Val Pro Leu Leu Thr
    210                 215                 220
Gly Ala Val Cys Val Tyr Leu Phe Lys Lys Ser Phe Tyr Gln Val Lys
225                 230                 235                 240
Phe Asn Gln Val Gly Val Ser Gln Lys Arg Thr Leu Ile Pro Leu Gly
                245                 250                 255
Pro Ser Ala Glu Gly His Ala Cys Pro
            260                 265
```

<210> 28502
<211> 548
<212> PRT
<213> A.fumigatus

<400> 28502

```
Asn Pro Pro Val Ile Lys Val Arg Arg Trp Pro Cys Thr Phe Ser Ser
1               5                  10                  15
Gly Leu Cys Pro Cys Ser Gln Val Arg Cys Ala Ser Thr Cys Ser Arg
            20                  25                  30
Asn Pro Ser Thr Arg Ser Ser Ser Thr Arg Ser Val Ser Ala Lys Ser
        35                  40                  45
Gly Arg Ser Phe Pro Trp Ala Leu Gln Arg Lys Val Thr Arg Ala Arg
    50                  55                  60
Asn Gly Glu Gly Glu Ala Met Asn Pro Leu Met Arg Leu Ala Asn Lys
65                  70                  75                  80
Ser Gly Phe Leu Gln Ser Ala Thr Asp Leu Thr Ala Ala Ser Gly Gly
                85                  90                  95
Ser Lys Arg Arg Met Val Leu Ile Ala Thr Met Glu Tyr Asp Ile Glu
            100                 105                 110
Asp Trp Ala Ile Lys Ile Lys Ile Gly Gly Leu Gly Val Met Ala Gln
        115                 120                 125
Leu Met Gly Lys Thr Leu Gly His Gln Asp Leu Ile Trp Val Val Pro
    130                 135                 140
Cys Val Gly Gly Val Asp Tyr Pro Val Asp Arg Pro Ala Glu Pro Met
145                 150                 155                 160
Ile Val Thr Ile Leu Gly Lys Pro Tyr Glu Val Gln Val Gln Tyr His
                165                 170                 175
Ile Leu Gln Asn Ile Thr Tyr Val Leu Leu Asp Ala Pro Val Phe Arg
            180                 185                 190
Gln Gln Ser Lys Ser Glu Pro Tyr Pro Pro Arg Met Asp Asp Leu Asp
```

```
        195                 200                 205
Ser Ala Ile Tyr Tyr Ser Ala Trp Asn Gln Cys Ile Ala Gln Thr Ile
    210                 215                 220
Lys Arg Phe Pro Ile Asp Leu Tyr His Ile Asn Asp Tyr His Gly Ser
225                 230                 235                 240
Leu Ala Pro Leu Tyr Leu Leu Pro Gln Thr Ile Pro Ala Cys Leu Ser
                245                 250                 255
Leu His Asn Ala Glu Phe Gln Gly Leu Trp Pro Met Arg Thr Glu Lys
            260                 265                 270
Glu Lys Glu Glu Val Cys Ser Val Phe Asn Leu Asp Lys Glu Ile Thr
        275                 280                 285
Arg Arg Tyr Val Gln Phe Gly Glu Val Phe Asn Leu Leu His Ala Gly
    290                 295                 300
Ala Ser Tyr Leu Arg Val His Gln Gln Gly Phe Gly Ala Val Gly Val
305                 310                 315                 320
Ser Lys Lys Tyr Gly Lys Arg Ser Tyr Ala Arg Tyr Pro Ile Phe Trp
                325                 330                 335
Gly Leu Lys Lys Val Gly Asn Leu Pro Asn Pro Asp Pro Ser Asp Val
            340                 345                 350
Gly Glu Trp Asn Lys Glu Lys Ala Leu Ala Lys Ser Glu Asp Pro Pro
        355                 360                 365
Val Asp Gln Glu Phe Glu Ala Gly Arg Ala Glu Leu Lys Arg Gln Ala
    370                 375                 380
Gln Glu Trp Ala Gly Leu Glu Gln Asn Pro Asp Ala Asp Leu Leu Val
385                 390                 395                 400
Phe Val Gly Arg Trp Ser Met Gln Lys Gly Val Asp Leu Ile Ala Asp
                405                 410                 415
Val Met Pro Ala Val Leu Glu Ala Arg Pro Asn Val Gln Leu Ile Cys
            420                 425                 430
Val Gly Pro Val Ile Asp Leu Tyr Gly Lys Phe Ala Ala Leu Lys Leu
        435                 440                 445
Asp Arg Met Met Lys Val Tyr Pro Gly Arg Val Phe Ser Arg Pro Gln
    450                 455                 460
Phe Thr Ala Leu Pro Pro Tyr Ile Phe Ser Gly Ala Glu Phe Ala Leu
465                 470                 475                 480
Ile Pro Ser Arg Asp Glu Pro Phe Gly Leu Val Ala Val Glu Phe Gly
                485                 490                 495
Arg Lys Gly Ala Leu Gly Ile Gly Ala Arg Val Cys Gly Leu Gly Gln
            500                 505                 510
Met Pro Gly Trp Trp Tyr Asn Val Glu Ser Met Thr Thr Ala His Leu
        515                 520                 525
Leu His Gln Phe Lys Leu Ala Ile Glu Gly Ala Leu Lys Ser Lys Pro
    530                 535                 540
Gln Gly Pro Cys
545
```

<210> 28503
<211> 131
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (21),(29)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28503
Thr Asn Gly Phe Arg Val Pro Gln Trp Ile Glu Asp Leu Glu Ile Leu
1 5 10 15
Gln Ser Thr Phe Xaa Arg Ile His Asn Lys Gly Ala Xaa Lys Ser Asn
20 25 30
Ile Ser Pro Val Thr Ser Thr Arg Pro Met Thr Pro Trp Gly Leu Gly
35 40 45
Thr Met Asn Pro Thr Phe Pro Gly Cys Trp Asn Pro Asp Pro Gly Gly
50 55 60
Thr His Phe Cys Arg Asp Cys Phe Val Asn Leu Lys Glu Leu Ser Glu
65 70 75 80
Ile Gly His Asn Asn Gly Glu Thr Ile Ile Phe Leu Lys Gln Asn Asn
85 90 95
Leu Trp Val Gly Met Asp Gly Lys Pro Leu Pro Gly Met Ala Pro Lys
100 105 110
Thr Ala Leu Gly Val His Thr Gly Pro Gly Ile Leu Thr Gly Pro Gly
115 120 125
Gly Gly Glu
130

<210> 28504
<211> 467
<212> PRT
<213> A.fumigatus

<400> 28504
Cys Ser Cys His Val Ala Arg Lys Tyr Arg Asp Glu Pro Arg Pro Arg
1 5 10 15
Gln Gly Leu Leu Arg Gly Arg Glu Phe Leu Met Lys Asp Leu Tyr Thr
20 25 30
Phe Asp Tyr Ser Val Glu Glu Ala Leu Lys Thr Tyr Asn Leu Val Lys
35 40 45
Ala Ala Tyr Lys Asn Leu Phe Asp Glu Leu Lys Ile Pro Tyr Leu Val
50 55 60
Ala Ala Ala Asp Ser Gly Asn Met Gly Gly Ser Leu Ser His Glu Phe
65 70 75 80
His Phe Pro Ser Ser Lys Gly Glu Asp Thr Val Ile Ser Cys Ser Asn
85 90 95
Cys Asp His Val Tyr Asn Asp Glu Leu Ala Asp Gly Lys Ala His Gly
100 105 110
Ile Glu Glu Ala Gln Asn Ala Gly Ser Gly Gln Val Ser Gly Phe Asp
115 120 125
Thr Gly Ala Thr Ser Thr Gly Asp Ser Pro Thr Val Ser Val Asp Leu
130 135 140
Trp Met Ala Ile Ser Arg Asp Lys Lys Thr Leu Leu Arg Gly Trp Tyr
145 150 155 160
Pro Lys Phe Ser Met Arg Glu Ala Asn Gln Glu Pro Val Glu Arg Glu
165 170 175
Val Asn Ser His Ala Val Lys Ser Ile Ala Thr Ala Ala Gly Val Asp
180 185 190
Ile Asp Leu Ser Val Glu Asn Pro Leu Glu Gln Trp Val Ser Gln Val
195 200 205
Lys Ser Asp Arg Glu Ser Ser Ile Ser Gly Ser Ser Glu Arg Pro Gln
210 215 220
Val Leu Asp Leu Tyr Asp Ala Gln Val Arg Val Tyr Lys Arg Pro Pro
225 230 235 240

```
Leu Gly Asp Leu Leu Glu Lys Val Asn Arg Thr Ala Asp Glu Ile Asp
                245                 250                 255
Tyr Ser Met Leu Asp Arg Phe Pro Gly Thr Asn Gln Ala Leu Asn Leu
            260                 265                 270
Val Lys Val Gln Asp Gly Asp Lys Cys Thr Lys Cys Ala Lys Gly Ser
        275                 280                 285
Leu Lys Thr His Thr Ala Val Glu Leu Gly His Thr Phe His Leu Gly
    290                 295                 300
Thr Arg Tyr Ser Glu Val Leu Gln Ala Ser Val Met Val Asp Arg Ser
305                 310                 315                 320
Leu Ser Gly Gly Ser Gln Ser Lys Asp Gln Leu Val Pro Met Gln Met
                325                 330                 335
Gly Cys His Gly Ile Gly Val Ser Arg Met Ile Ser Ala Val Ala Asp
            340                 345                 350
Ser Leu Ser Asp Ser Lys Gly Leu Asn Trp Pro Arg Ala Met Ala Pro
        355                 360                 365
Tyr Glu Val Val Val Val Pro Gly Lys Gly Leu Glu Thr Glu Ala Glu
    370                 375                 380
Lys Val Tyr Asp Ser Leu Val Ser Asn His Thr Ser Ser Val Asp Ala
385                 390                 395                 400
Ile Leu Asp Asp Arg Asp Lys Pro Met Gly Trp Lys Leu Gly Asp Ala
                405                 410                 415
Asp Leu Ile Gly Tyr Pro Val Ile Val Val Val Gly Lys Gly Trp Lys
            420                 425                 430
Lys Ala Gln Thr Leu Glu Val Gln Cys Arg Arg Leu Asn Asn Leu Arg
        435                 440                 445
Glu Asp Val Pro Leu Asp Gln Leu Pro Ser Phe Val Gln Ser Leu Leu
    450                 455                 460
Glu Arg Leu
465
```

<210> 28505
<211> 128
<212> PRT
<213> A.fumigatus

```
<400> 28505
Ala Leu Ala Ser Leu Ala Tyr Ala Ile Thr Gly Tyr Ile Pro Tyr Ser
1               5                   10                  15
Ala Leu Ser Asn Arg Arg Ala Val Ile Asn Gly Ala Ser Thr Val Asn
            20                  25                  30
Ile Thr Ser Leu Ser Val Pro Gln Leu Arg Ala Leu Gln Thr Arg Leu
        35                  40                  45
Thr Ser Glu Leu Glu His Leu Thr Thr Ser His Gln Lys Leu Arg Ala
    50                  55                  60
Ala Gln Ser Arg Phe Arg Asp Cys Val Arg Ser Ile Asn Asp Gly Val
65                  70                  75                  80
Val Gly Ser Glu Lys Lys Gly Thr Ala Gly Lys Asp Asp Ile Leu Val
                85                  90                  95
Pro Leu Thr Ser Ser Leu Tyr Val Arg Gly Lys Leu Ala Asp Arg Glu
            100                 105                 110
Lys Val Leu Val Asp Val Gly Thr Gly Phe Tyr Val Glu Lys Val Ser
        115                 120                 125
```

<210> 28506
<211> 63

<212> PRT
<213> A.fumigatus

<400> 28506
Glu Tyr Glu His Lys Gly Gly Lys Cys Val Ser Trp Thr Ser Lys Lys
1 5 10 15
Phe Ile Pro Ile His Pro Ser Arg Asp Thr Ile Thr Cys Cys Ile Val
20 25 30
Thr Ile Asp Glu Ser Gly Ser Lys Asn Thr Lys Thr Arg Phe Pro Ser
35 40 45
Asn Asn Gln His Met Lys Ser Asn Met Lys Thr Cys Gln Tyr Cys
50 55 60

<210> 28507
<211> 203
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (38)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28507
Lys Thr Val Ser Ser Gln Met Val Ala Pro Phe Lys Thr Phe Pro Thr
1 5 10 15
Phe Ser Pro Thr Ser Lys Leu Ser Thr Arg Pro Cys Gly Lys Ser Pro
20 25 30
Asn Val Pro Ser Cys Xaa Met Ala Ala Asp Arg Gly Ala Phe Ile Asp
35 40 45
Gln Ser Gln Ser Leu Asn Ile His Leu Lys Glu Pro Thr Met Gly Lys
50 55 60
Leu Thr Ser Met His Phe Ala Gly Trp Lys Met Gly Leu Lys Thr Gly
65 70 75 80
Ile Tyr Tyr Leu Arg Thr Met Ala Ala Ser Ala Pro Ile Gln Phe Thr
85 90 95
Val Asp Gln Glu Gln Phe Lys Val Ala Asp Thr Asn Val Ala Arg Ala
100 105 110
Asn Ala Ala Tyr Lys Lys Arg Ala Ala Gly Ser Val His Thr Thr Tyr
115 120 125
Ser Ala Val Pro Arg Thr Thr Ser Ala Pro Leu Asn Gly His Ser Glu
130 135 140
Asp Gly Ser Pro Arg Ala Leu Ala Ala Asp Val Thr Ala Asp Ser Glu
145 150 155 160
Thr Gly Val Asn Gly Ser Gln Glu Glu Asp Asp Glu Arg Glu Ser Gly
165 170 175
Glu Arg Glu Gly Asp Ile Tyr Ser Gln Lys Val Leu Gln Cys Ser Ile
180 185 190
Glu Asn Lys Glu Ala Cys Leu Met Cys Gln Gly
195 200

<210> 28508
<211> 319
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (310)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28508
Lys Ala Gln Lys Leu Trp Tyr Ala Ile Leu Glu Ala Gln Thr Glu Thr
1 5 10 15
Gly Asn Pro Phe Met Leu Tyr Lys Asp Ala Cys Asn Lys Lys Ser Asn
20 25 30
Gln Lys Asn Leu Gly Thr Ile Arg Ser Ser Asn Leu Cys Thr Glu Ile
35 40 45
Ile Glu Tyr Ser Ala Pro Asp Glu Val Ala Val Cys Asn Leu Ala Ser
50 55 60
Leu Ala Leu Pro Thr Phe Val Asp Ala Ala Arg Gly Glu Tyr Asp Phe
65 70 75 80
Gly Lys Leu His Glu Val Val Gln Val Leu Val Arg Asn Leu Asn Lys
85 90 95
Ile Ile Asp Val Asn Tyr Tyr Pro Val Pro Glu Ala Lys Lys Ser Asn
100 105 110
Met Arg His Arg Pro Ile Ala Leu Gly Val Asn Gly Leu Ala Asp Ala
115 120 125
Phe Leu Ala Leu Arg Leu Pro Phe Asp Ser Ala Glu Ala Arg Gln Leu
130 135 140
Asn Ile Gln Ile Phe Glu Thr Ile Tyr His Gly Ala Leu Thr Ala Ser
145 150 155 160
Cys Glu Leu Ala Lys Glu Phe Gly Pro Tyr Glu Thr Tyr Glu Gly Ser
165 170 175
Pro Val Ser Gln Gly Ile Leu Gln Tyr Asp Met Trp Asp Arg Thr Pro
180 185 190
Thr Asp Leu Trp Asp Trp Asp Ser Leu Lys Ala Lys Ile Ala Gln His
195 200 205
Gly Val Arg Asn Ser Leu Leu Val Ala Pro Met Pro Thr Ala Ser Thr
210 215 220
Ser Gln Ile Leu Gly Phe Asn Glu Cys Phe Glu Pro Tyr Thr Ser Asn
225 230 235 240
Ile Tyr Ser Arg Arg Val Leu Ala Gly Glu Phe Gln Val Val Asn Pro
245 250 255
Trp Leu Leu Lys Asp Leu Val Asp Leu Gly Leu Trp Ser Asp Asn Met
260 265 270
Lys Asn Arg Ile Ile Ala Asp Gly Gly Ser Val Gln Asn Ile Pro Asn
275 280 285
Ile Leu Ala Asp Ile Lys Ala Leu Tyr Lys Thr Val Trp Glu Ile Ser
290 295 300
Gln Arg Thr Ile Leu Xaa Asn Gly Arg Arg Pro Trp Cys Phe His
305 310 315

<210> 28509
<211> 78
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE

<222>
(5),(8),(14),(17),(18),(19),(21),(22),(26),(28),(29),(34),(35),(38),(39),(40),(41),(42),(43),(44),(45),(46),(47),(48),(49),(50),(51),(59),(60)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28509
Pro Pro Pro Pro Xaa Pro Pro Xaa Pro Pro Pro Pro Pro Xaa Pro Pro
1 5 10 15
Xaa Xaa Xaa Pro Xaa Xaa Pro Pro Pro Xaa Pro Xaa Xaa Lys Asn Glu
20 25 30
Val Xaa Xaa Gln Thr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
35 40 45
Xaa Xaa Xaa Lys Thr Leu Arg Thr Pro Lys Xaa Xaa Gly Arg Lys Lys
50 55 60
Asp Leu Glu Lys Asp Gly Arg Gln Ser Asp Arg Glu Thr Asp
65 70 75

<210> 28510
<211> 467
<212> PRT
<213> A.fumigatus

<400> 28510
Leu Val Leu Ala Lys Trp His Pro Asn Val Ser Lys Leu Asp Gln Tyr
1 5 10 15
Thr Pro Ala Arg Ser Trp Ser Ala Leu Met Glu Ala Ser Met Arg Gln
20 25 30
Ser Gly Leu His Thr Tyr Gly Ser Val Arg Val Ile Ala Thr Leu Pro
35 40 45
Leu Phe Glu Ala Gln Thr Ile Leu Pro Arg Ser Val Ser Asn Arg Ser
50 55 60
Arg Pro Ala Leu Ile Thr Glu Asn Val Ala Leu His Ala Phe Glu Val
65 70 75 80
Ala Ser Thr Gln Asp Pro Ser Val Trp Thr Met Ala Lys Gly Trp Asp
85 90 95
Leu Ala Ala Ala Asn Ala Ala Arg Val Ala Glu Arg Ser Ala Gln His
100 105 110
Asn Val Ile Val Pro Ala Gly Arg Gln Val Pro Pro Val Pro Leu Ala
115 120 125
Pro Glu Ala Pro Glu Pro Gly His Ser Pro Tyr Pro Tyr Val Ser Arg
130 135 140
Leu Lys Thr Asp Met His Asp Arg Ile Leu Lys Thr Ile Lys Thr Ala
145 150 155 160
Glu Lys Ser Pro Ser Asp Ile Ala Leu Lys Lys Lys Lys Gln Arg Ala
165 170 175
Leu Ile Gln Leu Arg Tyr Asp Asn Arg Asn Ser Phe Leu Arg Lys Glu
180 185 190
Leu Ala Asp Lys Gln Ile Lys Ile Asp Glu Leu Asn Arg Ser Leu Ala
195 200 205
Arg Lys Ala Ala Asp Ser Thr Ala Asp Leu Gln Asp Leu Gln Pro Ile
210 215 220
Leu Asp Gln Ile Gly Ser Leu Lys Ala Asp Ile Ala Lys Leu Ser Ser
225 230 235 240
Glu Val His Tyr Glu Val Leu His His Val Pro Asn Met Ile Asp Asp
245 250 255
Ala Arg Ser Ala Leu Ser Thr Gly Ser Phe Asp Asp Ala Val Leu Leu

```
            260                 265                 270
Trp Asp Arg Arg Leu Phe Glu Pro Leu His Ile Gln Pro Glu Glu Leu
        275                 280                 285
Tyr Pro Arg Glu Thr Asp Met Thr Met Ile Tyr Phe Glu Ala Asp Ala
    290                 295                 300
Asn Pro Pro Ile Met Arg Leu Cys Asn Gln Val Asp Glu Ala Ser Arg
305                 310                 315                 320
Ala Asp Leu Tyr Arg Ile Tyr Glu Ala Val Ser Leu Ile Phe Gly Ser
                325                 330                 335
Arg Ser Ala Met Pro Val Ser Glu Leu Leu Asn Ala Leu Phe Pro Asn
            340                 345                 350
Arg Pro Ile Asn Asp Leu Val Arg Ala Ile Pro Ser Leu Ala Thr His
        355                 360                 365
Ala Ala Arg Thr Pro Lys Pro Asn Phe Asp Ser Leu Pro Lys Thr Val
    370                 375                 380
His Gly Arg Pro Gly Glu Asp Pro Ser Lys Gln Leu Asp Pro Val Phe
385                 390                 395                 400
Asn Phe Gln Glu Asn Leu Asp Tyr Asp Leu Ser Asp Val Arg Ile Arg
                405                 410                 415
Cys Leu Ser Ser Ile Thr Leu Trp Glu Ile Ile Leu Glu Tyr Gln Lys
            420                 425                 430
Glu Asn Asp Thr Glu Val Asn Val Val Gln Leu Asn Arg Leu Leu Gly
        435                 440                 445
Gly Thr Leu Thr Ser Phe Arg Ala Gly Glu Tyr Gly Met Glu Pro Lys
    450                 455                 460
Lys Leu Arg
465
```

<210> 28511
<211> 181
<212> PRT
<213> A.fumigatus

<400> 28511

```
Thr Thr Met Lys Thr Ile Phe Thr Asn Gly Arg Ile Phe Ala Pro Ser
1               5                   10                  15
Ser Asn Asp Leu Asn Ala Asp Asn Ala Phe Ala Glu Ser Met Val Ile
            20                  25                  30
Glu Asp Asp His Ile Val Asn Val Gly Val Gln Asp Lys Ala Pro Ser
        35                  40                  45
Gly Asp Tyr Thr Ile Asp Leu Asn Arg Arg Ile Val Val Pro Gly Phe
    50                  55                  60
Ile Asp Gly His Val His Ile Leu Asn Phe Gly Leu Ser Leu Gly Lys
65                  70                  75                  80
Leu Asp Leu Met Asp Cys Thr Cys Leu Glu Asp Ile Gln Ala Ala Ile
                85                  90                  95
Arg Ser Phe Ala Ala Ser His Pro Thr Ala Pro Arg Leu Leu Cys Arg
            100                 105                 110
Ala Trp Ile Gln Ser Thr Thr Ser Gly Val Ala Leu Ala Ser Met Leu
        115                 120                 125
Asp Asp Leu Asp Pro Arg Pro Ile His Ile Glu Ser Leu Asp Leu His
    130                 135                 140
Ser Val Trp Leu His Ser Ala Ala Leu Glu Glu Met Gly Ile Ser Ser
145                 150                 155                 160
Thr Arg Asp Pro Pro Gly Gly Thr Ile His Arg Asp Glu Lys Arg Lys
                165                 170                 175
```

Thr Ile Gly Ala Pro
180

<210> 28512
<211> 189
<212> PRT
<213> A.fumigatus

<400> 28512
Met Pro Phe Trp Pro His Pro Pro Ala Lys Pro Pro Ser Ser Arg Met
1 5 10 15
Pro Ser Ala Ser Thr Lys Lys Thr Thr Asp Cys Cys Thr Ser Ile Leu
20 25 30
Thr Ser Glu Thr Ala Thr Ser Ser Gln Leu Glu Thr Gly Asn Ser Ser
35 40 45
Ser Pro Arg Ser Leu Pro Arg Gln Thr Thr Ser Thr Pro Ser Thr Thr
50 55 60
Pro Ser Arg Ser Thr Gly Arg Thr Ser Ser Arg Ser Ser Ser Leu Ala
65 70 75 80
Cys Ser Thr Arg Thr Ala Cys Thr Pro Pro Asn Lys Pro Pro Pro Ser
85 90 95
Ala Pro Arg Ser Pro Ala Ala Ser Thr Pro Arg Thr Thr Ser Thr Ser
100 105 110
Ser Pro Cys Ala Ser Thr Arg Lys Ser Thr Ala Pro Ala Ile Leu Ser
115 120 125
Cys Arg Ala Thr Arg Ser Pro Trp Pro Thr Pro Ser Ala Pro Pro Pro
130 135 140
Thr Pro Thr Ala Thr Ala Ser Thr Gln Arg Arg Pro Pro Cys Ala Pro
145 150 155 160
Pro Ser Lys Ala His Arg Thr Thr Ala Thr Lys Pro Pro Ala Asp Gly
165 170 175
Thr Ser Ser Thr Pro Pro Val Phe Thr Thr Gly Leu Glu
180 185

<210> 28513
<211> 161
<212> PRT
<213> A.fumigatus

<400> 28513
Leu Pro Arg Arg Gln Arg His Leu Ser Ser Arg Pro Glu Thr His His
1 5 10 15
Leu Pro Asp His Tyr Arg Gly Lys Leu Arg Val Arg Leu Leu Pro His
20 25 30
Leu His Ala Arg Arg Asp Val Gln Ala Arg Gly Gln Ala His Trp His
35 40 45
Ala Gln His Val Leu Pro Ala Pro Leu Arg Thr Ser Arg Pro Leu Arg
50 55 60
His Arg Asp Arg Pro Arg Pro Arg Arg Pro Glu Pro Pro Ala His Leu
65 70 75 80
Leu Leu Ala Arg Arg Pro Gly Asn Arg Arg Pro Arg Gln Tyr Cys Arg
85 90 95
Ala Glu Arg Arg Gly Pro His Gly Arg Pro Arg Arg Leu Pro Arg Gln
100 105 110
Pro Leu Arg Gln Arg Leu Leu Arg Lys Glu Asp Pro Leu Ala His Arg
115 120 125

```
Pro Pro Arg Arg Ile Gly Leu Leu Pro Arg Asn Leu Pro Arg Met Gly
    130                 135                 140
His His Gln Pro Leu Pro Ser Ser Pro Arg Gly Trp Asn Asp Pro Phe
145                 150                 155                 160
Asn
```

<210> 28514
<211> 325
<212> PRT
<213> A.fumigatus

<400> 28514

```
Val Cys Leu Arg Leu Ser Glu Gly Val Cys His Thr Asn Met Ala Asp
1               5                  10                  15
Pro Leu Ser Ala Asp Glu Ile Thr Thr Ala Ala Thr Leu Leu Arg Gln
            20                  25                  30
Arg Ala His Pro Thr Ala Leu Lys Phe Asn Cys Ile Thr Leu His Glu
        35                  40                  45
Pro Leu Lys Ala Glu Leu Asn Ala Phe Leu Ser Gly Thr Gly Pro Arg
    50                  55                  60
Pro Ala Arg Arg Ala Phe Ser Ile Ile Leu Lys Thr Gly Thr Pro Glu
65                  70                  75                  80
Val Ser Glu Ala Ile Val Asn Leu Thr Ala Lys Lys Val Glu Ser Trp
                85                  90                  95
Lys Asn Val Lys Asn Val Met Gln Thr Leu Thr Leu Asp Asp Leu Asn
            100                 105                 110
Ile Ile Glu His Ile Ala Ser Lys Asp Cys Arg Ile Ile Glu Ala Cys
        115                 120                 125
Arg Glu Ile Gly Ile Thr Asp Met Tyr Arg Val Tyr Tyr Asp Ala Trp
    130                 135                 140
Ala Ile Gly Ile Asp Glu Arg Trp Gly Phe Glu Arg Arg Leu Gln Gln
145                 150                 155                 160
Ala Leu Pro Tyr Tyr Arg Ser Ser Gln His Asp Asn Gln Tyr Ala His
                165                 170                 175
Pro Leu Asp Phe Thr Val Val Ala Asp Thr Glu Thr Gln Glu Ile Leu
            180                 185                 190
Ser Val Asp Val Arg Arg Val Asn Gly Glu Arg Thr Pro Val Pro Leu
        195                 200                 205
Asp Glu His Asn Tyr Leu Pro Gln Phe Ile Lys Asp Gln Tyr Arg Pro
    210                 215                 220
Glu Arg Leu Lys Ala Ile Glu Ile Thr Gln Pro Glu Gly Val Ser Phe
225                 230                 235                 240
Lys Met Asn Gly Asn Glu Ile Glu Trp Ala Gly Leu Lys Met His Ile
                245                 250                 255
Gly Phe Asn Tyr Arg Glu Gly Ile Val Leu Ser Asn Val Arg Ile Asp
            260                 265                 270
Asp Pro Tyr Glu Asn Arg Glu Arg Lys Leu Phe His Arg Val Ser Val
        275                 280                 285
Val Glu Met Val Val Pro Tyr Gly Cys Pro Lys Pro Pro His His Lys
    290                 295                 300
Lys His Ala Phe Asp Val Gly Glu Tyr Gly Ser Gly Phe Met Thr Asn
305                 310                 315                 320
Ser Leu Lys Asp Gly
                325
```

<210> 28515
<211> 203
<212> PRT
<213> A.fumigatus

<400> 28515
Asp Cys Lys Gly Ala Ile Gln Tyr Leu Asp Ala Val Leu Ala Thr Ser
1 5 10 15
Thr Gly Glu Ala Thr Val Ile Glu Asn Ala Ile Cys Ile His Glu Glu
20 25 30
Asp Asn Gly Leu Leu Tyr Lys His Thr Asp Phe Arg Asp Gly Asn Val
35 40 45
Ile Ser Ala Arg Asp Arg Lys Leu Ile Ile Ser Gln Ile Ile Thr Ala
50 55 60
Ala Asn Tyr Glu Tyr Ala Phe Tyr His Thr Phe Thr Leu Asp Gly Thr
65 70 75 80
Tyr Lys Leu Glu Val Lys Leu Thr Gly Met Leu Asn Thr Tyr Cys Leu
85 90 95
His Pro Ser Glu Gln Ala Ala Pro Phe Gly Thr Glu Ile Ala Arg Gly
100 105 110
Leu Asp Ala Gln Asn His Gln His Ile Phe Ser Leu Arg Val Asp Pro
115 120 125
Glu Ile Asp Gly Pro Gly Asn Thr Val Val Gln Ser Asp Ala Val Pro
130 135 140
Met Ala Asp Pro Val Gly Ser Pro Ala Asn Pro Tyr Gly Asn Gly Phe
145 150 155 160
Tyr Ala Lys Lys Thr Pro Leu Arg Thr Ala Leu Gln Gly Ala Ser Asp
165 170 175
Tyr Cys His Glu Thr Ser Arg Gly Trp Asp Ile Ile Asn Pro Ser Arg
180 185 190
Leu His His Gly Ala Gly Met Ile Arg Ser Ile
195 200

<210> 28516
<211> 124
<212> PRT
<213> A.fumigatus

<400> 28516
Arg Arg Ala Ser Asp Tyr Thr Met Leu Pro Leu Pro Pro Ala Val Thr
1 5 10 15
Ala Leu Ser Ala Pro Gly Lys Val Leu Leu Thr Gly Gly Tyr Leu Val
20 25 30
Leu Asp Arg Ser Tyr Thr Gly Thr Val Phe Ala Leu Asp Ala Arg Ile
35 40 45
His Val Ile Val Gln Gln Leu Arg Arg Asn His Arg Arg Glu Ala Ala
50 55 60
Ser Gly Ser Ala His Gly Arg Ser Asp Thr Pro Gln Ala Glu Gly Asn
65 70 75 80
Val His Gly Asp Lys Glu Asp Glu Gly Thr Ile Val Val His Ser Pro
85 90 95
Gln Phe Val Asp Ala Val Trp Glu Tyr Ser Ile Gln Arg Cys Glu Asp
100 105 110
Gly Gly Gly Val Leu Val Lys Gln Arg Asn Asp Gly
115 120

<210> 28517
<211> 384
<212> PRT
<213> A.fumigatus

<400> 28517
Ser Asn Asn Ile Ile Val Ser Val Asn Cys Pro Gly Ala Asp Pro Ser
1 5 10 15
Arg Pro Arg Asn Leu Phe Val Glu Thr Ser Leu Asn Phe Ala Leu Thr
20 25 30
Tyr Ile Ser Tyr Val Ala Asp Ser Lys Asp Phe Gly Ser Leu Ser Ile
35 40 45
Thr Ile Leu Ala Asp Asn Asp Tyr Tyr Ser Glu Thr Ala Phe Ser Lys
50 55 60
Ala Ser Gly Leu Arg Ser Ser Ser Arg Phe Val Asp Phe Gly Val Arg
65 70 75 80
Leu Gln Glu Ala His Lys Thr Gly Leu Gly Ser Ser Ala Ala Leu Val
85 90 95
Thr Ala Leu Val Ser Ser Leu Val Ile His Arg Thr Met Gln Pro Asp
100 105 110
Asp Leu Gly Pro Gly Arg Asp Lys Leu His Asn Leu Ala Gln Ala Ala
115 120 125
His Cys Ala Ala Gln Gly Lys Val Gly Ser Gly Phe Asp Val Ala Ala
130 135 140
Ala Ile Tyr Gly Ser Cys Leu Tyr Arg Arg Phe Ser Pro Ser Ile Leu
145 150 155 160
Glu Ser Val Gly Asp Ala Gly Ser Pro Gly Phe Glu Glu Arg Leu Phe
165 170 175
Arg Ile Val Glu Asp Ala Asp Pro Gln His Pro Trp Asp Thr Glu Cys
180 185 190
Leu Asp Phe Gly Met Lys Leu Pro Arg Gly Met Gln Met Val Leu Cys
195 200 205
Asp Val Glu Cys Gly Ser Gln Thr Pro Ser Met Val Arg Lys Val Leu
210 215 220
Glu Trp Arg Lys Gln Asn Gln Lys Glu Ala Asp Met Leu Trp Gly Ala
225 230 235 240
Leu Gln Ser Asn Asn Glu Arg Leu Arg Leu Glu Leu Arg Arg Leu Ala
245 250 255
Gln Ser Pro Asp Glu His Thr Leu Ser Asp Phe Glu Asn Val Arg Thr
260 265 270
Tyr Ile Gln Arg Ser Arg Asn His Ile Arg Ser Met Thr Gln Lys Ser
275 280 285
Asp Val Pro Ile Glu Pro Arg Val Gln Thr Glu Leu Leu Asp Ala Leu
290 295 300
Ser Glu Leu Glu Gly Val Ile Gly Gly Val Val Pro Gly Ala Gly Gly
305 310 315 320
Tyr Asp Ala Ile Val Leu Leu Ile Gln Asp Asn Pro Asp Val Ile Thr
325 330 335
Arg Leu Lys Ala Phe Phe Glu Thr Trp Glu Ser Lys Ala Glu Asp Asp
340 345 350
Phe Gly Gly Lys Ile Gly Lys Val Arg Leu Leu Gly Val Arg His Gly
355 360 365
Ser Glu Gly Val Lys Asn Glu Met Leu Glu Gln Tyr Ala Gly Trp Val
370 375 380

<210> 28518

<211> 64
<212> PRT
<213> A.fumigatus

<400> 28518
Thr Pro Pro Ser Asp Pro Ser Ser Pro Val Val Lys Thr Ala Lys Glu
1 5 10 15
Leu Pro Arg Leu Thr Asp Glu Glu Ile Glu Ala Lys Ala Ala Glu Tyr
20 25 30
Gly Ile Leu Asp Asp Asn Glu Lys Thr Glu Glu Arg Val Met Glu Gly
35 40 45
Asp Pro Ala Ala Thr Ala Glu Phe Ser Ser Phe Gln Pro Thr Gln Leu
50 55 60

<210> 28519
<211> 108
<212> PRT
<213> A.fumigatus

<400> 28519
Lys Ser Gly Trp Tyr Arg Arg Cys Pro Cys Gln Arg Ala Ala Gln Thr
1 5 10 15
Pro Glu Val Met Glu Lys Asn Thr Arg Val Asp Leu Leu Ser Arg Leu
20 25 30
Met Glu Gly Lys Asp Ser Asn Gly Asn Lys Leu Gly Arg Glu Glu Leu
35 40 45
Thr Ala Glu Ala Leu Thr Gln Leu Ile Ala Gly Ser Asp Thr Thr Ser
50 55 60
Asn Thr Thr Cys Ala Ile Leu Tyr Trp Cys Met Ser Thr Pro Gly Val
65 70 75 80
Ile Pro Lys Leu Gln Lys Val Leu Asp Glu Ala Ile Pro Asp Asp Val
85 90 95
Asp Val Pro Thr His Ala Met Val Lys Asp Ile Pro
100 105

<210> 28520
<211> 203
<212> PRT
<213> A.fumigatus

<400> 28520
Tyr Leu Leu Asn Val Tyr Leu Leu Pro Tyr Ser Asp Phe Tyr Asp Ala
1 5 10 15
Phe Val Ser Ile Arg Arg Gly Leu Phe Asn Thr Arg Asp Arg Ala Glu
20 25 30
His Thr Arg Lys Arg Lys Thr Val Ser His Thr Phe Ser Met Lys Ser
35 40 45
Ile Gly Gln Phe Glu Gln Tyr Ile His Gln Asn Val Glu Leu Phe Val
50 55 60
Gln Gln Trp Thr Lys Leu Ala Lys Leu Asn Gly Asn Pro Arg Ser Gly
65 70 75 80
Tyr Ala Thr Ile Asp Ala Leu Asn Trp Phe Asn Tyr Leu Ala Phe Asp
85 90 95
Ile Ile Gly Asp Leu Ala Phe Gly Ala Pro Phe Gly Met Leu Glu Lys
100 105 110
Gly Lys Asp Ile Ala Glu Met Arg Lys Thr Pro Asp Ser Glu Pro Thr

```
        115                 120                 125
Tyr Val Gln Ala Val Glu Val Leu Asn Arg Arg Gly Glu Val Ser Ala
    130                 135                 140
Thr Leu Gly Cys Leu Pro Arg Leu Ile Pro Tyr Ala Lys Tyr Leu Pro
145                 150                 155                 160
Asp Arg Phe Phe Lys Asp Gly Val Gln Ala Val Glu Asn Leu Ala Gly
                165                 170                 175
Ile Ala Val Ala Arg Val Asn Glu Arg Leu Lys Pro Arg Lys Ser Trp
            180                 185                 190
Arg Lys Thr Pro Val Ser Ile Phe Cys Leu Ala
        195                 200
```

<210> 28521
<211> 254
<212> PRT
<213> A.fumigatus

<400> 28521

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Pro Ser Ser Ser Leu Val Arg Thr Pro Pro Pro Thr Pro Pro Ala Pro
1               5                   10                  15
Ser Ser Thr Gly Ala Cys Gln Leu Pro Ala Ser Ser Pro Ser Ser Arg
            20                  25                  30
Arg Phe Ser Thr Arg Leu Phe Pro Thr Thr Ser Met Phe Pro His Thr
        35                  40                  45
Pro Trp Ser Lys Ile Phe His Ser Met Ser Leu Cys Pro Val Arg Ser
    50                  55                  60
Ser Pro Phe Ser Pro Leu Ala Asn Asn Pro Tyr Ser Leu Gln Trp Val
65                  70                  75                  80
Ile Trp Glu Thr Met Arg Ile His Ser Thr Ser Ala Met Gly Leu Pro
                85                  90                  95
Arg Glu Ile Pro Pro Gly Asn Pro Pro Val Thr Ile Ser Gly His Thr
            100                 105                 110
Phe Tyr Pro Gly Asp Val Val Ser Val Pro Ser Tyr Thr Ile His Arg
        115                 120                 125
Ser Lys Glu Ile Trp Gly Pro Asp Ala Glu Lys Phe Val Pro Glu Arg
    130                 135                 140
Trp Asp Pro Ala Arg Leu Thr Ala Arg Gln Lys Ala Ala Phe Ile Pro
145                 150                 155                 160
Phe Ser Thr Gly Pro Arg Ala Cys Val Gly Arg Asn Val Ala Glu Met
                165                 170                 175
Glu Leu Leu Val Met Thr Gly Thr Ile Phe Arg Leu Phe Glu Phe Glu
            180                 185                 190
Met Gln Gln Asp Gly Pro Met Glu Thr Arg Glu Gly Phe Leu Arg Lys
        195                 200                 205
Pro Leu Gly Leu Ile Val Gly Met Lys Arg Arg Ala Val His Ala Phe
    210                 215                 220
Cys Leu Asn Thr Tyr Gln Val Pro Ile Cys Trp Val Gly Gly Ile Gln
225                 230                 235                 240
Gly Phe Asp Phe Gly Gly Ile Ile Arg Cys Gly Gly Pro Asp
                245                 250
```

<210> 28522
<211> 289
<212> PRT
<213> A.fumigatus

<400> 28522
Leu Arg Cys Glu Arg Leu Leu Thr Arg Asn Pro Pro Thr Ser Arg Leu
1 5 10 15
Trp Arg Ser Ser Thr Ala Val Val Arg Ser Leu Leu Leu Ser Ala Val
20 25 30
Ser Arg Gly Leu Ser Pro Met Pro Ser Ile Ser Pro Thr Ala Ser Ser
35 40 45
Arg Met Ala Phe Lys Pro Leu Lys Ile Trp Leu Val Ser Pro Leu Pro
50 55 60
Val Ser Thr Ser Gly Ser Asn Pro Gly Ser His Gly Glu Lys His Pro
65 70 75 80
Cys Arg Ser Ser Val Ser Pro Asp Gly Arg Gln Gly Gln Gln Trp Gln
85 90 95
Gln Ala Arg Pro Arg Gly Thr His Cys Arg Gly Leu Asp Pro Ala His
100 105 110
Arg Trp Phe Gly His His Leu Gln His His Leu Arg His Pro Leu Leu
115 120 125
Val His Val Asn Ser Arg Arg His Pro Gln Ala Pro Glu Gly Ser Arg
130 135 140
Arg Gly Tyr Ser Arg Arg Arg Arg Cys Ser His Thr Arg His Gly Gln
145 150 155 160
Arg Tyr Ser Ile Val Cys Pro Tyr Val Leu Phe Ala Pro Pro Pro Phe
165 170 175
Arg His Leu Leu Thr Thr Leu Thr Ala Cys Ser Gly Ser Ser Gly Lys
180 185 190
Leu Cys Ala Ser Thr Ala Pro Pro Pro Trp Val Phe Arg Ala Arg Tyr
195 200 205
Pro Pro Ala Thr Pro Gln Ser Pro Ser Pro Val Thr Pro Phe Thr Pro
210 215 220
Ala Thr Trp Ser Pro Ser Pro Ala Thr Pro Ser Thr Ala Pro Arg Lys
225 230 235 240
Ser Gly Ala Pro Thr Pro Lys Asn Leu Ser Pro Asn Asp Gly Thr Pro
245 250 255
Pro Ala Leu Pro Arg Ala Lys Arg Pro Leu Ser Phe Pro Ser Pro Leu
260 265 270
Val Arg Ala Pro Ala Ser Ala Ala Met Ser Leu Arg Trp Asn Tyr Ser
275 280 285
Ser

<210> 28523
<211> 92
<212> PRT
<213> A.fumigatus

<400> 28523
Val Asn Gln Asp Gly Val Gly Pro Leu Thr Ala Asp Ile Asp Pro Ser
1 5 10 15
Ser Gly Gly Thr Asn Ala Lys Ala Phe Val Ser Ala Lys Val Ile Gln
20 25 30
Asn Ile Pro Gly Val Ala Gly Phe Ser Thr Ser Ser Thr Met Asp Tyr
35 40 45
Glu Val Lys Val Gln Val Pro Asn Gly Met Lys Cys Thr Gly Thr Val
50 55 60
Gly Ala Ala Lys Asn Val Cys Ile Leu Arg Val Arg Asn Thr Ala Ile
65 70 75 80

Ser Gly Pro Phe Gly Gly Ser Ala Ala Phe Thr Met
85 90

<210> 28524
<211> 113
<212> PRT
<213> A.fumigatus

<400> 28524
Cys Ser Ala Cys Pro Ser Ser Pro Val Gly Val Arg Leu Ala Ile Ile
1 5 10 15
Arg Gly Gln Lys Met Gly Gly Ile Lys Ala Ser Pro Leu Gly Arg Thr
20 25 30
Met Gly Ala Gly Pro Val Tyr Ala Ala Thr Val Ile Asn Lys Phe Met
35 40 45
Gly Ala Ala Thr Asp Lys Arg Gly Arg Ala Ser Pro Ser Glu Arg Arg
50 55 60
Met Arg Leu Pro Ser His Cys Ser Ile Asn Trp Ala Asn Met Phe Ser
65 70 75 80
Cys Arg Gln Leu Ile Asn Asp Ala Ala Ser Val Ile Thr Asn Ala Gly
85 90 95
Gly Thr Ile Leu Asn Gly Met Asp Ser Leu Gly Gly Pro Arg Arg Ala
100 105 110
Asp

<210> 28525
<211> 398
<212> PRT
<213> A.fumigatus

<400> 28525
Leu Cys Lys Asp Pro His Tyr Gln Lys Ile Tyr Ser Leu Ser Arg Arg
1 5 10 15
Asn Pro Gly Gly Gly Asn Ala Lys Ile Gln His Ala Thr Leu Asp Leu
20 25 30
Arg Gly Ser Ala Glu Asp Met Ala Arg Asn Leu Lys Asp Ile Ser Ala
35 40 45
Glu Tyr Val Phe Phe Cys Ala Tyr Leu Ala His Asp Asp Pro Ala Glu
50 55 60
Leu Ser Arg Val Asn Gly Leu Met Leu Ser Asn Phe Ile Gln Ala Leu
65 70 75 80
Glu Ile Thr Gly Ala Ile Arg Thr Val Lys Arg Phe Val Leu Thr Cys
85 90 95
Gly Leu Lys Gln Tyr Gly Val His Leu Gly Asn Cys Lys Gln Pro Leu
100 105 110
Ile Glu Asp Asp Pro Leu Leu Glu Gly Asn Gln Gly Gly Thr Thr Trp
115 120 125
Pro Pro Asn Phe Tyr Tyr Glu Gln Gln Arg Ile Leu Lys Glu Ala Ala
130 135 140
Ala Arg Gly Lys Trp Glu Trp Ile Val Thr Leu Pro Gln Asp Val Leu
145 150 155 160
Gly Tyr Ala Arg Gly Asn Phe Met Asn Glu Ala Thr Ala Leu Gly Leu
165 170 175
Tyr Cys Ala Val Ser Lys Ala Leu Pro Gly Ser Glu Leu Pro Phe Pro
180 185 190

```
Gly Cys Lys Ala Asn Tyr Phe Ala Phe Asn Cys Trp Thr Ser Ala Asn
        195                 200                 205
Leu His Ala Lys Phe Cys Leu Trp Ala Ala Thr Ala Pro Asn Ala Gly
    210                 215                 220
Asn Asn Ile Phe Asn Val Met Asp Gly Asp Thr Glu Ser Phe Gln Asn
225                 230                 235                 240
Leu Trp Pro Arg Leu Ala Ala Arg Phe Gly Cys Lys Ile Pro Asn Pro
                245                 250                 255
Met Phe Pro His Gly Gly Thr Pro Asp Thr Gln Gly Phe Arg Glu Tyr
            260                 265                 270
Glu Ala Thr Thr Val Arg Met Pro Asn Arg His Pro Leu Ala Val His
        275                 280                 285
Ala Asp Arg Ile Gly Val Ser Ala Asp Asp Thr Pro Thr Leu Phe Leu
    290                 295                 300
Gln Val Asp Pro Glu Lys Trp Ala Lys Arg Lys Asp Val Asn Glu Ala
305                 310                 315                 320
Trp Ala Lys Leu Arg Asp Lys Tyr Asn Leu Asp Gln Cys Gly Trp Asp
                325                 330                 335
Thr Ala Thr Trp Asp Phe Leu Thr Phe Ala Leu Gly Arg Asp Trp Ser
            340                 345                 350
Cys Val Ala Thr Met Ser Lys Ala Arg Arg Leu Gly Trp Asn Gly Tyr
        355                 360                 365
Ala Asp Thr Trp Glu Glu Leu Glu Asp Thr Phe Arg Val Leu Glu Thr
    370                 375                 380
Glu Gly Ile Leu Pro Pro Val Asp Lys Leu Arg Gly Asp Phe
385                 390                 395
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<210> 28526
<211> 364
<212> PRT
<213> A.fumigatus

<400> 28526

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Tyr Ser Arg Arg Gln Ile Pro Ala Glu Phe Leu Tyr Ile Phe Leu Ser
1               5                   10                  15
Ile Asp Arg Asn Leu Asp Ile His Ala Gln His Ser Asn Gly Gly Gly
            20                  25                  30
Arg Phe Lys Tyr Leu Ser Gly Trp Gln Gln Asp Arg Arg Lys Met Asp
        35                  40                  45
Phe Ser Ser Lys Val Leu Pro Val Ala Ala Leu Gly Val Val Leu Val
    50                  55                  60
Val Leu Thr Pro Arg Val Ile Lys Trp Ala Ser Thr Tyr Lys Ser Ser
65                  70                  75                  80
Leu Leu Gln Ala Leu Arg Leu Gln Lys Glu Thr Ser Ser Glu Ile Val
                85                  90                  95
Ser Leu Arg Ile Tyr Pro Ile Lys Ser Cys Arg Gly Ile Glu Leu Pro
            100                 105                 110
Arg Thr Thr Leu Arg Leu His Gly Leu Asp Leu Asp Arg Gln Trp Met
        115                 120                 125
Phe Val Asp Ala Lys Thr His Glu Phe Leu Thr Ile Arg Gln Leu Thr
    130                 135                 140
Gln Met Thr Leu Ile Asn Thr Ala Leu Ser Asp Asp Gly Thr Ser Leu
145                 150                 155                 160
Leu Leu Ser Ile Thr Gly Ser Asp Glu Lys Val Gln Ile Pro Ala Arg
                165                 170                 175
Pro Asp Ala Ala Trp Leu Ala Ala His Thr Thr Leu Ala Gln Val Lys
```

```
            180                 185                 190
Val Trp Asp Thr Leu Thr Asp Gly Tyr Leu Tyr Gly Asp Ala Val Asn
        195                 200                 205
Ala Pro Phe Thr Arg Phe Leu Gln Arg Asp Val Cys Leu Val Tyr Lys
    210                 215                 220
Gly Pro Thr Pro Arg Ile Leu Gln Gly Asn Gly Asp Pro Arg Leu Leu
225                 230                 235                 240
Gly Arg Gln Gln Ser Thr Asn Phe Pro Asp Val His Pro Val Gln Ile
                245                 250                 255
Ala Ser Glu Ala Ser Leu Ala Glu Leu Asn Gln Arg Leu Arg Arg Lys
            260                 265                 270
Gly Ala Gln Pro Ile Thr Val Glu Arg Phe Arg Pro Asn Ile Ile Val
        275                 280                 285
Arg Gly Thr Val Pro Trp Ala Glu Asp Ser Trp Lys Thr Val Arg Ile
    290                 295                 300
Gly Ser Glu Leu Asp Leu Asp Val Val Ala Arg Cys Ala Arg Cys Gln
305                 310                 315                 320
Val Pro Asn Val Asp Pro Glu Thr Ala Glu Lys His Lys Arg Glu Pro
                325                 330                 335
Trp Asp Thr Leu Met Thr Tyr Arg Arg Val Asp Glu Gly Ile Lys Tyr
            340                 345                 350
Lys Pro Leu Leu Trp Asp Ala Glu Cys Ala Pro Glu
        355                 360
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<210> 28527
<211> 142
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (85)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28527

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Ile Ser Ser Arg Ser Arg Thr Arg Phe Leu Lys Leu Thr Met Phe Ser
1               5                   10                  15
Leu Ala Ser Phe Leu Ser Phe Phe Trp Pro Arg Ala Ser Arg Arg Ala
            20                  25                  30
Arg Asn Thr Leu Thr Ser Cys Ser Ser Ile Cys Ser Ile Ser Ser Ser
        35                  40                  45
Phe Met Ser Ala Ser Glu Pro Ser Asp Cys Ser Leu Lys Ser Trp Ser
    50                  55                  60
Ala Arg Cys Val Pro Ser Ala Ser Ala Ser Leu Ala Ser Lys Ala Gly
65                  70                  75                  80
Ile Ser Ser Ser Xaa Ser Pro Ser Ser Asp Ala Ala Ser Ser Ser Ser
                85                  90                  95
Leu Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Glu Phe Ser
            100                 105                 110
Ala Ser Met Thr Ser Thr Ser Leu Ser Ser Ser Ser Thr Ser Ile Ile
        115                 120                 125
Ser Ser Ser Ser Ser Ser Ser Cys Cys Ser Asn Asn Ser Cys
    130                 135                 140
```

<210> 28528
<211> 123

<212> PRT
<213> A.fumigatus

<400> 28528
Thr Pro Gln Asn His Ser Pro Pro Ala Trp Pro Arg Pro Arg Pro Ala
1 5 10 15
Val Asp Val Arg Arg Arg Lys Asn Pro Arg Val Pro His His Pro Pro
20 25 30
Thr His Pro Asn Asp Thr His Gln His Arg Pro Gln Arg Arg Arg His
35 40 45
Leu Pro Pro Ala Glu His His Arg Ile Arg Arg Glu Gly Ser Asp Pro
50 55 60
Arg Pro Pro Arg Arg Arg Leu Ala Ser Gly Pro His His Pro Arg Pro
65 70 75 80
Gly Gln Gly Leu Gly His Ala Asp Arg Arg Val Pro Leu Arg Arg Arg
85 90 95
Arg Gln Cys Pro Val His Gln Val Pro Ala Ala Arg Cys Leu Ser Gly
100 105 110
Leu Gln Gly Pro His Ala Ala His Pro Ala Gly
115 120

<210> 28529
<211> 153
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (13)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28529
Gln Arg Arg Arg Arg Ser Arg Ile Arg Arg Arg Arg Xaa Arg Arg Arg
1 5 10 15
Asn Ala Arg Leu Arg Ser Gln Ala Arg Arg Ser Thr Gly His Ala Pro
20 25 30
Arg Arg Pro Arg Leu Gln Arg Thr Val Arg Gly Leu Arg Arg Arg His
35 40 45
Glu Arg Arg Arg Asp Gly Ala Asp Arg Arg Ala Ala Ser Gln Ser Val
50 55 60
Pro Arg Ala Pro Gly Arg Pro Gly Pro Glu Glu Arg Gln Glu Gly Arg
65 70 75 80
Gln Gly Glu His Gly Gln Leu Gln Glu Pro Arg Pro Arg Pro Ala Gly
85 90 95
Asp Leu Arg Gln Glu Met Pro Leu Glu Gly Ser Gly Pro Arg Pro Pro
100 105 110
Ser Pro Pro Ala Ala Ser His Pro Gln Val Asp Arg Gln Ala Ala Ser
115 120 125
Gln Gln Gly Glu Arg Arg Ala Pro Arg Val Tyr Gln Val Val Gln Gly
130 135 140
Gln Cys Thr Ser Phe Ala Gly Leu Gly
145 150

<210> 28530
<211> 337
<212> PRT

<213> A.fumigatus

<220>
<221> UNSURE
<222> (17),(20),(23),(109)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28530

```
Gly Ser Gln Val Leu Ala Val Leu Val Thr Arg Phe Thr Lys Asn Gly
1               5                  10                  15
Xaa Gly Phe Xaa Trp Val Xaa Glu Val His Ser Leu Arg Glu Ile Ser
            20                  25                  30
Phe His Gly Asn Gln His Ile Arg Phe Trp Arg Pro Gly Lys Ala Phe
        35                  40                  45
Val Gly Gln Gln Glu Leu Phe Glu Gln Gln Asp Asp Glu Glu Asp Glu
    50                  55                  60
Glu Met Met Asp Val Asp Glu Asp Asp Ser Asp Val Glu Val Ile Asp
65                  70                  75                  80
Ala Glu Asn Ser Asp Glu Asp Glu Glu Asp Asp Asp Asp Asp Asp Asp
                85                  90                  95
Asn Asp Asp Asp Glu Ala Ala Ser Asp Glu Gly Glu Xaa Glu Glu Glu
            100                 105                 110
Met Pro Ala Phe Glu Ala Lys Leu Ala Glu Ala Leu Gly Thr His Arg
        115                 120                 125
Ala Asp Gln Asp Phe Asn Glu Gln Ser Glu Gly Ser Asp Ala Asp Met
    130                 135                 140
Asn Asp Asp Glu Met Glu Gln Ile Asp Glu Gln Leu Val Lys Val Phe
145                 150                 155                 160
Arg Ala Arg Arg Asp Ala Leu Gly Gln Lys Lys Asp Lys Lys Asp Ala
                165                 170                 175
Lys Glu Asn Met Val Asn Phe Lys Asn Arg Val Leu Asp Leu Leu Glu
            180                 185                 190
Ile Tyr Val Lys Lys Cys His Ser Lys Val Leu Ala Leu Asp Leu Leu
        195                 200                 205
Leu Pro Leu Leu Arg Leu Thr Arg Lys Ser Thr Val Lys Gln Leu Ala
    210                 215                 220
Asn Lys Ala Ser Gly Val Leu Arg Glu Tyr Thr Lys Leu Cys Lys Gly
225                 230                 235                 240
Asn Ala Leu Pro Ser Leu Asp Ser Ala Glu Pro Val Trp Glu Leu Leu
                245                 250                 255
Lys Ser Ile His Ala Glu Ala Met His Ser Gly Pro Pro Ala His Ala
            260                 265                 270
Ser Ala Cys Ser Gln Ala Ser Leu Leu Val Val Lys Val Leu Val Ala
        275                 280                 285
His Asp Lys Asn Ala Leu Ala Asp Val Val Gly Val Tyr Ala Ala Thr
    290                 295                 300
Arg Lys Glu Gln Leu Leu Ser Lys Lys Cys His Val Gln Pro Gln Phe
305                 310                 315                 320
Phe Ser Asp Trp Asn Asn Trp Cys Val Ser Ala Ser Lys Gln Met Lys
                325                 330                 335
Asn
```

<210> 28531
<211> 83
<212> PRT

<213> A.fumigatus

<400> 28531
Thr Arg Trp Gly Val Gly Phe Gly Pro Arg Asp Cys Ser Asp Tyr Gln
1 5 10 15
Thr Gly Ile Ser Val Ile Pro Ile Glu Arg Leu Thr Glu Ala Asp Arg
20 25 30
Lys Trp Met Leu Thr Ala Glu Tyr Gly Gly Thr Gly Gly Arg Pro Ile
35 40 45
Glu Ser Gly Met Val Val Glu Glu Pro Asp Ile Glu Ile Gly Ala Gly
50 55 60
Val Ser Ser Lys Gly Lys Arg Ile Ser Phe Leu Val Leu Arg Ile Asn
65 70 75 80
Glu Met Lys

<210> 28532
<211> 63
<212> PRT
<213> A.fumigatus

<400> 28532
Lys Pro Gln Val Asn Asp Ile Gly Lys Ser Asp Asp Met Leu Arg Ile
1 5 10 15
Leu Lys Asn Leu Ser Val Leu Ser Ser Glu Leu Pro Asn Ala Leu Glu
20 25 30
Lys Ile Val Asp Ala Lys Asp Ala Glu Glu Ile Asp Gly Gly Glu Lys
35 40 45
Trp Val Gln Gly Leu Phe Ala Asp Ala Ile Lys Ala Tyr Ser Gln
50 55 60

<210> 28533
<211> 177
<212> PRT
<213> A.fumigatus

<400> 28533
Ile Leu Pro Phe His Leu Thr Ser Leu Cys Pro Arg Pro Leu Ser Ser
1 5 10 15
Thr Cys Ile Leu Leu Thr Ala Thr Leu Leu Ser Gln Leu His Pro Ser
20 25 30
Leu Pro Lys Gln His Thr Trp Ser Thr Thr Thr Thr Lys Met Val Ala
35 40 45
Ile Lys Ser Leu Phe Ser Ala Leu Val Ala Thr Ala Leu Ile Ser Ser
50 55 60
Thr Ser Ala Leu Pro Val Pro Asn Thr Val Asn Asp Val Val His Ser
65 70 75 80
Leu Asp Asp Thr Ala Asn Lys Tyr Thr Asp Leu Asp Asn Ala Ile Lys
85 90 95
Ala Phe Asp Gly His Pro Ala Gly Tyr Thr Thr Ile Thr Glu Arg Glu
100 105 110
Ala Thr Val Glu Val Ser Leu His Arg Ala Ile Asp Ala Ala His Ala
115 120 125
Thr Ala Ser Leu Ser Val Glu Asp Ser Lys Phe Val Met Gln Ala Leu
130 135 140
Ala Lys Pro Tyr Pro Thr Phe Met Gly Asn Leu Leu Ala Asp Ile Val

```
145                 150                 155                 160
Ser Lys Val Ser His Leu Phe Ala Leu Asp Asn Met His Ser Gly Arg
                165                 170                 175
Asp


<210> 28534
<211> 312
<212> PRT
<213> A.fumigatus

<400> 28534
Glu Asp Asn Asn Arg Cys Gly Met Thr Pro Glu His Thr Thr Leu Ser
1               5                   10                  15
Thr Gly Asp Pro Arg Met Trp Thr Trp Asn Ile Arg Gln Val Gly Val
            20                  25                  30
Leu Asp Leu Thr Ala Leu Val Ser Arg Val Leu Phe Glu Thr Gly Phe
        35                  40                  45
Glu Lys Leu Gly Leu Val Cys His Ser Gln Gly Thr Ala Gln Thr Phe
    50                  55                  60
Val Ala Leu Ser Lys His His Arg Pro Glu Leu Gly Glu Lys Ile Ser
65                  70                  75                  80
Val Phe Cys Ala Leu Ala Pro Ala Val Tyr Ala Gly Pro Leu Ile Glu
                85                  90                  95
Arg Val Tyr Phe Arg Phe Met Arg Val Ile Pro Pro Asp Ile Phe Arg
            100                 105                 110
Thr Ile Phe Gly Ile His Ala Phe Ile Pro Ile Met Ile Thr Val His
        115                 120                 125
Arg Phe Leu His Pro Arg Ile Tyr Gly Ala Leu Gly Tyr His Val Phe
    130                 135                 140
Ala His Leu Phe Gly Trp Ser Asp Val Arg Trp Asp Arg Gly Leu Arg
145                 150                 155                 160
Asp Arg Met Phe Gln Phe Ala Pro Val Tyr Ile Ser Ser Glu Thr Ile
                165                 170                 175
Arg Trp Trp Leu Gly Gln Gly Cys Phe Ala Thr Gln Arg Cys Ile Leu
            180                 185                 190
Ala Thr Met Glu Glu Thr Leu Ala Glu Met Glu Glu Asp Val Arg Leu
        195                 200                 205
Gln Arg Asp Gly Asp Gln Pro Gly Ser Arg Thr Asp Thr Ala Trp Tyr
    210                 215                 220
Gly Pro Gln Thr Pro Pro Phe Ala Leu Trp Val Ala Gly Ser Asp Ala
225                 230                 235                 240
Leu Val Asp Gly Arg Pro Leu Leu Gln Arg Leu His Ser Gly Arg Glu
                245                 250                 255
Pro His Val Gln Val Val His Ser Lys Val Ile Glu Glu Tyr Glu His
            260                 265                 270
Leu Asp Val Leu Trp Ala Met Asp Ala Val Glu Gln Val Gly Gln Glu
        275                 280                 285
Val Arg Asp Val Ile Tyr Arg Thr Met Pro Glu Ala Ala Arg Lys Cys
    290                 295                 300
Cys Arg Val Pro Lys Gly Val Ser
305                 310

<210> 28535
<211> 139
<212> PRT
```

<213> A.fumigatus

<400> 28535
Val Leu Pro His Leu Ala Ala Gly Thr Cys Pro Ile Ser Leu Ile Tyr
1 5 10 15
His Cys Ala Phe Ile Leu Thr Ala Ser Glu Lys Cys Gln Gln Glu Lys
20 25 30
Arg Lys Thr Val Asn Gly Glu Asp Ile Leu Phe Ala Met Thr Ser Leu
35 40 45
Gly Phe Glu Asn Asp Ala Glu Ala Leu Lys Ile Tyr Leu Ser Lys Tyr
50 55 60
Arg Glu Val Arg Leu Cys Thr Thr Cys Tyr Gly Cys Leu Ser Pro His
65 70 75 80
Gln Arg Leu Val Val Trp Trp Val Tyr Tyr His Met Leu Ser Thr Pro
85 90 95
Pro Asp Ser Val Arg Pro Trp Arg Thr Pro Glu Tyr Ala Asn Glu Gln
100 105 110
Arg Leu Gln Phe Trp Arg Ala His Gly Arg Ile Gln His Ala Arg Trp
115 120 125
Thr Thr Trp Cys Ile Gly Phe Arg Arg Leu Ser
130 135

<210> 28536
<211> 62
<212> PRT
<213> A.fumigatus

<400> 28536
Thr Ala Thr Cys Ala Asn Ile Tyr Arg Gln Val Ala Arg Ile Met Lys
1 5 10 15
Leu Ala Leu Pro Glu Asn Ala Lys Ile Ala Lys Glu Ala Lys Glu Cys
20 25 30
Met Gln Glu Cys Val Asn Glu Phe Ile Ser Phe Ile Thr Ser Glu Gly
35 40 45
Glu Cys Tyr Arg Ile Trp Leu Pro Val Pro Val Leu Phe His
50 55 60

<210> 28537
<211> 88
<212> PRT
<213> A.fumigatus

<400> 28537
Val Leu Leu Gln Thr Gln Ser Ala Arg Gly Glu His Gln Asn Met Pro
1 5 10 15
Thr Ser Ser Gly Tyr Asn Ser Gly Gly Pro Met Gly Gly Ser Asn Thr
20 25 30
Gln Gly Gly Arg Pro Gly Ala Ser Ala Ser Gly Gly Phe Pro Glu Thr
35 40 45
Thr Asp Ser Thr Asn Asn Ile Ile Asn Pro Gly Leu Asp Pro Ser Glu
50 55 60
Gln Asp Ser Ser Thr Tyr Gly Tyr Pro Pro Met Val Gly Gln Pro His
65 70 75 80
Asn Gly Ala Gly Gly Asp Ser Tyr
85

<210> 28538
<211> 189
<212> PRT
<213> A.fumigatus

<400> 28538
Arg Ser Ser Cys Asp Ile Ser His Pro Thr Gln Pro Phe Asn His Pro
1 5 10 15
Leu Arg Met Lys Asp Lys Ile Val Glu Pro Thr Val Ala Val Ser Asp
20 25 30
Asn Ser Leu Ala Asp Glu Thr Ala Pro Asp Glu Val Leu Lys His Leu
35 40 45
Lys His Ile Lys Glu Gln His Gln Trp Asp Pro Asn Leu Pro Asp Asp
50 55 60
Val Ala Glu Glu Leu Asp Val Ala Leu His Thr Asp Asp Lys Gly Ala
65 70 75 80
Arg Val Gly Val Ala His Glu Leu Met Glu Asp Ser Pro Tyr Val Glu
85 90 95
Val Arg Ser Ala Val Pro Asn Tyr Asp Glu Gly Gly His Thr Asn Thr
100 105 110
Ile Arg Ala Trp Thr Ile Gly Leu Val Phe Ala Thr Leu Gly Ser Ala
115 120 125
Leu Asn Met Leu Phe Ser Met Arg Gln Pro Tyr Ile Val Ile Pro Ser
130 135 140
Tyr Val Ile Gln Val Ile Ala Tyr Pro Val Gly Val Ala Trp Tyr Lys
145 150 155 160
Val Met Pro Asn Lys Gln Phe Lys Phe Phe Gly Ile Asp Cys Asn Leu
165 170 175
Asn Pro Gly Pro Phe Ser Lys Lys Glu His Ala Leu Ile
180 185

<210> 28539
<211> 65
<212> PRT
<213> A.fumigatus

<400> 28539
Pro Pro Ala Ser Ala Ser Arg Pro Thr Phe Leu Pro Leu Leu Phe Leu
1 5 10 15
Phe Ser Ser Phe Ala Asp His Leu Ile Ala Pro Leu Ser Ile Val Tyr
20 25 30
Gly Thr Asn Leu Arg Trp Ile Leu Leu Thr Thr Ala Leu Leu His Tyr
35 40 45
Ser Leu Leu Leu Leu Ser Phe Tyr Arg Pro Ser Pro Leu Lys Ile Leu
50 55 60
Leu
65

<210> 28540
<211> 75
<212> PRT
<213> A.fumigatus

<400> 28540
Ser Trp Leu Asn Leu Arg Arg Lys Met Ala Ser Ile Leu Cys Arg Ala
1 5 10 15

```
Val Ala Ala Leu Leu Leu Leu Leu Gln Phe Ser Thr Val Trp Ser Leu
            20                  25                  30
Pro Leu Asp Ile Ser Leu Ala Gly Asp Ala Gly Ser Gly Arg Lys Ser
        35                  40                  45
His Trp Val Asp Ile Trp Thr Thr Met Pro Gln Leu Val Glu Pro Tyr
    50                  55                  60
Asn Leu Pro Pro Ala Pro Tyr Val Ser Arg Ser
65                  70                  75
```

<210> 28541
<211> 62
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (54)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28541

```
Ser Thr Ser Thr Ser Leu Lys Ala Asn Lys Ala Thr Pro Ser Thr Gly
1               5                   10                  15
His Pro Gly Ser Lys Thr Thr Ser Trp Leu Ser Phe Gly Asn Tyr Val
            20                  25                  30
Gly Ala Asn Asn Leu Asn Asp Pro Ser Val Lys Asn Val Asn Ser Trp
        35                  40                  45
Trp Gly Ser Thr Trp Xaa Val Tyr Tyr Arg Thr Ser Leu Cys
    50                  55                  60
```

<210> 28542
<211> 172
<212> PRT
<213> A.fumigatus

<400> 28542

```
Ala His Ile Thr Ala His Gln Glu Pro Ser Val Pro Asp Val Phe Cys
1               5                   10                  15
Gln Ile Pro Ser Lys Ser Tyr Thr Met Ala Ala Ile Phe Gln Ser Gln
            20                  25                  30
Lys Ser Ala Leu Ile Thr Gly Ala Ala Ser Gly Ile Gly Phe Ala Ile
        35                  40                  45
Ala Arg Val Cys Arg Thr Lys Gly Met His Leu Ala Leu Leu Asp Val
    50                  55                  60
Asp Thr Ala Asn Leu Glu Asn Ala Arg Asn Glu Leu Ser Ala Leu Asp
65                  70                  75                  80
Pro Ser Leu Lys Thr Glu Ile Tyr Thr Ile Asp Val Gly Asn Arg Asp
                85                  90                  95
Ala Trp Lys Asp Ile Ala Lys Gln Ile Arg Ser Thr Phe His Asp Leu
            100                 105                 110
Asp Leu Ile Val Leu Asn Ala Gly Lys Ser Tyr Lys Ala Gln Ser Gly
        115                 120                 125
Leu Ala Gly Arg Leu Lys Pro Trp Ala Asp Ala Glu Tyr Trp Arg Lys
    130                 135                 140
Val Ile Tyr Leu Ile Arg Ser Cys Pro Ala Ile Ala Asp Glu Leu Asp
145                 150                 155                 160
Ile Arg His Gln Arg Leu Arg Pro Ala Glu Arg Ala
```

165 170

<210> 28543
<211> 278
<212> PRT
<213> A.fumigatus

<400> 28543
Arg Asp Pro Ser Ser Pro Val Val Asn Thr Glu Ala Ile Arg Leu Ser
1 5 10 15
Leu Ala Ser Glu Glu Glu Arg Arg Asn Lys Ala Glu Lys Glu Ala Arg
20 25 30
Lys Glu Ala Lys Arg Arg Glu Lys Glu Asn Lys Lys Ala Glu Lys Ala
35 40 45
Ala Arg Lys His Gly Phe Tyr Ser Asn Asn Ala Ser Ser Ser Ala Leu
50 55 60
Asp Val Pro Ser Asp Ala Arg Leu Gly Arg Val Ala Ser Thr Ser Ser
65 70 75 80
Ser Ile Thr Gly Glu Asp Ala Ser Pro Ser Lys Gly Lys Glu Val Asp
85 90 95
Arg Thr Ser Pro Ala Ala Thr Ala Ala Ser Ser Gln Ser Ser Thr Glu
100 105 110
Ile Ala Ser Glu Ser Met Thr Ile Asn Pro His Pro Asn Val Val Glu
115 120 125
Leu Gly Ser Ser Ala Gln Ser Ser Met Ala Gln Leu Ser Pro Arg Glu
130 135 140
Leu Pro Lys Pro Ser His Leu Arg Gln Val Ser Ser Ala Ser Ser Ser
145 150 155 160
Phe Ser Ser Leu Val Glu Ser Thr Gly Glu Asp His Ser Gly Ala Tyr
165 170 175
Asp Gly Asn Ala Ser Ser Thr Glu Pro Leu Phe Asn Phe Arg Ser Leu
180 185 190
Ala Ala Val Ile Gly Asp Glu Asp Lys Gly Asp Gly Thr Ala Glu His
195 200 205
Val Glu Asp Thr Ser Leu Lys Pro Ser Ala Glu Gly Ser Ala Ser Ser
210 215 220
Thr Ala Pro Val Ala Asp Glu Met Pro Gly Gln Ser Thr Thr Pro Ala
225 230 235 240
Asp Pro Ile Ala Val Lys Thr Val Ala Glu Asp Arg Asp Cys Leu Met
245 250 255
Pro Lys Glu Leu Glu Thr Gln Ser Val Glu Ile Thr Ser Ala Thr Arg
260 265 270
Asn Ala Glu Ala Thr Thr
275

<210> 28544
<211> 228
<212> PRT
<213> A.fumigatus

<400> 28544
Thr Ala Leu Ser His His Pro Arg Val Lys Thr Thr Glu Phe Lys Lys
1 5 10 15
Leu Lys Pro Ala Tyr Lys Ala Val Ile Lys Asp Ile Thr Glu Lys Met
20 25 30
Gly Asn Gly Met Ala Asp Tyr Cys Arg Lys Ala Ala Leu Asp Asp Ala

```
        35                  40                  45
Ser Val Lys Thr Val Glu Glu Tyr Asp Leu Tyr Cys Trp Tyr Val Ala
    50                  55                  60
Gly Leu Val Gly Glu Gly Ser Thr Arg Leu Phe Val Glu Ala Glu Phe
65                  70                  75                  80
Gly Asn Pro Ala Leu Leu Lys Arg Thr Glu Leu Tyr Lys Ser Met Gly
                85                  90                  95
Leu Phe Leu Gln Lys Thr Asn Ile Ile Arg Asp Val Arg Glu Asp Phe
            100                 105                 110
Asp Asp Gly Arg Gln Phe Trp Pro Lys Glu Ile Trp Ser Lys His Val
        115                 120                 125
Thr Asn Phe Glu Asp Leu Phe Lys Pro Glu Asn Arg Glu Ala Ala Leu
    130                 135                 140
Asn Cys Ser Ser Glu Met Val Leu Asn Ala Leu Arg His Ala Glu Glu
145                 150                 155                 160
Cys Leu Phe Tyr Leu Ala Gly Leu Arg Glu Gln Ser Val Phe Asn Phe
                165                 170                 175
Cys Ala Ile Pro Gln Ser Met Ala Ile Ala Thr Leu Ser Leu Cys Phe
            180                 185                 190
Arg Asn Pro Ala Ile Phe Glu Arg Asn Ile Lys Ile Lys Lys Gly Arg
        195                 200                 205
Gly Val Pro Val Asp Asp Gly Val Asp Thr Glu Ser Ala Asn Ser Leu
    210                 215                 220
Arg Gly Leu Pro
225
```

<210> 28545
<211> 161
<212> PRT
<213> A.fumigatus

<400> 28545

```
Asp Met Arg Arg Ser Val Ser Phe Thr Leu Leu Val Cys Val Asn Arg
1               5                   10                  15
Ala Ser Ser Thr Ser Ala Pro Ser Leu Ser Pro Trp Pro Leu Leu Pro
            20                  25                  30
Phe Pro Phe Ala Ser Ala Thr Arg Gln Phe Ser Asn Val Thr Ser Arg
        35                  40                  45
Ser Arg Arg Gly Glu Ala Cys Gln Leu Met Met Glu Ser Thr Gln Asn
    50                  55                  60
Leu Arg Ile Leu Tyr Glu Ala Phe Arg Arg Tyr Ala Arg Glu Ile His
65                  70                  75                  80
Lys Lys Asn Thr Pro Lys Asp Pro Asn Phe Leu Glu Ile Gly Ile Ala
                85                  90                  95
Cys Ala Lys Val Gly Ile Leu His Ser Ser Ser Phe Val Pro Ser Ile
            100                 105                 110
Asn Ser Arg Arg Ser Lys Asn Leu Ser Arg Pro Ser Ser His Arg Asn
        115                 120                 125
Gln Pro Lys Arg Pro Thr Gly Val Ser Trp Ala Lys Ser Pro Lys Pro
    130                 135                 140
Asn Lys Arg Arg Pro Asp Trp Arg Leu Lys Pro Ala Lys Thr Ser Ser
145                 150                 155                 160
Leu
```

<210> 28546

<211> 144
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (34)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28546
Trp Asn Arg Tyr Ala Lys Phe Ser Arg Tyr Thr Thr Trp Val Phe Tyr
1 5 10 15
Gly Leu Leu Lys Thr Asp Asp Phe Gln Ile Arg His Glu Gly Lys Gly
20 25 30
Val Xaa Val Gln Asp Met Asp Pro Leu Pro Asn Trp Asn Arg Gly Arg
35 40 45
Ala Ile Val Ile Gly Asp Ala Ala His Ala Met Thr Pro Leu Gln Gly
50 55 60
Gln Gly Ala Asn Met Ala Val Glu Asp Ala Asp Ser Leu Arg Leu Leu
65 70 75 80
Arg Pro Gly Leu Ser His Ala Glu Ile Glu Ala Val Leu Lys Gln Val
85 90 95
Asp Asn Val Arg Arg Pro Arg Ala Ser Lys Val Leu Glu Asp Thr Arg
100 105 110
Val Met Ala Lys Asp Ile Ser Met Glu Gln Arg Leu Ala Asn Leu Asp
115 120 125
Phe Thr Cys Gly Tyr Asn Gly Val Phe Glu Ala Leu Lys Glu Ile Gln
130 135 140

<210> 28547
<211> 184
<212> PRT
<213> A.fumigatus

<400> 28547
Ser Ile Pro Asp Leu Thr Lys Arg Thr Asp Leu Cys Leu Cys Ser Ala
1 5 10 15
Thr Ala Ser Met Ala Gly Pro Thr Glu Pro Ile Arg Lys Arg Arg Arg
20 25 30
Pro Ala Leu Ser Cys Val Glu Cys Arg Arg Arg Lys Val Lys Cys Asp
35 40 45
Arg Asn Ser Pro Cys Gly Gln Cys Arg Ala His Lys Ser Thr Ala Cys
50 55 60
Thr Tyr Ala Val Ala Trp Ala Thr Gly Pro Val Arg His Glu Ser Gln
65 70 75 80
Arg Thr Gln Glu Pro Leu Leu Pro Glu Pro Ala Asp Gln Gly Ala Ser
85 90 95
Glu Pro Gln Gln Pro Ala Ser Ser Ser Pro Asn Pro Thr Ile Gly Glu
100 105 110
Ser Thr Gly Pro Gly Ile Ser Leu Val Leu Gly Gly Pro Val Arg Cys
115 120 125
Thr Pro Pro Asp Leu Asp Ser Thr His Thr Leu Pro Gln Lys Val Ser
130 135 140
Val Ser Ser Ser Thr Ile Gln Ala Pro Pro Gly Pro Phe His Gly Ile
145 150 155 160
Leu Ser Lys Thr Arg Val Phe Gly His Gly His Trp Met Ser Ser Val

```
                165                 170                 175
Pro Leu Val Arg Arg Pro Ala Thr
            180
```

<210> 28548
<211> 104
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (71)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28548

```
Ser Thr Trp Pro Ala Asn Ile Val His Leu Leu Lys His Arg Phe Asp
1               5                  10                  15
Phe Arg Met Gly Lys Thr Trp Thr Gln Gln Ala Glu Thr Val Ser Ile
            20                  25                  30
Phe Asp Cys His Val Arg Pro Leu Thr Leu Gln Trp Gly His Arg Met
        35                  40                  45
Gly Arg Ile Pro Asp Asn Asp Cys Ala Ser Ser Ile Pro Val Gly Lys
    50                  55                  60
Gly Val His Ile Leu Asn Xaa His Thr Phe Thr Phe Val Ala Asn Leu
65                  70                  75                  80
Lys Ile Val Ser Phe Gln Lys Pro Val Lys Asn Pro Ser Gly Val Pro
                85                  90                  95
Gly Glu Phe Cys Val Ser Val Pro
            100
```

<210> 28549
<211> 106
<212> PRT
<213> A.fumigatus

<400> 28549

```
Ser Arg Phe Val Leu Phe Thr Ser Gly Ile Thr Leu Phe Glu Thr Ala
1               5                  10                  15
Met Ala Ala Pro Arg Leu Phe Arg Pro Ala Ala Arg Leu Leu Ser Ser
            20                  25                  30
Arg Leu Ser Ala Thr Pro Phe Arg Ser Thr Phe Gln Lys Ser Ala Cys
        35                  40                  45
Ala Pro Ser Ile Leu Arg Ala Arg Gly Tyr Ala Thr Glu Ser Gly Thr
    50                  55                  60
Lys Glu Val Thr Val Arg Asp Ala Leu Asn Glu Ala Leu Ala Glu Glu
65                  70                  75                  80
Leu Glu Ser Asn Pro Lys Thr Phe Ile Leu Gly Glu Glu Val Ala Gln
                85                  90                  95
Tyr Asn Gly Ala Tyr Gly Ile Thr Phe Ser
            100                 105
```

<210> 28550
<211> 142
<212> PRT
<213> A.fumigatus

<400> 28550
His Leu Val Arg Leu Leu Tyr Gly Gln Ala Phe Pro Met Ser Glu Ala
1 5 10 15
Ala Gln Lys Asp Asp Phe Val Leu Pro Leu Gly Lys Ala Lys Ile Glu
20 25 30
Arg Pro Gly Lys Asp Leu Thr Ile Val Ser Leu Ser Arg Cys Val Gly
35 40 45
Gln Ser Leu Asn Ala Ala Thr Glu Leu Lys Gln Lys Tyr Gly Val Glu
50 55 60
Ala Glu Val Ile Asn Leu Arg Ser Val Lys Pro Leu Asp Val Glu Thr
65 70 75 80
Ile Ile Gln Ser Leu Lys Lys Thr Gly Arg Leu Met Cys Val Glu Ser
85 90 95
Gly Phe Pro Met Phe Gly Val Gly Ser Lys Ile Leu Ala Leu Pro Met
100 105 110
Glu Tyr Gly Phe Asp Tyr Ser His Cys Ser Cys Cys Leu Val Leu Pro
115 120 125
Ala Leu Arg Phe Ile His Leu Thr Leu Leu Val Leu Ser Arg
130 135 140

<210> 28551
<211> 73
<212> PRT
<213> A.fumigatus

<400> 28551
Ala Leu Gly Arg Phe Ala Arg Ile Ile Ile Ile Cys Leu Cys Ile Val
1 5 10 15
Val Cys Ile Leu Leu Val Ser Ile Ala Leu Cys Ile Ala Val Leu Ser
20 25 30
Val Arg Ile Leu Ser Gly Phe Val Pro Asn Glu Phe Ala Arg Phe Thr
35 40 45
Arg Ser Tyr Arg Leu Val Gly Val Val Val Ile Val Ser Ser Pro Arg
50 55 60
Gly Trp Gln Trp Pro Leu Gln Pro His
65 70

<210> 28552
<211> 158
<212> PRT
<213> A.fumigatus

<400> 28552
Tyr Ser His His Arg Gly Gly Leu Leu Trp Phe Gly Cys Trp Arg Arg
1 5 10 15
Pro Arg Trp Thr Ala Pro Tyr Arg Glu Ser Asn Val Tyr Leu Phe Leu
20 25 30
Lys Arg Leu Glu Arg Leu Met Gly Ala Ser His Leu Gln Cys Glu Phe
35 40 45
Met Thr Phe Asn Phe Ala Met Gln Ala Ile Asp Gln Ile Ile Asn Ser
50 55 60
Ala Ala Lys Thr His Tyr Met Ser Gly Gly Ile Gln Pro Cys Asn Ile
65 70 75 80
Thr Phe Arg Gly Pro Asn Gly Phe Ala Ala Gly Val Ala Ala Gln His
85 90 95
Ser Gln Asp Tyr Ser Ala Trp Tyr Gly Ser Ile Pro Gly Leu Lys Val

```
            100                 105                 110
Val Ala Pro Trp Ser Ala Glu Asp Ala Lys Gly Leu Met Lys Ala Ala
        115                 120                 125
Ile Arg Asp Pro Asn Pro Val Val Val Leu Glu Asn Glu Tyr Val Leu
    130                 135                 140
Pro Glu Pro Leu Asp Val Ala Gly Leu Glu Leu Thr Phe Gly
145                 150                 155
```

<210> 28553
<211> 103
<212> PRT
<213> A.fumigatus

<400> 28553

```
Ile Ala Ile Tyr Tyr Tyr Ser Phe Gly Arg Glu Asn Glu Leu Gln Leu
1               5                   10                  15
Thr Gly Ser Phe Gln Ser His Leu Met Val Trp Asn Ile Ala Leu Thr
            20                  25                  30
Arg Met Lys Tyr Leu Ala Tyr Trp Ala Leu Leu Tyr Ser Ser Ser Pro
        35                  40                  45
Gly Leu Ala Ile Gln Pro Ser Ala Pro Asp Ala Ile Pro Ala Pro Ile
    50                  55                  60
Arg Asp Leu Gln Trp Gly Gln Leu Asn Phe Leu His Thr Thr Asp Thr
65                  70                  75                  80
His Gly Trp Leu Ala Gly His Leu Gln Glu Tyr Gly Phe Ala Ile Tyr
                85                  90                  95
Cys Ala Ile Val Asp Ala Arg
            100
```

<210> 28554
<211> 212
<212> PRT
<213> A.fumigatus

<400> 28554

```
Cys Arg Ser Lys Arg Ala Ser Tyr Gly Ala Asp Trp Gly Asp Tyr Ile
1               5                   10                  15
Ser Phe Thr Thr Arg Met Arg Glu Lys Ala Leu Ala Gln Gly Asn Asp
            20                  25                  30
Leu Leu Ile Ile Asp Thr Gly Asp Arg Val Glu Gly Asn Gly Leu Tyr
        35                  40                  45
Asp Ala Ser Glu Pro Lys Gly Ala Tyr Ile Ser Asp Ile Leu Arg Gln
    50                  55                  60
Gln Gln Ile Asp Leu Met Ser Ala Gly Asn His Glu Leu Tyr Lys Gln
65                  70                  75                  80
Asn Thr Ser Glu Thr Glu Phe Leu Thr Thr Val Pro Asn Phe Arg Asp
                85                  90                  95
Ser Tyr Leu Ala Ser Asn Ile Asp Ile Val His Pro Ile Ser Gly Glu
            100                 105                 110
Leu Val Pro Leu Ala Pro Arg Phe Lys Lys Phe Thr Thr Glu Lys Gln
        115                 120                 125
Gly Ile Arg Ile Val Ala Phe Gly Phe Leu Phe Asp Phe Ser Lys Asn
    130                 135                 140
Tyr Asn Asn Thr Ile Val Tyr Thr Val Glu Asp Thr Ile Lys Thr Thr
145                 150                 155                 160
Trp Phe Gln Glu Ala Ile Arg Asp Glu Glu Val Asp Leu Phe Leu Val
```

```
                165                 170                 175
Ile Gly His Val Pro Val Arg Ser Lys Glu Tyr Asn Ala Val Phe Glu
            180                 185                 190
Glu Ile Arg Asn Gly Leu His His Gly Ala Gly Arg Ile His Gly Trp
        195                 200                 205
Cys Tyr Gln Glu
    210
```

<210> 28555
<211> 60
<212> PRT
<213> A.fumigatus

<400> 28555

```
Leu Pro Ile Ser Ser Val Ser Leu Thr Leu Met Ser Arg Lys Tyr Pro
1               5                   10                  15
Leu Trp His His Gly Val His Glu Asn Met Ile Ser Val Gln Pro Pro
            20                  25                  30
Thr Ser Pro Trp Ala Arg Trp Ile Gly Ser Glu His Lys His Gly Gln
        35                  40                  45
Gly Thr Pro Ser Glu Met Gln His Gly Thr Ser Gln
    50                  55                  60
```

<210> 28556
<211> 476
<212> PRT
<213> A.fumigatus

<400> 28556

```
Trp Ser Asn Ser Phe Glu Ala Arg Thr Ala Met Arg Leu Ala Ile Glu
1               5                   10                  15
Gln Ala Gly Ser Val Phe Thr Gly Trp Ile Ala Ser Cys Leu Ser Cys
            20                  25                  30
Leu Arg Pro Glu Gly Asp Val Gln Ser Ser His Tyr Gln Arg Ala Thr
        35                  40                  45
Lys Ser Asn Gly Met Tyr Ser Phe Pro Asp Arg Ile Tyr His Gln Gln
    50                  55                  60
Thr Leu Met Ser Cys Asn Pro Gly Val Glu Arg Glu Met Arg Ile Cys
65                  70                  75                  80
His Thr Gln Pro His Leu Val Pro Pro Met Lys Leu Val Val Tyr Asp
                85                  90                  95
Asn Leu Pro Ser Pro Gly Pro Pro Pro Arg Thr Ser Ser Phe Pro Pro
            100                 105                 110
Trp Ile Thr Glu Gly Arg Ser Ile Ala Ser Arg Ala Ser Asn Arg Ala
        115                 120                 125
Ser Met Ser Phe Lys Arg Gln Ser Thr Thr Pro Leu Arg Ile Ser Ala
    130                 135                 140
Pro Thr Asp Phe Arg Arg Val Glu Thr Phe Gln Ser Phe Ala Ser Ser
145                 150                 155                 160
Pro Ala Glu Phe Gln Pro Leu Val Leu Lys Ile His Thr Pro Gly Asn
                165                 170                 175
Arg Leu Ser Asp Leu Pro Thr Phe Asp Glu Phe Thr Ser Gln Glu Gly
            180                 185                 190
Arg Arg Arg Ser Leu Ser Trp Pro Ala Lys Ala Val Val Ser Pro Thr
        195                 200                 205
Asp Pro Ser Arg Ile Pro Arg Val Arg Ser His His His Ser Ser Ser
```

```
    210                 215                 220
Ser Phe Gln Leu Ala Arg Lys Pro Val Gly Ser Gly Ser Arg Arg Ser
225                 230                 235                 240
Ser Leu Ser Asn Leu Glu Gln Leu Leu Asp Lys Gln Ser Pro Ile Ala
                245                 250                 255
Ser Pro Gly Met Pro His Phe Ser Ala Arg Thr Ser Thr Ala Thr Gly
            260                 265                 270
Leu Ser Glu Ala Met Phe Leu Pro Thr His Ser Arg Leu Gln Glu Pro
        275                 280                 285
Ser Ala Gly Tyr Gly Ser Met Pro Gln Arg Gln Arg Ile Asp Ile Thr
    290                 295                 300
Pro Pro Ile Ala Val Pro Pro Lys Thr Pro Pro Lys Thr Pro Leu Gln
305                 310                 315                 320
Asp Arg Pro Leu Pro Pro Leu Pro Thr Gly Asn Ser Pro Ser Ser Thr
                325                 330                 335
Glu Thr Pro Thr Ser Asn Pro Ser Ser Thr Pro Leu Ser Glu Asn Asp
            340                 345                 350
Val Gln Thr Gln Thr Pro Asn Thr Thr Pro Ser Arg Ser Gly Arg Val
        355                 360                 365
Ala Gln Trp Leu Leu Gln Thr Ser Ser Lys Ala Ser Pro Pro Val Ser
    370                 375                 380
Trp Lys Leu Gln Ala Gly Arg Ser Arg Gly Gly Ser Ala Ser Ala Asn
385                 390                 395                 400
Ala Phe Arg Ile Arg Ser Arg Thr Leu Ser Gly Ser Thr Ala Val Ser
                405                 410                 415
Ser Ala Pro Ser Thr Thr Thr Thr Thr Ser Leu Gly Pro Arg Thr Pro
            420                 425                 430
Thr Ser Arg Gly Thr Arg Asp Leu Asn Leu Asn Gln Leu Ser Glu Lys
        435                 440                 445
Asp Leu Glu Ala Phe Pro Ser Arg Gly Leu His His Gly Ala Gly Arg
    450                 455                 460
Ser Ala Ala Leu Gly Ser Gly Ala Gln Trp Asp Pro
465                 470                 475

<210> 28557
<211> 193
<212> PRT
<213> A.fumigatus

<400> 28557
Asp Gln Ala Pro Val Asp Leu Pro Phe Arg Thr Trp Ser Ser Phe Trp
1               5                   10                  15
Thr Ser Asn Leu Pro Ser Gln Ala Leu Glu Cys Leu Thr Ser Gln Pro
            20                  25                  30
Val Pro Gln Pro Pro Pro Ala Ser Ala Arg Pro Cys Ser Tyr Gln His
        35                  40                  45
Thr Pro Gly Cys Arg Asn Pro Arg Leu Ala Met Gly Gln Cys Pro Asn
    50                  55                  60
Ala Asn Ala Ser Ile Ser Pro Arg Pro Ser Arg Cys Pro Pro Arg His
65                  70                  75                  80
Leu Pro Lys Leu Pro Cys Arg Thr Gly Arg Tyr His Leu Phe Leu Pro
                85                  90                  95
Val Thr Pro His Arg Gln Arg Lys Arg Pro His Pro Ile Pro His Pro
            100                 105                 110
Pro Pro Ser Pro Arg Thr Thr Ser Lys Pro Lys Pro Gln Thr Pro Pro
        115                 120                 125
```

```
Arg Pro Ala Pro Ala Ala Ser Arg Ser Gly Ser Ser Lys Gln Ala Ala
    130                 135                 140
Lys Pro Leu Pro Leu Ser Pro Gly Asn Ser Arg Pro Ala Gly Ala Glu
145                 150                 155                 160
Ala Ala Ala Arg Ala Gln Thr Pro Ser Ala Ser Ala His Ala Pro Ser
                165                 170                 175
Ala Ala Gln Arg Pro Ser Arg Pro His Arg Ala Gln Pro Pro Pro Gln
            180                 185                 190
Ala
```

<210> 28558
<211> 242
<212> PRT
<213> A.fumigatus

<400> 28558

```
Asn Ser Ser Phe Gly Met Gly Val Glu Ala Asp Ser Lys Leu Pro Asp
1               5                   10                  15
Arg Ser Ser Ser Ala Gln Ser Lys Glu Asp Val Asp Pro Glu Thr Gly
            20                  25                  30
Ser Ile Gln Glu Gly Glu Gly Leu Asp Arg Leu Gly Tyr Lys Gln Glu
        35                  40                  45
Leu His Arg Asn Arg Ser Val Leu Thr Leu Leu Phe Gln Thr Leu Ala
    50                  55                  60
Ile Ala Ala Ile Pro Tyr Gly Glu Gly Ser Pro Leu Leu Asn Ala Ile
65                  70                  75                  80
Tyr Gly Gly Gly Pro Leu Ser Ile Phe Val Gly Trp Ile Met Val Cys
                85                  90                  95
Val Leu Asp Glu Cys Val Ala Leu Ser Leu Ala Glu Leu Ala Ser Arg
            100                 105                 110
Trp Pro Thr Ser Ala Gly Pro Tyr Tyr Trp Ser Phe Gln Ile Ser Arg
        115                 120                 125
Ser Ser Lys Thr Val Leu Ser Phe Ile Asn Gly Trp Ile Trp Leu Val
    130                 135                 140
Gly Asn Trp Thr Ile Thr Leu Ser Val Asn Phe Gly Phe Ala Ser Leu
145                 150                 155                 160
Val Ser Ala Thr Val Ser Met Tyr His Pro Gly Trp Ala Ala Thr Asp
                165                 170                 175
Trp Gln Leu Leu Leu Ile Phe Tyr Ala Ile Cys Ile Gly Ser Phe Phe
            180                 185                 190
Ile Cys Thr Phe Gly Glu Pro Leu Pro Ser Pro Gly Arg His Arg Val
        195                 200                 205
Cys His Leu His Arg Thr His His Pro His Gln Ser His Cys Ile Val
    210                 215                 220
Arg Gln Gly Arg Arg Arg Gln Thr Gln Arg Gly Leu Arg Phe Gly Pro
225                 230                 235                 240
Leu Gln
```

<210> 28559
<211> 107
<212> PRT
<213> A.fumigatus

<400> 28559

```
Val Arg Ser Ser Ser Ala Arg Leu Gly Asn Arg Tyr Leu Pro Gln Val
1               5                  10                  15
Asp Ile Ala Cys Ala Thr Phe Thr Ala Leu Thr Ile Leu Ile Ser Leu
            20                  25                  30
Ile Ala Leu Ser Val Lys Ala Asp Ala Gly Arg His Ser Ala Ala Tyr
        35                  40                  45
Ala Leu Gly His Tyr Asn Glu Asn Leu Ser Gly Trp Gly Gly Phe Pro
    50                  55                  60
Phe Phe Ile Gly Leu Leu Pro Ala Ala Tyr Thr Phe Ser Ala Ile Gly
65                  70                  75                  80
Met Gly Leu Leu Asn Gly Arg Lys Ile Val Pro Ser Pro His Ser His
                85                  90                  95
Leu Pro Arg Gly His Ser Thr Phe Cys Val Pro
            100                 105
```

<210> 28560
<211> 95
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (78)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28560

```
Pro Val Ala Asn Lys Lys Lys Ser Ile Leu His Leu Thr Ala Phe Glu
1               5                  10                  15
Asn Ser Ala Ala Phe Arg Asp Tyr Ile Asn Ala Thr Thr Ala Glu Leu
            20                  25                  30
Asp Asp Pro Phe Ala Gln Asp Asp Ala Thr Asp Phe Gly Leu Leu Ala
        35                  40                  45
Leu Arg Asp Arg Pro Val Ala Asp Trp Gly Pro Ser Val Glu Lys Val
    50                  55                  60
Cys Ile Lys Ser Thr Ser Asp Phe Thr Glu Gly Cys Leu Xaa Ile Gly
65                  70                  75                  80
Tyr Gly Thr Phe Glu His Pro Thr Ala Ala Leu Asn Pro Tyr Pro
                85                  90                  95
```

<210> 28561
<211> 76
<212> PRT
<213> A.fumigatus

<400> 28561

```
Leu Gln Lys Glu Asp Leu Asp Cys Ser Gly Leu His Trp Thr Ser Pro
1               5                  10                  15
Ala His Ala Phe Thr Thr Gln Lys His Val Cys Leu Thr Leu Thr Phe
            20                  25                  30
Glu Lys Asp Ser His Ile His Phe Asp Ala Phe Ala Asn Ala His Ser
        35                  40                  45
Leu Pro Gln Asp Ile Pro Val Ile Leu Asn Leu Trp Ile Leu Pro Thr
    50                  55                  60
Ile Leu Asn Thr Leu Thr Leu Leu Lys Leu Gly Leu
65                  70                  75
```

<210> 28562
<211> 63
<212> PRT
<213> A.fumigatus

<400> 28562
Leu Ile Tyr Thr Ser Leu Leu Val Leu Ile Gln Ile Ser Ala Arg Tyr
1 5 10 15
Ala Thr Asn Leu Met Asp Pro Ala Asp Tyr Asp Lys Val Leu Ala Asn
20 25 30
Pro Gln Glu Val Lys Asp Arg Ile Ile Gly Ser Lys Ile Val Ile Gly
35 40 45
Leu Ser Ser Pro Arg Gly Trp Lys Asp Pro Arg Gly Phe Tyr Asn
50 55 60

<210> 28563
<211> 303
<212> PRT
<213> A.fumigatus

<400> 28563
Arg Met Arg Asn Val Gln Tyr Thr His Leu Pro Ser Gly Gly Leu Cys
1 5 10 15
Met Ile Val Phe Ala Asp Phe Ile Leu His Ser Asp Asp Gly Tyr Arg
20 25 30
Leu Thr Tyr Gly Gly Leu Asp Tyr Leu Ala Leu Asn Ala His Gln Lys
35 40 45
Gln Lys Cys Ile Tyr Ser Val Gly Asn Gln Ile Gly Val Gly Lys Glu
50 55 60
Ser Asp Ile Ile Val Val Ala Asn Ser Lys Gly Thr Gln Cys Ile Leu
65 70 75 80
Lys Ile His Arg Leu Gly Arg Ile Ser Phe Arg Thr Val Lys Thr Asn
85 90 95
Arg Asp Tyr Leu Arg Asn Arg Ser Thr Gly Ser Trp Met Tyr Met Ser
100 105 110
Arg Leu Ala Ala Met Lys Glu Phe Ala Phe Met Lys Ala Leu Arg Glu
115 120 125
Asn Gly Phe Ser Val Pro Glu Pro Ile Ala Gln Asn Arg His Thr Ile
130 135 140
Val Met Ser Leu Ile Asp Ala Phe Pro Leu Arg Gln Ile Ser Arg Val
145 150 155 160
Pro Lys Pro Ala Leu Leu Tyr Ser Glu Leu Met Gly Thr Ile Met Glu
165 170 175
Leu Ala Arg Phe Gly Leu Ile His Gly Asp Tyr Asn Glu Phe Asn Ile
180 185 190
Leu Ile Lys Glu Glu Glu Asp Pro Asn Ala Lys Gly Lys Ala Pro Ala
195 200 205
Asp Ala Asp Asn Asp Glu Asn Ile Arg Leu Val Pro Val Ile Ile Asp
210 215 220
Phe Pro Gln Met Val Ser Ile Asp His Pro Asn Ala Glu Met Tyr Phe
225 230 235 240
Asp Arg Asp Val Asn Cys Ile Lys Arg Tyr Phe Gln Arg Lys Phe His
245 250 255
Phe Leu Ser Asp Glu Pro Ser Pro Phe Phe Ser Asp Ala Lys Glu Gln
260 265 270
Leu Phe Glu Glu Ser Trp Glu Ser Gly Trp Met Ser Thr Tyr Lys Ala

```
        275                 280                 285
Phe Gly Phe Ser Arg Gln Asp Gly Ser Arg Ala Lys Asn Leu Thr
    290                 295                 300

<210> 28564
<211> 217
<212> PRT
<213> A.fumigatus

<400> 28564
Thr Asn Asn Ser Ala Tyr Thr Ser Ile Gly Ser Ser Leu Arg Gly Thr
1               5                  10                  15
Ser Thr Ala Met Pro Glu Leu Ala Glu Val Ser Arg Ile Val His Phe
            20                  25                  30
Ile Asn Gln His Leu Val Gly Lys Thr Leu Thr Lys Val Ser Ala Gln
        35                  40                  45
Asn Asp Asp Ile Val Tyr Gly Lys Val Gly Thr Ser Ala Ser Glu Phe
    50                  55                  60
Gln Lys Ala Met Glu Gly Lys Lys Val Val Ser Ala Gly Gln Gln Gly
65                  70                  75                  80
Lys Tyr Phe Trp Leu Ile Met Asn Glu Pro Pro His Ala Val Met His
                85                  90                  95
Phe Gly Met Ala Gly Trp Leu Lys Ile Arg Asp Ala Asp Thr Tyr Tyr
            100                 105                 110
Tyr Arg Val Glu Lys Pro Glu Asp Lys Thr Trp Pro Pro Lys Tyr Trp
        115                 120                 125
Lys Phe Leu Leu Glu Thr Asp Gly Asp Pro Lys Thr Glu Ala Ala Phe
    130                 135                 140
Val Asp Phe Arg Arg Leu Ser Arg Ile Arg Leu Val Asp Cys Pro Gly
145                 150                 155                 160
Glu Glu Ile Arg Lys His Ser Pro Leu Lys Glu Asn Gly Pro Asp Pro
                165                 170                 175
Val Ala Asp Lys Asp Ile Val Thr Glu Glu Trp Leu Ala Asp Lys Leu
            180                 185                 190
Lys Ser Arg Lys Val Pro Ile Lys Ala Leu Leu Leu Asp Gln Ala Asn
        195                 200                 205
Ile Ser Gly Ile Gly Asn Trp Met Gly
    210                 215

<210> 28565
<211> 173
<212> PRT
<213> A.fumigatus

<400> 28565
Gln Pro Phe Ser Asp Glu Ile Leu Tyr His Ala Lys Ile His Pro Glu
1               5                  10                  15
Gln Tyr Ser Asn Thr Leu Asn Asp Glu Gln Ile Lys Gln Leu His Ser
            20                  25                  30
Ser Ile His Tyr Ile Cys Thr Thr Ser Val Asp Val Leu Ala Asp Ser
        35                  40                  45
Glu Lys Phe Pro Glu His Trp Leu Phe Lys His Arg Trp Gly Lys Gly
    50                  55                  60
Lys Lys Asn Lys Pro Ser Val Leu Pro Asn Gly Glu Lys Ile Val Phe
65                  70                  75                  80
Leu Thr Val Gly Gly Arg Thr Ser Ala Val Val Pro Ser Val Gln Arg
```

```
                85                  90                  95
Lys Thr Gly Pro Val Ala Arg Asp Ile Asp Asp Glu Asp Thr Asn Gly
            100                 105                 110
Pro Lys Thr Glu Thr Lys Arg Lys Arg Val Thr Ala Val Thr Lys Glu
        115                 120                 125
Glu Asp Val Asn Asp Asp Glu Lys Glu Pro Lys Ser Lys Lys His Gly
    130                 135                 140
Ser Arg Ser Gly Gln Ser Glu Asp Thr Val Glu Ile Lys Glu Glu Pro
145                 150                 155                 160
Lys Gln Glu Arg Arg Arg Arg Ser Thr Arg Leu Arg Asn
                165                 170
```

<210> 28566
<211> 586
<212> PRT
<213> A.fumigatus

<400> 28566

```
Arg Pro Ile Trp Pro Ile Gly Ala Gly Lys Ser Pro Val Pro Leu Lys
1               5                   10                  15
Leu Asp Ser Thr Leu Lys Arg Ala Asp Leu Glu Lys Ile Arg Ser Ser
            20                  25                  30
Arg Lys Asp Arg Ala Lys Glu Lys Pro Ala Arg Pro Val Arg Asp Asp
        35                  40                  45
Lys Met Gln Val Gly Thr Tyr Pro Ser Ser Ser His Tyr Ala Ala Ala
    50                  55                  60
Pro Val Gln Arg Ser Pro Ser Arg Pro Arg Gln Arg Asp Ser Val Tyr
65                  70                  75                  80
Val Arg His Val Pro Gly Thr Cys Arg Asp Cys Asp Gln Gly Leu Tyr
                85                  90                  95
His Ala Ser Thr Pro Ile Glu Pro Arg Arg Met Glu His Pro Tyr Tyr
            100                 105                 110
Val Ser Gln Pro Pro Pro Ser Val Tyr Asp Tyr Pro Pro Pro Pro Pro
        115                 120                 125
Ser Pro Gln Ser Arg Tyr Pro Pro Ser Ile Ile Gln Asp Val His Val
    130                 135                 140
Ser His Ser Ser Arg Pro Ser Ala Arg Ser Gly Arg Ser Asn Ser Tyr
145                 150                 155                 160
His Ser Thr Ala Arg Pro Ser Ser Phe His Gly Met Met Pro Gly Met
                165                 170                 175
Gly Pro Met Val Tyr Thr Pro Ser Pro Met Ser Arg Tyr Glu Ala Gly
            180                 185                 190
Pro Pro Leu Ala Ser Pro Val Tyr Ala Asn Ser Pro Ser Tyr Ala Ala
        195                 200                 205
Ser His Tyr Ala Gln Gln Ser Pro Tyr Tyr Gly Ala Gln Glu Phe Pro
    210                 215                 220
Ala Leu Pro Pro Thr Asp His His Gln Glu Arg Ser Val Ser Lys Thr
225                 230                 235                 240
Arg Glu Lys Gln Pro Arg Ala Arg Arg Pro Ser Leu Tyr Gly Pro Pro
                245                 250                 255
Val Val Asp His Val Pro Pro Thr Pro Pro Tyr Asp Glu Ser Glu Asp
            260                 265                 270
Asp Asp Asp Glu Glu Asp Asp Asp Asp Asp Ser Glu Asp Glu Gln Leu
        275                 280                 285
Leu Glu Pro Pro Pro Pro Pro Val Arg Thr Arg Pro Arg Leu Pro Ser
    290                 295                 300
```

```
Gln Ser Ser His Asn Arg Asp Glu Asp Tyr Tyr Arg Met Pro Pro Pro
305                 310                 315                 320
Pro Ile Lys Asn Asn Asn Thr Arg Pro His Val Ile Gln Lys Arg Pro
                325                 330                 335
Asp Pro Pro Arg Lys Ser Ala Thr Thr Thr Ser Leu Thr Ser Glu Arg
            340                 345                 350
Arg Ser Ser Arg Ser Phe Asp Leu Ser Glu Met Glu Asp Ala Leu Pro
        355                 360                 365
Ser Tyr Gly Tyr Arg Arg Ser Ser Arg Glu Thr Val Val Pro Glu Arg
    370                 375                 380
Ser Gln Ser Leu Arg Gly Ser Arg Arg Ser Thr Ser Tyr His Asp Ser
385                 390                 395                 400
Val Arg Pro Ala Arg Ile Ala Ile Glu Gly Ala Arg Arg Gln Arg Thr
                405                 410                 415
Thr Val Tyr Asp Tyr Asn Ser Gly Gly Asp Ile Glu Asp Lys Gln Arg
            420                 425                 430
Glu Ala Glu Glu Tyr Gln Ala Ser Arg Ser Gly Lys Thr Val Ala Val
        435                 440                 445
Pro Leu Thr Ala Asp Ala Leu Arg Lys Ala Lys Thr Ser Gln Arg Ala
    450                 455                 460
Glu Ser Asp Ser Gly Ser Gln Lys Ser Arg Ser Ser Arg Gly Ser Asp
465                 470                 475                 480
Ala Arg Thr Gln Asn Gly Ser Ser Gly Glu Ala Lys Pro Glu Glu Asp
                485                 490                 495
Asp Asn Ile Val Met Thr Met Asn Gly Val Thr Met Ser Phe Thr Gln
            500                 505                 510
Lys Ser Val Gly Gly Lys Arg Ile Ser Val Arg Thr Gly Asp Thr Gly
        515                 520                 525
Ala Val Glu Leu Asn Ile Glu Gly Lys Arg Pro Lys Lys Tyr Leu Thr
    530                 535                 540
Gly Gly Ser Asp Tyr Thr Gly Ser Val Ser Arg Arg Glu Leu Glu Asp
545                 550                 555                 560
Ala Arg Arg Pro Arg Gly Asp Arg Arg Ser Asp Lys Ala Ser His Arg
                565                 570                 575
Ser Ser Arg Ser Thr Tyr Ser Gly Arg Tyr
            580                 585
```

<210> 28567
<211> 100
<212> PRT
<213> A.fumigatus

<400> 28567

```
Ile Leu Leu Arg Ser Leu Ala Leu Asn Val Gln Leu Asn Arg Ser Arg
1               5                   10                  15
Val Ala Ser Ala Asp Ala Asp Pro Leu Ser Pro Asp Arg Leu Leu Ser
            20                  25                  30
Glu Thr His Ser His Thr Ile His Gly His Asp Asn Val Ile Val Phe
        35                  40                  45
Leu Arg Leu Gly Leu Ala Ala Ala Thr Ile Leu Ser Ala Ser Ile Thr
    50                  55                  60
Thr Ser Ala Ala Thr Ala Leu Leu Thr Ser Ala Val Thr Phe Arg Thr
65                  70                  75                  80
Leu Arg Cys Phe Gly Phe Ala Gln Gly Ile Arg Gly Lys Trp His Arg
                85                  90                  95
Tyr Gly Phe Thr
```

100

<210> 28568
<211> 76
<212> PRT
<213> A.fumigatus

<400> 28568
Pro Gln Gly Glu Asn Tyr Gln Arg Tyr Gln Arg Cys Tyr Gln Leu Ile
1 5 10 15
Thr Leu Gln Cys Tyr Leu Cys Pro Cys Asn His Arg Ala Asn Gly Val
20 25 30
Thr Asn Pro Gln Tyr Thr Gly Thr Phe Leu Phe Glu Asn Asp Tyr Ser
35 40 45
Thr Val Arg Met Asp Glu Gly Glu Tyr Asp Thr Asp Thr Phe Lys Lys
50 55 60
Gly Ala Ser Ser Trp Phe Gln Leu Ser Leu Pro Gly
65 70 75

<210> 28569
<211> 163
<212> PRT
<213> A.fumigatus

<400> 28569
Ile Ser Asn Cys Gly Leu Ile Val Ile Arg Lys Thr Met Ser Pro Gln
1 5 10 15
Glu Asn Ser Arg Val Glu Tyr Leu Pro Leu Ser Arg Arg Ala Thr Asp
20 25 30
Gly Thr Glu Phe Gly Ala Lys Glu Ser Phe His Ile Ser Ser Thr Leu
35 40 45
Glu Lys Leu Gly Phe Ile Pro Arg Ile Val Leu Val Ile Thr Phe Leu
50 55 60
Ser Leu Thr Ala Trp Ile Leu Asn Phe Val His Pro Ser His Ile Ser
65 70 75 80
Val His Glu Ala Asn Ser Gly Arg Lys Pro Leu Val His Thr Leu Asn
85 90 95
Gly Ser Tyr Glu Gly Ile His Leu Asp Ala Leu Lys Gln Asp Ile Phe
100 105 110
Leu Gly Met Pro Tyr Ala Ala Pro Pro Leu Gly Pro Leu Arg Phe Arg
115 120 125
His Pro Gln Pro Leu Thr Glu Ser Trp Asp Gly Val Arg Asn Ala Ser
130 135 140
Thr Tyr Gly Pro Gln Cys Arg Leu Thr Pro Thr Gly Met Asp Gly Ile
145 150 155 160
Ala Leu Pro

<210> 28570
<211> 384
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (190)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28570

```
His Cys Pro Asp Gly Arg Gly Arg Ile Arg His Arg Tyr Val Gln Lys
1               5                  10                  15
Gly Cys Val Lys Leu Val Ser Val Ile Phe Thr Trp Leu Ile Met Ala
            20                  25                  30
Glu Ser Leu Gln Asp Val Ala Ser Val Leu Leu Arg Ala Glu Val Val
        35                  40                  45
Ile Gly Arg Cys Tyr Val Leu Thr Tyr Ser Pro Asn His His Tyr Thr
    50                  55                  60
Ile Ser His Met Thr Pro Glu Glu Val Leu Ala Ile Ile Glu Ala Trp
65                  70                  75                  80
Thr Met Val Tyr Ala Arg Tyr Leu Ser Pro Asp Asn Pro Gln Arg Arg
                85                  90                  95
Ser Thr Thr Ser Ile Ser Ser His Gly Pro Arg Phe Gly Asp Glu Thr
            100                 105                 110
Thr Ser Asp Thr Ala Asn Leu Arg Tyr Met Gln Ile Phe Asp Asn Asn
        115                 120                 125
Gly Glu Ile Val Gly Cys Ser Asn Thr His Pro His Gly Gln Ile Trp
    130                 135                 140
Ile Thr Ser Ser Met Pro Asp Glu Val Arg Leu Glu Leu Ile Gln Met
145                 150                 155                 160
Ser Glu Tyr Arg Lys Asp His Cys Gly Arg His Leu Leu Glu Asp Tyr
                165                 170                 175
Ala Arg Leu Glu Val Asp Arg Gln Glu Arg Val Val Trp Xaa Asn Asp
            180                 185                 190
Ala Phe Leu Ala Ile Cys Pro Trp Trp Ala Val Trp Pro Phe Glu Val
        195                 200                 205
Leu Leu Leu Pro Lys Arg His Val Arg Gly Leu Val Asp Leu Asn Lys
    210                 215                 220
Thr Glu Arg Leu Gln Phe Ala Glu Ala Ile Leu His Val Thr Arg Ser
225                 230                 235                 240
Tyr Asp Thr Leu Phe Gly Met Thr Phe Pro Tyr Ser Met Cys Leu His
                245                 250                 255
Pro Gln Pro Ser Gly Ser Pro Gly Asp Ser Gln Leu Thr His Ser Val
            260                 265                 270
Ser Ala Leu His Gln Ala Pro Leu Asn Ala Thr Glu Ala Glu Val Asp
        275                 280                 285
Ser Ser Tyr Leu His Met His Phe Ser Pro Pro Leu Leu Phe Pro Ser
    290                 295                 300
Val Lys Lys Phe Phe Gly Gly Tyr Glu Leu His Gly Glu Pro Thr Arg
305                 310                 315                 320
Glu Ile Thr Pro Glu Ala Ala Ala Ala Leu Leu Arg His Ser Gly Thr
                325                 330                 335
Gln Leu Pro Val Cys Ala Asp Asn Leu Lys Ala Ala Gln His Gln Phe
            340                 345                 350
Gln Val Arg Ser Asp Gly Val Leu Cys Arg Gly Gly Thr Ser Thr Trp
        355                 360                 365
Trp Glu Arg Val Leu Arg Thr Ser Arg Trp Val Lys Leu Trp Phe Ser
    370                 375                 380
```

<210> 28571
<211> 114
<212> PRT
<213> A.fumigatus

<400> 28571
Leu Leu Met Arg Pro Cys Leu Asp Ile Arg Thr Trp Phe Ser Asn Val
1 5 10 15
Glu Gln His Ala Ser Glu Gly Val His Lys Ile Leu Ile Gly Asn Lys
20 25 30
Cys Asp Trp Glu Glu Lys Arg Ala Val Ser Thr Glu Gln Gly Gln Gln
35 40 45
Leu Ala Asp Glu Leu Gly Ile Pro Phe Leu Glu Val Ser Ala Lys Asn
50 55 60
Asn Ile Asn Ile Glu Lys Ala Phe Tyr Ser Leu Ala Ser Ala Ile Lys
65 70 75 80
Lys Gly Met Asp Thr Ser Lys Ser Glu Gln Val Gly Ser Gln Gly Val
85 90 95
Asn Ile Asp His His Gly Ser Gly Thr Ser Gly Ser Thr Gly Gly Lys
100 105 110
Cys Cys

<210> 28572
<211> 135
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (83)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28572
Gln Cys Ser Glu Val Leu Arg Gly Thr Ser Leu Arg Gln Leu Pro Arg
1 5 10 15
Leu Gln Pro Arg Val His Leu Arg Arg Val Thr Arg Pro Ala Pro Ala
20 25 30
Arg Arg Pro Glu Thr His Arg Arg Gly Thr Gln Leu Pro Pro Gly His
35 40 45
Ala Gln Arg Ser Leu Pro Gly Asp Pro His Arg Gly Arg Ala Ser Arg
50 55 60
Thr Gln Ala Ala Gly Asp His Pro Gln Glu Arg Asn Arg Arg Arg Asp
65 70 75 80
Pro Arg Xaa His Arg Arg Asp Ala His Pro Ala Gly Arg Gly Gly Pro
85 90 95
Gly Arg Gly Leu Trp Pro Gly Gly Ala Glu Ala Arg Gly Cys Ala Ala
100 105 110
Asp Asp Arg Cys Arg Gly Gly Gly Ser Gln Leu Pro Ala Glu Gly His
115 120 125
Gly His Pro Leu Ser Val Arg
130 135

<210> 28573
<211> 209
<212> PRT
<213> A.fumigatus

<400> 28573
Arg Lys Ser Asp Arg Met His Ser Val Val His Thr Gly Phe Leu Arg

```
1               5                   10                  15
Pro Ser Leu Ile Ala Lys Val Asn Val Asp Arg Ile Gly Arg Glu Asp
            20                  25                  30
Asp Gly Ala Ser Leu Trp Thr Pro Tyr Pro Ser His Arg Ala Ala Arg
        35                  40                  45
Pro Ala Tyr Leu Asn Gln Tyr Phe Asp Glu Ser Cys Asn Leu Cys Glu
    50                  55                  60
Ile Ala Arg Asp Ile Ser Arg Val Leu Phe Ala Asp Asp Gln Ser His
65                  70                  75                  80
Ala Ser Thr Ala Tyr Arg Arg Gln Thr Lys Asp Asn Leu Tyr Glu Arg
                85                  90                  95
Leu Arg Arg Trp His Asn Ala Leu Pro Asp Val Phe Asp Pro Gly Arg
            100                 105                 110
Arg Pro Pro Pro His Ile Ile Leu Leu Arg Leu Arg Tyr Phe Thr Leu
        115                 120                 125
Val Ile Asn Leu Phe Ser Cys Ser Ser Ser Thr Asp Asp Thr Ser Ser
    130                 135                 140
Leu Ala Ser Asn Ala Pro Lys Thr Pro Glu Ser Pro Pro Arg Gln Ser
145                 150                 155                 160
Pro Ile Gly Arg Tyr Asn Ala Trp Glu Ile Thr Gln Ser Ala Ala Arg
                165                 170                 175
Gly Ile Ser Ser Leu Thr Arg Leu His Arg Arg Glu Tyr Gly Met Ser
            180                 185                 190
Arg Ala His His Phe Ala Met Tyr Ala Ile Asn Leu Ala Leu Phe Val
        195                 200                 205
Phe
```

<210> 28574
<211> 377
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (176)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28574

```
Arg Leu Thr Pro Cys Leu Asp Met Asn Asp Pro Thr Ser Thr Pro Arg
1               5                   10                  15
Gln Ile Val Pro Gly Arg Val Gln Thr Ser Pro Thr Ser Pro Thr Ser
            20                  25                  30
Asp Ser Pro Pro Gln Gly Ser Gln Ala Ser Pro Thr Ser Ser Trp Lys
        35                  40                  45
Lys Arg Val Ser Thr Ala Cys Leu Ala Cys Lys Lys Ser Lys Arg Lys
    50                  55                  60
Val Gly Gly Arg Pro Leu Ile Phe His Phe Arg Ser Ser Gly Pro Asn
65                  70                  75                  80
Arg Ser Asn Leu Leu Asp Met Asp Thr Asp Met Ala Asp Asn Ala Ala
                85                  90                  95
Lys Cys Ser Gly Val Pro Pro Cys Asp Asn Cys Arg Ala Phe Asn Arg
            100                 105                 110
Val Cys Ile Phe Asp Glu Ser Leu Asp Gln Arg Arg Arg Val Ala Gln
        115                 120                 125
Lys Arg Thr Ala Glu Glu Leu Asn Tyr His Arg Asp Met Leu Asn Asp
```

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```
    130                 135                 140
Leu Phe Arg Val Ile Arg Thr Ala Asp Glu Pro His Ala Leu Lys Leu
145                 150                 155                 160
Leu Glu Ile Ile Arg Lys Asn Ala Thr Ala Glu Glu Ile Arg Ala Xaa
                165                 170                 175
Ile Asp Glu Thr Leu Ile Arg Leu Asp Gly Glu Gly Arg Gly Ala Gly
            180                 185                 190
Cys Gly Gln Ala Val Gln Lys Leu Glu Asp Val Arg Arg Thr Ile Asp
        195                 200                 205
Val Glu Gly Ala Asp Pro Ser Phe Arg Arg Lys Val Met Asp Ile His
    210                 215                 220
Tyr Leu Cys Asp Glu Ala Pro Trp Lys Val Pro Ala Lys Pro Trp Thr
225                 230                 235                 240
Ser Val Thr Glu Asp Glu Asp Leu Val Ser His Leu Val Ser Leu Tyr
                245                 250                 255
Phe Thr Trp Asp Tyr Pro Phe His Ala Phe Leu Asp Arg Asp Val Phe
            260                 265                 270
Leu Ala His Met Ala Arg Gly Arg Glu Asp Ser Asp Phe Cys Ser Pro
        275                 280                 285
Phe Leu Val Asn Ala Leu Leu Ala Asn Ala Cys Val Arg Ser Leu Leu
    290                 295                 300
Phe Cys Pro Val Phe Pro Ala Trp Arg Leu Val Leu Tyr Trp Gly Glu
305                 310                 315                 320
Val Ile Ala Asp Arg Asp Glu Thr Ala Leu Leu Arg Val Leu Arg Gly
                325                 330                 335
Val Cys Arg Ala Gly Arg Leu Gly Asp Gln Gly Arg Gly Leu Phe Val
            340                 345                 350
Gly Ser Gly Glu Ala Glu Gly Gly Gly Leu Ser Lys Ala Gln Ser Gly
        355                 360                 365
Val Pro Ala Gly Asp Val Ala Val Val
    370                 375
```

<210> 28575
<211> 113
<212> PRT
<213> A.fumigatus

<400> 28575

```
Ile Ser Leu Ser Ser Ala Lys Lys Lys Lys Lys Lys Lys Lys Lys Glu
1               5                   10                  15
Lys Lys Arg Lys Glu Lys Lys Lys Glu Lys Lys Ser Arg Asp Asn Met
            20                  25                  30
Arg Met Lys Ser Leu Asp Leu Arg Ser Phe Leu Gln Leu Ser Ala Gln
        35                  40                  45
Ala His Pro Ser Ala Ala Cys Pro Ser Lys Asn Lys Arg His Asp Gly
    50                  55                  60
Ser Gly Trp Phe Gln Pro Lys Arg Pro Val Thr Ala Leu Ser Ser Gly
65                  70                  75                  80
Arg Arg Gly Glu Val Arg Asn Thr Lys Pro Glu Arg Tyr Glu Gln Arg
                85                  90                  95
Gly Pro Glu Glu Thr Gly Arg Ile Asp Ala Asn Arg Ser Ser Ile Thr
            100                 105                 110
Tyr
```

<210> 28576

<211> 85
<212> PRT
<213> A.fumigatus

<400> 28576
Leu Tyr Arg Met Leu Arg Asn Val Leu Ser Leu Thr Ile Asp Tyr Val
1 5 10 15
Asp Asn Ile Pro Lys Ser Arg Ala Ala Gly Thr Val Asp Thr Pro Gly
20 25 30
Ala Ile Pro Ser Leu Phe Ile His Leu Leu Gly Pro Phe Ile Ser Ile
35 40 45
Thr Ile Tyr Thr Trp Asp Ile Leu Leu Ser Gly Phe Cys Phe Tyr Thr
50 55 60
Phe Phe Cys Met Pro Leu Val Leu Phe Met Lys Tyr Asp Leu Pro Gly
65 70 75 80
Ile Gly Ala Arg Lys
85

<210> 28577
<211> 273
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (46)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28577
Asn Cys Gln Met Pro Leu Ala Leu Arg Leu Ala Leu Glu Pro Ala Arg
1 5 10 15
Leu Ala Met Asp Leu Arg Thr His Leu Glu Gly Gln His Ser Ala Asn
20 25 30
Ile Gln Ser Thr Leu Thr Arg Arg Gln Gly Leu Leu Asn Xaa Lys Asn
35 40 45
Lys Ala Ile Leu Pro Gly Gly Gly Val Glu Phe Ser Ser Gly His Ser
50 55 60
Phe Ser Ile Ser Leu Asp Glu Val Glu Arg Leu Asp Glu Leu Gly Lys
65 70 75 80
Gly Asn Tyr Gly Thr Val Tyr Lys Val Arg His Ser Arg Pro His Met
85 90 95
Arg Lys Pro Gly Met Gly Leu Arg Gly Ile Ile Ser Arg Pro Ala Glu
100 105 110
Asn Ser Thr Pro Asp Ser Thr Ser Ala Ala Lys Pro Gln Asp Asn Leu
115 120 125
Ser Gly Tyr Ile Met Ala Met Lys Glu Ile Arg Leu Glu Leu Asp Glu
130 135 140
Asn Lys Phe Ala Gln Ile Ile Met Glu Leu Asp Ile Leu His Arg Cys
145 150 155 160
Val Ser Pro Phe Ile Ile Asp Phe Tyr Gly Ala Phe Phe Gln Glu Gly
165 170 175
Ala Val Tyr Met Cys Val Glu Tyr Met Asp Gly Gly Ser Ile Asp Lys
180 185 190
Leu Tyr Lys Asp Gly Val Pro Glu Asn Ile Leu Arg Lys Val Ala Leu
195 200 205
Ser Thr Val Met Gly Leu Lys Thr Leu Lys Asp Asp His Asn Ile Ile

```
    210                 215                 220
His Arg Asp Val Lys Pro Thr Asn Ile Leu Val Asn Ser Arg Gly Gln
225                 230                 235                 240
Ile Lys Ile Cys Asp Phe Gly Val Ser Gly Asn Leu Val Ala Ser Ile
                245                 250                 255
Ala Lys Thr Asn Ile Gly Cys Gln Ser Tyr Met Ala Pro Glu Arg Ile
            260                 265                 270
Ala
```

<210> 28578
<211> 108
<212> PRT
<213> A.fumigatus

<400> 28578

```
Gly Gly Val His Leu Ser Gly Ala Thr Gly Gly Gly Thr Tyr Ser Val
1               5                  10                  15
Gln Ser Asp Ile Trp Ser Leu Gly Leu Thr Ile Ile Glu Cys Ala Ile
            20                  25                  30
Gly Arg Tyr Pro Tyr Pro Pro Glu Thr Phe Asn Asn Ile Phe Ser Gln
        35                  40                  45
Leu His Val Ser Leu Lys Pro Leu Ser Gln Leu Phe Arg Met Val Glu
    50                  55                  60
His Cys Leu Met Pro Phe Gln Gly Tyr Arg Ala Trp Gly Ser Ala Asn
65                  70                  75                  80
Leu Thr Gly Gly Arg Ile Phe Gly Arg Gly Ala Cys Ile Cys Pro Cys
                85                  90                  95
Leu Leu Gly Gln Lys Ser Gln Gln Ala Ser Phe Val
            100                 105
```

<210> 28579
<211> 137
<212> PRT
<213> A.fumigatus

<400> 28579

```
Cys His Phe Lys Ala Ile Val His Gly Asp Pro Pro Thr Leu Pro Glu
1               5                  10                  15
Glu Gly Tyr Ser Glu Glu Ala His Ala Phe Val His Ala Cys Leu Asp
            20                  25                  30
Lys Asn Pro Ser Lys Arg Pro Ser Tyr Ser Thr Leu Leu Arg His Pro
        35                  40                  45
Trp Leu Ala Pro Leu Met Gln Pro Pro Thr Glu Ser Asn Gly Thr Glu
    50                  55                  60
Ala Thr Phe Ala Asp Pro Ser Ala Gly Gln Pro Gly Gly Pro Asp Thr
65                  70                  75                  80
Ser Thr Ala Thr Glu Asp Glu Glu Val Ala Glu Trp Val Lys Glu Arg
                85                  90                  95
Ile Glu Arg Arg Gln Arg Gly His Leu Gln Glu Ala Glu Lys Pro Ala
            100                 105                 110
Leu His Ala Val Ala Leu Asp Ala Val Pro Gly Ser Pro Leu Leu Asp
        115                 120                 125
Asp Pro Ser Ser Leu Pro Ser Leu Ser
    130                 135
```

<210> 28580
<211> 105
<212> PRT
<213> A.fumigatus

<400> 28580
Ile Gln Thr Lys Phe Thr Ser Val His Gly Gln Asp Pro Asn Lys Met
1 5 10 15
Pro Tyr Asp Pro Arg Thr Ser Val Thr Asp Gln Val His Ala Ser Val
20 25 30
Lys Ser Ser Leu His Asn Leu Cys Ala Pro Asp Ala Ser Ser Ser Val
35 40 45
Glu Asp Ala Tyr Ile Asp Thr Phe Leu Leu His Ser Pro Leu Ser Thr
50 55 60
Met Ala Glu Thr Met Glu Ala Trp Leu Thr Leu Glu Ser Tyr Val Pro
65 70 75 80
His Arg Ile Arg Asn Leu Gly Ile Ser Asn Cys Thr Leu Pro Ile Leu
85 90 95
Lys Lys Leu Tyr Ala Arg Cys Asp Gly
100 105

<210> 28581
<211> 437
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (237)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28581
Arg Leu Leu Thr Phe Arg Ile Ile Leu Ser Ala Ala Arg Gly Asn Thr
1 5 10 15
Ser Leu Glu Ser Ala Val Ser Leu Thr Lys Thr Leu Arg Leu Asp Met
20 25 30
Gln Ala Leu Gly Gln Arg Leu Ala Asn Ala Ala Ala Ser Glu Glu Leu
35 40 45
Leu Arg Lys Gly Ala Lys Ser Pro Arg Asp Arg Ser Arg Asn Asp Ala
50 55 60
Glu Ile Lys Leu Ile Val Arg Asp Ile Lys Arg Leu Leu Thr Arg Ile
65 70 75 80
Glu Asp Ala Val Pro Leu Met Asn Leu Ala Ile Thr Thr Ser Gly Ala
85 90 95
Arg Leu Ser Thr Asn Leu Pro Ala Thr Val Ser Pro Ser Arg Leu Leu
100 105 110
Gln Ala Ser Thr Phe Leu Thr Ala Gly Asp Thr Gln Tyr Trp Met Ser
115 120 125
Pro Thr Gln Ala Ile Gln Ile Gly Pro Thr Phe Thr Leu Ser Ile Tyr
130 135 140
Met Leu Phe Ala Gly His Val Arg Pro Gln Asp Glu Glu Gly Ile Arg
145 150 155 160
Glu Thr Thr Trp Lys Glu Val Ile His Lys Ala Arg Val Lys Leu Arg
165 170 175
Arg Val Pro Leu Asp Leu Thr Ser Ile Thr Leu Ala Pro Thr Trp Arg
180 185 190

```
Ala Lys Leu Pro Ala Glu Ala Arg Ile Asp Glu Tyr Gln Tyr Gln Met
        195                 200                 205
Leu Ile Ile Glu Asp Leu Asp Asp Gly Arg Val His Ser Tyr Asp Glu
    210                 215                 220
Asp Glu Pro Lys Pro Glu Pro Tyr Glu Gly Ile Pro Xaa Ala Gly Met
225                 230                 235                 240
Arg Glu Ile Leu Pro Ile His Gln Ile Ser Lys Ile Phe Tyr Ala Asp
                245                 250                 255
Thr Ser Lys Val Leu Asn Ile Asn Thr Glu Gly Glu Val Asn Asn Pro
            260                 265                 270
Val Leu Leu Leu Lys Arg Asp Ile Asn Ala Ile Pro Pro Arg Arg Met
        275                 280                 285
Leu Glu Arg Glu Glu Ala Asp Ser Phe Tyr Val Gln Glu Glu Gln Gly
    290                 295                 300
Glu Glu Glu Thr Asp Glu Ile Gln Ala Gln Leu Asp Ala Gln Leu Asn
305                 310                 315                 320
Gly Thr Asn Ala Lys Asp Ser Leu Asn Gln Ser Tyr Asn Glu Lys Ser
                325                 330                 335
Ile Pro Glu His Trp Arg Phe Pro Lys Asp Leu Asp Pro Glu Trp Ile
            340                 345                 350
Ala Phe Glu Val Tyr Asn Glu Asp Glu Ser Ser Asp Thr Glu Ser Glu
        355                 360                 365
Ala Asp Ala Pro Asp Arg Glu His Ser Ile Asp Pro Gln Met Met Ala
    370                 375                 380
Lys Leu Ser Leu Asp Ala Glu Asp Asp Arg Ser Lys Gln Thr Thr Pro
385                 390                 395                 400
Thr Ser Ser His Pro Ala Ala Thr Thr Thr Val Ser Asn Pro Leu Phe
                405                 410                 415
Asn Asn Ile Arg Thr Ser Phe Ser Ile Val Leu His Arg Arg Gly Trp
            420                 425                 430
Lys Asn Thr Gln Ser
        435

<210> 28582
<211> 195
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (24)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28582
Val Ile Trp Cys Lys Ile Lys Thr Pro Lys Lys Arg Pro Ser Leu Gly
1               5                   10                  15
Gln Arg Cys Phe Cys Asn Leu Xaa Tyr Pro Ser Phe Ser Pro Ser Ser
            20                  25                  30
Leu Trp Leu Ser Phe Ser Arg Tyr Pro Lys Met Ala Asn Gln Thr Pro
        35                  40                  45
Asp Ser Trp Glu Asp Glu Leu Ser Lys Gln Thr Glu Gly Val Asn Leu
    50                  55                  60
Asn Ala Arg Gly Gln Tyr Arg Pro Gln Ala Gln Ala Pro Ser Phe His
65                  70                  75                  80
Pro Gly Ala Ala Ser Phe Gln Pro Gly Ala Pro Ser Phe Val Pro Gly
                85                  90                  95
```

```
Gln Thr Tyr Gln Gln Tyr Gly Gly Gly Tyr Pro Gln Tyr Gly Gln Tyr
            100                 105                 110
Gly Gly Tyr Pro Ala Tyr Asp Gln Gln Gln Gly Phe Gly Gln Tyr
        115                 120                 125
Gly Ala Tyr Ala Gln Gln Pro Gly Gly Tyr Asn Gln Ile Tyr Asn Asn
    130                 135                 140
Gln Tyr Gly Gly Tyr Asn Gln His Gln Gln Gln Tyr Thr Gln Pro
145                 150                 155                 160
Pro Arg Gln Ala Ala Pro Val Ala Thr Gln Ala Pro Ser Ala Pro Ala
                165                 170                 175
Gln Pro Ala Gln Thr Ala Pro Asn Ile His His Gly Pro Gly Arg Asn
            180                 185                 190
Arg Asn Cys
        195
```

<210> 28583
<211> 69
<212> PRT
<213> A.fumigatus

<400> 28583

```
Asn Ile Phe Leu Pro Leu Arg Asn Pro Ala Ile Leu Tyr Pro Thr Thr
1               5                   10                  15
Met Ala Ser Glu Thr Lys Ile Leu Pro Lys Lys Gly Glu Arg Asn Ile
            20                  25                  30
Leu Val Thr Ser Ala Leu Pro Tyr Val Asn Asn Val Pro His Leu Gly
        35                  40                  45
Asn Ile Val Gly Ser Val Leu Ser Ala Asp Val Phe Ala Arg Cys Val
    50                  55                  60
Leu Tyr Ala Ala Leu
65
```

<210> 28584
<211> 272
<212> PRT
<213> A.fumigatus

<400> 28584

```
Asp Leu Ser Arg Tyr His Lys Ala Cys Gly Arg Gln Thr Leu Tyr Ile
1               5                   10                  15
Cys Gly Thr Asp Glu Tyr Gly Thr Ala Thr Glu Thr Lys Ala Leu Glu
            20                  25                  30
Glu Lys Val Thr Pro Glu Glu Leu Cys Ala Lys Tyr Asn Lys Ile His
        35                  40                  45
Gln Glu Val Tyr Glu Trp Phe Glu Ile Gly Phe Asp His Phe Gly Arg
    50                  55                  60
Thr Pro Thr Gln Gln His Thr Glu Ile Ser Gln Ala Ile Phe Lys Arg
65                  70                  75                  80
Leu Tyr Asp Asn Gly Tyr Leu Thr Glu Lys Thr Ala Glu Gln Pro Phe
                85                  90                  95
Cys Glu Ala His Gly Ser Phe Leu Ala Asp Arg Tyr Val Glu Gly Glu
            100                 105                 110
Cys Pro Arg Cys His Tyr Glu Asp Ala Arg Gly Asp Gln Cys Asp Lys
        115                 120                 125
Cys Gly His Leu Leu Asp Pro Phe Asp Leu Ile Lys Pro Arg Cys Lys
    130                 135                 140
```

```
Leu Asp Gly Ala Thr Pro Val Arg Arg Ser Thr Lys His Ile His Leu
145                 150                 155                 160
Leu Leu Asp Lys Leu Gln Pro Glu Ile Glu Asn Trp Val Leu Pro Ala
                165                 170                 175
Met Glu Lys Gly Asn Trp Pro Lys Asn Ser Arg Asp Ile Thr Lys Ala
            180                 185                 190
Trp Leu Lys Glu Gly Leu Lys Asp Arg Gly Ile Thr Arg Asp Leu Lys
        195                 200                 205
Trp Gly Val Pro Val Pro Leu Pro Gly Phe Glu Asn Lys Val Leu Tyr
    210                 215                 220
Val Trp Phe Glu Ala Cys Ile Gly Tyr Pro Ser Ile Thr Ala Asn Tyr
225                 230                 235                 240
Thr Ala Asp Trp Glu Lys Trp Trp Arg Asn Pro Glu Glu Val Glu Leu
                245                 250                 255
Tyr Gln Phe Leu Gly Lys Asp Asn Val Pro Phe His Ser Val Ile Phe
            260                 265                 270

<210> 28585
<211> 107
<212> PRT
<213> A.fumigatus

<400> 28585
Thr Asp Ile Cys Val Leu Tyr Ser Pro Gly Val Ile Ser Pro Thr Leu
1               5                   10                  15
Trp Ser Ile Gly Thr Asp Leu Ser Asn Arg Val Leu Thr Thr Leu Asp
            20                  25                  30
Lys Ser Leu Ile Thr Ser Cys Thr Ser Leu Phe Ala Leu Leu Ala Ser
        35                  40                  45
Pro Leu Ala Gly Ile Leu Ala Asp Lys Leu Gly Arg Arg Arg Val Ile
    50                  55                  60
Leu Val Ala Asp Val Leu Phe Thr Leu Gly Ala Leu Val Gln Ala Val
65                  70                  75                  80
Thr Gly Gln Val Trp Gly Met Val Leu Gly Arg Ser Val Val Gly Leu
                85                  90                  95
Ala Val Gly Ala Ala Ser Leu Val Thr Pro Leu
            100                 105

<210> 28586
<211> 364
<212> PRT
<213> A.fumigatus

<400> 28586
Leu Ile Ile Val Phe Pro Arg Tyr Ile Ser Glu Leu Ala Pro Ser His
1               5                   10                  15
Ala Arg Gly Arg Leu Val Thr Ile Leu Cys Leu Phe Ile Thr Gly Gly
            20                  25                  30
Gln Val Val Ala Tyr Ile Val Gly Trp Leu Phe Ser Thr Ile Thr Ser
        35                  40                  45
Gly Trp Arg Trp Ile Val Gly Leu Gly Thr Leu Pro Ala Val Leu Gln
    50                  55                  60
Phe Val Ile Val Val Ala Leu Pro Glu Thr Pro Arg Trp Leu Val Gln
65                  70                  75                  80
Ala Gly Leu Glu Ala Glu Ala Leu His Val Leu Ser Lys Val Tyr Gln
                85                  90                  95
```

```
Gly Gln Ser Asp Asn His Gln Ile Ala Lys Gln Val Val Arg Ser Ile
            100                 105                 110
Gln Leu Glu Val Ala Glu Glu Gln Glu Glu Met Asp Arg Ile Lys Pro
        115                 120                 125
Ser Val Asp Ala Thr Arg Ile Pro Trp Leu Arg Lys Val Ala Gln Arg
    130                 135                 140
Ala Gln Asp Leu Phe Leu Val Gly Gly Asn Arg Arg Ala Leu Ile Ile
145                 150                 155                 160
Ala Thr Met Leu Gln Gly Leu Gln Gln Leu Cys Gly Phe Asn Ser Leu
                165                 170                 175
Met Tyr Phe Ser Ala Thr Ile Phe Ser Met Leu Ala Phe Ser Ser Pro
            180                 185                 190
Thr Leu Thr Ser Leu Ser Val Ala Val Thr Asn Phe Ile Phe Thr Leu
        195                 200                 205
Leu Ala Phe Ala Leu Ile Asp Arg Ile Gly Arg Arg Arg Ile Leu Leu
    210                 215                 220
Tyr Ser Ile Pro Val Met Ser Ala Ser Leu Ile Val Cys Ala Leu Ala
225                 230                 235                 240
Phe Gly Ser Met Glu Leu Pro Gly Phe Ser Ser Glu Pro Arg Ser Gln
                245                 250                 255
Thr Gln Ala Asp Asn Gly Ala Thr Asp Lys Ser Phe Leu Pro Ile Ala
            260                 265                 270
Val Leu Leu Cys Leu Thr Val Tyr Thr Ala Ser Tyr Ala Phe Gly Leu
        275                 280                 285
Gly Asn Val Pro Trp Gln Gln Ser Glu Leu Phe Pro Leu Asn Val Arg
    290                 295                 300
Ser Leu Gly Ser Ala Leu Ala Thr Ala Thr Asn Trp Ala Ser Asn Phe
305                 310                 315                 320
Ile Val Gly Leu Thr Phe Leu Pro Met Met Asp Trp Leu Phe Ser Gly
                325                 330                 335
Leu Asp Met Tyr Ala Leu Arg Arg Arg Leu Cys Gly Trp Met Val Trp
            340                 345                 350
His Leu Asn His Leu Pro Arg Asn Gly Pro Gly Pro
        355                 360

<210> 28587
<211> 156
<212> PRT
<213> A.fumigatus

<400> 28587
Lys Gln Gln Thr Arg Glu Phe Gly Gly Arg Leu Gly Thr Ser Ser Val
1                   5                   10                  15
Pro Ala Glu Ile Leu Cys Phe Met Asp Asn Arg Pro Ala Ser Glu Tyr
            20                  25                  30
Ala Gln Ser Gly Ser His Phe Pro Tyr Pro Pro Ser Ala Thr Ala His
        35                  40                  45
Ser Glu Leu Pro Ala Ala Asp Gln Ala Ser Ala Ala Ala Thr Ala Gln
    50                  55                  60
Tyr Thr Pro Gln Gln Glu Val Arg Pro Thr Pro Gln Tyr Thr Pro Gln
65                  70                  75                  80
Pro Glu Val Arg Pro Ala Ser Ala Ala Ala Ala Asn Ile Ser Ser Ser
                85                  90                  95
Asn Thr Pro Gln Ser Asp Tyr Gly Leu Asn Gln Pro Pro Ala Ala Arg
            100                 105                 110
Ser Pro Ala Tyr Pro Asp Tyr Leu Ala Pro Pro Pro Gln Tyr His His
```

```
        115                 120                 125
Ala Pro Asn Thr Gln Ala Gly Gly Ala Ala Gly Met Ala Gln Ala Thr
    130                 135                 140
Ser Pro Ser Met Thr Thr Leu His Asp Gly His Gln
145                 150                 155

<210> 28588
<211> 61
<212> PRT
<213> A.fumigatus

<400> 28588
Asn Leu Ala Ala Ala Glu Ile Gly Gly Tyr Phe Lys Pro Leu Lys Tyr
1               5                   10                  15
Asp Phe Ile Thr Lys Ser Ser Tyr Ser Cys Ala Val Asp Ile Ile Ile
            20                  25                  30
Ala Tyr Ser Pro Glu Tyr Gly Ser Tyr Cys Cys Val Gly Val Pro Val
        35                  40                  45
Lys Gly Val Ile Leu Tyr Leu Leu Pro Ala Leu Glu Arg
    50                  55                  60

<210> 28589
<211> 73
<212> PRT
<213> A.fumigatus

<400> 28589
Met Cys Phe Asp Phe Tyr Phe Lys Ser Cys Ser Ala Gln Pro Ala Thr
1               5                   10                  15
Ile Pro Leu Lys Ala Cys Ile Asn Leu Lys Asn Leu Val Glu Gln Glu
            20                  25                  30
Gly Arg Val Leu Leu Ile Val Leu Ala Leu Lys Asn Lys Glu Ile Leu
        35                  40                  45
Asn Ile Tyr Lys Ala Val Cys Ile Tyr Asn Met Pro Tyr Thr Thr Leu
    50                  55                  60
Gln Gln Arg Leu Lys Gly His Thr Phe
65                  70

<210> 28590
<211> 178
<212> PRT
<213> A.fumigatus

<400> 28590
Pro Asp Ile Gly Phe Gly Thr Val Phe Leu Ala His Lys Asn Thr Pro
1               5                   10                  15
His Gly Gln Ala Asn Phe Ala Ile Lys Ile Asn Glu His Asn Thr Ile
            20                  25                  30
Ala Ala Val Asp Asp Gly Ser His Val Ala Glu Met Met Phe Phe Glu
        35                  40                  45
Glu Gly Gly Lys Val Arg Tyr Ile Pro Cys Glu Ala Met Ile Met Leu
    50                  55                  60
Leu Leu Thr Arg Ser Pro Arg Phe Pro Thr Leu His Ser Val Tyr Thr
65                  70                  75                  80
Glu Lys Asp Lys Val Ala Ile Val Met Ser Ala Cys Ile Asp Tyr Asp
                85                  90                  95
```

```
Thr Leu Gln Leu Ser Asn Gly Met Gln Glu Thr Asp Gln Val Trp Ala
            100                 105                 110
Ile Glu Gly Gly His Leu Arg Thr Arg Gly Lys Glu Pro Arg Leu Asn
        115                 120                 125
Glu Leu Gln Ala Cys Lys Val Ser Thr Gln Leu Leu Glu Ala Ile Ala
    130                 135                 140
Tyr Leu Arg Asp Met Asn Ile Thr Tyr Gly Asp Val Ser Tyr Arg Asn
145                 150                 155                 160
Tyr Leu Val Gly Glu Asn Leu Glu Val Ser Lys Phe Gln Asn Phe Gln
                165                 170                 175
Phe Gly
```

<210> 28591
<211> 94
<212> PRT
<213> A.fumigatus

<400> 28591

```
Phe Ser Ala Glu Gln Ala Ala Val Ala Asp Lys Ser Ala Glu Ala Ala
1               5                   10                  15
Thr Gln Ser Thr Glu Thr Gln Pro Gly Ser Ser Thr Thr Thr Ala Pro
            20                  25                  30
Glu Ala Lys Thr Glu Ala Pro Ala Pro Glu Pro Thr Ala Ala Ala Pro
        35                  40                  45
Ala Val Pro Glu Thr Thr Thr Ser Ala Thr Ala Pro Ala Glu Thr Ala
    50                  55                  60
Pro Ala Ala Pro Ala Pro Ala Ala Glu Pro Thr Pro Ala Gln Pro Thr
65                  70                  75                  80
Ala Glu Lys Pro Ala Glu Thr Ala Glu Pro Pro Lys Ser Gly
                85                  90
```

<210> 28592
<211> 105
<212> PRT
<213> A.fumigatus

<400> 28592

```
Leu Ser Ala Pro Asp Ala Leu Gln Gln Leu Lys Lys Gly Leu Lys Ala
1               5                   10                  15
Ile Phe Ser Arg Lys Lys Lys Lys Ala Gln Asn Asn Gln Asn Glu Pro
            20                  25                  30
Ala Pro Ala Ala Asp Lys Pro Val Glu Gln Ala Ala Thr Ala Pro Ala
        35                  40                  45
Ala Gly Ala Gly Ala Ala Ala Ala Ala Ala Ala Val Pro Ala Thr Glu
    50                  55                  60
Ala Lys Pro Ala Glu Pro Ala Pro Ala Thr Glu Pro Lys Pro Gly Thr
65                  70                  75                  80
Leu Phe Leu Tyr Ile Leu Leu Asp Pro Val Lys Leu Ser Lys Leu Ile
                85                  90                  95
Leu Cys Arg Thr Ser Ser Arg Ser Arg
            100                 105
```

<210> 28593
<211> 77
<212> PRT

<213> A.fumigatus

<400> 28593
Glu His Ser Asp Asp Thr Asp His Gln Ala Ser Tyr Ile Ala Leu Ile
1 5 10 15
Pro Asp Trp Glu Arg Tyr Lys Lys Asn Glu Gly Tyr Ile Met Arg Arg
20 25 30
Lys His Gly Asn Asp Asn Asp Asp Asp Lys Lys Thr Ile Asn Ser Thr
35 40 45
Glu Gly Thr Phe Gly Tyr Tyr Ala Ala Thr Ala Arg Tyr Cys Gly Asn
50 55 60
Val Lys Glu Gln Ser Asn Asp Arg Ile Arg Arg Asp Cys
65 70 75

<210> 28594
<211> 150
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (11)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28594
Gly Gly Arg Lys Cys Pro Gly Tyr Val Leu Xaa Phe Pro Ser Ser His
1 5 10 15
Leu Gly Leu Ile Leu Phe Ala Tyr Phe Cys Phe Ser Gln Pro Gly Cys
20 25 30
Tyr Leu Pro Trp Arg Val Ile His Leu Lys Arg Gln His Thr Lys Ile
35 40 45
Pro Pro Ala Ser Ala Asp Pro Thr Ala Val Ala Thr Ile Cys Ile Thr
50 55 60
Asn Pro Pro Thr Arg Asp Pro Lys Ser Arg Lys Lys Pro Gly Lys Lys
65 70 75 80
Arg Arg Ile Gln Leu Arg Lys Arg Lys Lys Ala Ala Glu Glu Glu Lys
85 90 95
Gln Arg Glu Ala Glu Lys Arg Asn Arg Lys Asn Arg Glu Arg Lys Ile
100 105 110
Lys Arg Arg Gln Lys Ala Arg Glu Leu Lys Ala Ala Ala Ala Ala Ala
115 120 125
Ala Ala Ser Gly Pro Ser Gln Asp Val Ala Glu Val Glu Met Lys Asn
130 135 140
Ser Ser Asp Val Ser Asn
145 150

<210> 28595
<211> 78
<212> PRT
<213> A.fumigatus

<400> 28595
Lys Thr Leu Gln Met Phe Val Ser Ala Gly Gly Leu Asn Val Leu Val
1 5 10 15
Glu Phe Leu Glu Asp Asp Tyr Glu Asp Glu Arg Asp Leu Val Leu Ile
20 25 30

```
Gly Val Asn Gly Ile Trp Ser Val Phe Glu Leu Gln Val Ser Pro Ala
        35                  40                  45
His Gln Thr Arg Phe Thr Gln His Leu Thr Leu Ala Arg Asp Gln His
    50                  55                  60
Gln Arg Met Ile Phe Ala Glu Ser Cys Leu Ala Val Arg Ser
65                  70                  75
```

<210> 28596
<211> 180
<212> PRT
<213> A.fumigatus

<400> 28596

```
Arg Arg Trp Leu Pro Asn Glu Leu Phe Cys Thr Val Ser Val Asp Thr
1               5                   10                  15
Cys Leu Ala Arg Ser Tyr Leu Ser Asp Ser Lys Tyr Leu Gly Val Leu
            20                  25                  30
Lys Glu Leu Lys Arg Met Thr Pro Ala His Gln Ile Thr Met Leu Lys
        35                  40                  45
Phe Ile Lys Asn Leu Ser Met Leu Ser Thr Thr Leu Asp Ser Leu Gln
    50                  55                  60
Asn Ser Asn Ala Ile Asp Val Leu Thr Asp Leu Leu Arg Ser Thr Ile
65                  70                  75                  80
Lys Arg Pro His Phe Arg Glu Val Ser Asn Gln Ile Leu Asn Thr Ile
                85                  90                  95
Tyr Asn Met Cys Arg Leu Asn Lys Ser Arg Gln Glu Asp Ala Ala Leu
            100                 105                 110
Asn Gly Ile Val Pro Leu Leu Gln Lys Ile Val Lys Thr Glu Arg Pro
        115                 120                 125
Leu Lys Glu Phe Ala Leu Pro Ile Leu Cys Asp Met Ala His Ser Gly
    130                 135                 140
Lys Val Gly Arg Arg Glu Leu Trp Arg Asn Arg Gly Leu Pro Phe Tyr
145                 150                 155                 160
Ile Ser Leu Leu Ser Asp Pro Tyr Trp Gln Val Thr Ala Leu Asp Ala
                165                 170                 175
Ile Phe Thr Trp
            180
```

<210> 28597
<211> 138
<212> PRT
<213> A.fumigatus

<400> 28597

```
Pro Arg Gln Ala Ser Ile His Thr Tyr Cys Ala Lys Gln Phe Val Arg
1               5                   10                  15
Gln Pro Ser Pro Ser His Asp Phe Gln Pro Glu Arg Arg Arg Arg Arg
            20                  25                  30
Cys Trp Arg Cys Ala Pro Arg Gln Phe Arg Arg Val Leu Pro Leu Arg
        35                  40                  45
Pro Ile Leu Gly Leu Ile Arg Val Lys Glu Gly Leu Gly Pro Asn Cys
    50                  55                  60
Glu Thr Gly Phe Gly Lys Asn His Ser Leu Val Leu Ile Pro Cys Lys
65                  70                  75                  80
Cys Gln Met Leu Ser Glu Pro Ser Leu Met Ser Trp Thr Tyr Leu Gln
                85                  90                  95
```

```
Leu Lys Asp Ala Pro Asn Thr Ile Asp Ala Tyr Lys Asp Gln Ile Ser
            100                 105                 110
Phe Ile Leu Ile Ile Val Phe Gln Lys Phe His Lys Asn Ile Gln Pro
        115                 120                 125
Ser Gly Thr Asn Lys His Leu Lys Ser Leu
    130                 135
```

<210> 28598
<211> 244
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (240),(242)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28598

```
Cys Gln Cys Leu Gly His His Ile Gly Leu Gln Ser Gly Asp Ile Gly
1               5                   10                  15
Lys Val Val Tyr Asp Val Ala Lys Gly Tyr Gln Val Gly Arg Ser Arg
            20                  25                  30
Cys Gly Ser Met Val Ile Ile Leu Ala Thr Ser Cys Met Ala Met Leu
        35                  40                  45
Leu Thr Asp Asn Arg Tyr Leu Phe Asn Pro Phe Thr Ile Ala Ala Cys
    50                  55                  60
Leu Gly Arg Ser Thr Ser Ala Phe Thr Ser Thr Ala Ile Leu Tyr Ala
65                  70                  75                  80
Leu Ser Asn Ala Val Thr Gly Asn Ser Phe Asn Ala Met Leu Ala Leu
                85                  90                  95
Gly Cys Ala Ser Tyr Leu Ser Ile Tyr Pro Ala Leu Leu Phe Ile Pro
            100                 105                 110
Leu Val Leu Leu Cys Tyr Asp Arg Arg Ala Gln Val Ala Lys Pro Ser
        115                 120                 125
Ser Gly Val Ala Ile Phe Ala Ile Gln His Phe Gly Ile Leu Leu Leu
    130                 135                 140
Gly Val Gly Gly Leu Leu Ser Leu Ser Tyr Leu Val Val Pro Asp Phe
145                 150                 155                 160
Gln Gln Phe Ile Ser Ala Thr Tyr Gly Phe Gln Leu Leu Val Pro Asp
                165                 170                 175
Leu Thr Pro Asn Ile Gly Leu Trp Trp Tyr Phe Phe Ile Glu Ile Phe
            180                 185                 190
Asp Ser Phe Arg Glu Phe Phe Leu Gly Val Phe Trp Leu His Leu Thr
        195                 200                 205
Gly Tyr Val Gly Gly Leu Thr Val Arg Leu Arg Lys Gln Pro Leu Phe
    210                 215                 220
Val Leu Thr Ser Ser Ser Pro Arg Gly Trp Lys Glu Pro Arg His Xaa
225                 230                 235                 240
Lys Xaa Ala Pro
```

<210> 28599
<211> 101
<212> PRT
<213> A.fumigatus

<400> 28599
Leu Gln Leu Gly Ser Val Asn Met Ala Pro Thr Arg Ser Ser Ala Ser
1 5 10 15
Trp Leu Ser Ser Ala Leu Ala Val Cys Ala Ile Leu Cys Leu Ala Val
20 25 30
Pro Ala Asn Ala Leu Tyr Phe Tyr Met Asp Gly Arg Gln Thr Lys Cys
35 40 45
Phe Tyr Glu Asp Leu Pro Lys Asp Thr Leu Val Val Gly Thr Arg Trp
50 55 60
Ser Phe Tyr Tyr Ser Gln Leu Val Ala Asn Tyr His Ile Phe Phe Arg
65 70 75 80
Met Asn Arg Lys Leu Gln Asn Arg Ser His Gln Pro Thr Val Gln His
85 90 95
Val Leu Gly Arg Pro
100

<210> 28600
<211> 156
<212> PRT
<213> A.fumigatus

<400> 28600
Thr Gly Asn Phe Lys Thr Glu Val Ile Asn Gln Gln Ser Asn Thr Tyr
1 5 10 15
Ser Val Asp Pro Asn Leu Lys Met Leu Ile Thr Val Asp Glu Thr Phe
20 25 30
Asp Asn Asp His Arg Val Val Ser Lys Arg Asp Gly His Ala Gly Arg
35 40 45
Phe Thr Phe Ser Ala Ala Asp Ala Gly Gln His Arg Ile Cys Leu Thr
50 55 60
Pro Asp Thr Asn Ala Ala Val Gly Gly Trp Leu Ser Gly Ala Pro Ala
65 70 75 80
Gly Ala Val Arg Val Asn Leu Asp Ile Ala Ile Gly Glu Thr Ser Lys
85 90 95
Ile Glu Thr Glu Asp Lys Asp Lys Met Lys Asp Ile Val Gln Lys Val
100 105 110
Lys Asp Leu Asn Gly Arg Leu Gln Asp Ile Arg Arg Glu Gln Val Phe
115 120 125
Gln Arg Val Cys Cys Ser Phe Pro Thr Val Leu His Cys Leu Glu Leu
130 135 140
Gly Arg Met Ala Val Ala Asp Leu Pro Thr Phe Val
145 150 155

<210> 28601
<211> 198
<212> PRT
<213> A.fumigatus

<400> 28601
Cys Ala Ser Asn Ser Pro Thr Pro Leu His Ile Ser Val Asp Lys His
1 5 10 15
Leu Asp Val Leu Phe Ser Ser Ile Ser Ser Thr Asp Ser Lys Met Ser
20 25 30
Ala Ser Pro Pro Ser Ser Pro Leu Glu Arg Pro Pro Ser Thr Glu Lys
35 40 45
Gly Ala Thr Asp Ser Leu Ser Glu Leu Pro Val Asp Asn Gln Gly Glu

```
    50                  55                  60
Ser Lys Thr Arg Glu Arg Asp Ile His Glu Glu Glu Gln Ser Thr Gln
65                  70                  75                  80
Asn Lys Val Asp Gly Asn Asp Thr Ser Gln Ser Lys Thr Gln Asp Ala
                85                  90                  95
Gly Glu Lys Val Thr Arg Pro Gln Asn Asp Lys Glu Asn Thr Lys Glu
            100                 105                 110
Glu Asp Ala Ser Ala Pro Pro Leu Pro Asp Glu Pro Leu Pro Pro Pro
        115                 120                 125
Leu Pro Asn Glu Ala Pro Pro Asp Gly Asp Asp Gly Trp Glu Pro Val
    130                 135                 140
Trp Asp Ala Thr Ala Gln Ala Tyr Tyr Phe Tyr Asn Arg Phe Thr Gly
145                 150                 155                 160
Val Ser Gln Trp Glu Asn Pro Arg Val Pro Asp Ala Pro Ile Ala Ser
                165                 170                 175
Ala Pro Ala Leu Ala Pro Val Pro Leu Ser Asp Pro Ala Glu Gly Val
            180                 185                 190
Lys Ala Thr Thr Arg Ser
        195
```

<210> 28602
<211> 183
<212> PRT
<213> A.fumigatus

```
<400> 28602
Trp Leu Gly Ala Arg Leu Gly Cys Asn Arg Ser Ser Val Leu Leu Leu
1               5                   10                  15
Gln Pro Leu His Arg Arg Phe Ala Met Gly Glu Pro Thr Gly Ala Gly
            20                  25                  30
Cys Thr Asn Ser Val Ser Thr Ser Ile Gly Thr Gly Ala Ser Gln Arg
        35                  40                  45
Pro Arg Gly Arg Cys Lys Gly His Asn Pro Val Val Gly Gly Tyr Asn
    50                  55                  60
Ala Ala Ile His Gly Asp Tyr Asp Pro Thr Ala Pro Tyr Ala Gln Gln
65                  70                  75                  80
Tyr Glu Glu Pro Thr Leu Gly Gly Ala Ala Ala Asp Pro Ser Ser Ser
                85                  90                  95
Tyr Glu Ala Val Gly Ala Phe Asn Arg Phe Thr Gly Arg Trp Gln Pro
            100                 105                 110
Ala Thr Leu Thr Pro Glu Asn Tyr Asn Asp Glu Asn Lys Ser Arg Arg
        115                 120                 125
Gln Leu Asn Ala Phe Phe Asp Val Asp Ala Ala Ala Asn Ala His Asp
    130                 135                 140
Gly Arg Ser Leu Arg Ala Glu Arg Ser Ala Arg Lys Leu Thr Lys Lys
145                 150                 155                 160
Glu Leu Lys Met Phe Lys Glu Lys Arg Arg Glu Lys Lys Glu Glu Lys
                165                 170                 175
Arg Arg Ala Trp Leu Arg Asp
            180
```

<210> 28603
<211> 114
<212> PRT
<213> A.fumigatus

<400> 28603
Phe Arg Ala Arg Phe Tyr Val Leu Thr Asp His Gly Ala Leu Leu Leu
1 5 10 15
Arg Met Ser Asp His Ser Arg Val Ser Ile Gly Thr Ala Phe Val Ala
20 25 30
Gly Ile Leu Leu Ala Val Gly Phe Ser Glu Leu Leu Tyr Pro Glu Leu
35 40 45
Lys Asn Arg Ile Arg Gly Thr Arg Ser Gln Pro Thr Lys Val Leu Gln
50 55 60
Asp Gly Ser Ala Asp Ser Leu Thr Val Arg Ser Gly Pro Pro Ala Ile
65 70 75 80
Val Asp Gly Ile Glu Gly Cys Ile Gly Asn Thr Pro Leu Leu Arg Ile
85 90 95
Lys Ser Leu Ser Asp Ala Thr Gly Cys Glu Ile Leu Gly Lys Ala Glu
100 105 110
Val Trp

<210> 28604
<211> 80
<212> PRT
<213> A.fumigatus

<400> 28604
Gln Cys Cys Gln Leu Trp Val Tyr Ser Cys Trp Tyr Leu Val Cys Tyr
1 5 10 15
Leu Ala Asn His Tyr Asp Thr Gly Phe Ala Ala Val Lys Thr Ala Met
20 25 30
Lys Leu Gly Pro Gly His Arg Ile Val Thr Ile Leu Ser Asp Ser Gly
35 40 45
Ser Arg His Leu Ser Arg Phe Trp Ala Lys Ala Gly Asp Val Gly Gly
50 55 60
Ala Val Asp Thr Lys Leu Glu Asp Val Leu Asn Ala Lys Asp Asp Glu
65 70 75 80

<210> 28605
<211> 265
<212> PRT
<213> A.fumigatus

<400> 28605
Asn Leu Thr Pro Gly Ile Pro Tyr Thr Arg Ala Arg Gln Val Arg Pro
1 5 10 15
Glu Phe His Trp Leu Val Leu Pro Glu Gln Arg Ala Thr Ser Leu Thr
20 25 30
Cys Glu Tyr Arg Leu Val Arg Leu His Glu Val Phe Ile Pro Gln Leu
35 40 45
Thr Leu Ile Ser Cys Met Pro Ser Asp Gln Ala Ile Glu Lys Ser Asn
50 55 60
Leu Leu Leu Lys Leu Gly Ala Ile Val Asp Arg Val Pro Pro Ala Pro
65 70 75 80
Ile Val Glu Lys Asp Asn Phe Val Asn Arg Ala Arg Ala Leu Ala Gln
85 90 95
Ala Gln Thr Leu Ser Pro Ser Gly Gly Arg Gly Phe Phe Ala Asp Gln
100 105 110
Phe Glu Asn Glu Ala Asn Trp Arg Ala His Tyr Asn Gly Thr Gly Pro

```
        115                 120                 125
Glu Ile Tyr Ala Gln Cys Asn Gly Lys Leu Asp Ala Phe Val Ala Gly
    130                 135                 140
Ala Gly Thr Gly Gly Thr Ile Ser Gly Val Ala Leu Phe Leu Lys Pro
145                 150                 155                 160
Arg Ile Pro Asn Leu Ser Val Val Leu Ala Asp Pro Gln Gly Ser Gly
                165                 170                 175
Leu Tyr Asn Arg Val Arg Phe Gly Val Met Phe Asp Ile Lys Glu Arg
            180                 185                 190
Glu Gly Thr Arg Arg Arg Arg Gln Val Asp Thr Ile Val Glu Gly Ile
        195                 200                 205
Gly Ile Asn Arg Val Thr Ala Asn Phe Glu Ala Gly Lys Glu Leu Val
    210                 215                 220
Asp Asp Ala Val Arg Val Thr Asp Ala Gln Ala Leu Ala Met Ala Arg
225                 230                 235                 240
Trp Leu Val Glu Lys Asp Gly Ile Phe Val Gly Ser Ser Ser Ala Val
                245                 250                 255
Asn Cys Gly Tyr Ile Leu Val Gly Thr
            260                 265
```

<210> 28606
<211> 76
<212> PRT
<213> A.fumigatus

<400> 28606

```
Tyr Ser His Ala Arg Ala Gly Asp Glu Phe Ala Gly Asn Ala Asp Ser
1               5                   10                  15
Ala Phe Leu Ser Thr Arg Asn Ala Pro Ala Phe Ala Phe Leu Gly Ser
            20                  25                  30
Asn Gln Leu Val Phe Asn Val Val Asp Ser Lys Leu Leu Phe His Phe
        35                  40                  45
Lys Tyr Thr Leu Phe Phe Ile Gly Ser Ala His Val Pro Arg Gln Ser
    50                  55                  60
Gln Gln Cys Ala Gly Gln Asp Ser Phe Met His Arg
65                  70                  75
```

<210> 28607
<211> 70
<212> PRT
<213> A.fumigatus

<400> 28607

```
Leu Ser Glu Val Arg Leu Val Leu Ser Arg Ser Gln Ser Glu Arg Lys
1               5                   10                  15
Thr Leu Leu Ile Asp Leu Arg Val Gln Ile Ser His Asp Ala Phe Glu
            20                  25                  30
Ile Tyr Ser Ser Ala Leu Pro Asn Cys Ser Pro Leu Ile Lys Arg Ile
        35                  40                  45
Asn Tyr Ile Gly Ala Gln Gln Leu Leu Pro Val Arg Ala Thr Pro Pro
    50                  55                  60
Ala Leu Leu Arg Ala Arg
65                  70
```

<210> 28608
<211> 535

<212> PRT
<213> A.fumigatus

<400> 28608

```
Val Met Met Arg Leu Arg Ser Thr Val Arg Leu Ser Leu Thr Ala Leu
1               5                  10                  15
Leu Ser Leu Ser Ala Ser Thr Ile Ser Ala Arg Ser Asn Tyr Ser Gln
            20                  25                  30
Ser Glu Leu Leu Pro Pro Leu Phe Ser Val Leu Asp Asp Arg Pro Pro
        35                  40                  45
Glu Cys Pro Pro Cys Phe Asn Cys Gln Leu Asp Ala Phe Gln Cys Ala
    50                  55                  60
Gln Phe Ala Pro Cys Asn Lys Phe Asn Gly Lys Cys Val Cys Pro Pro
65                  70                  75                  80
Gly Phe Gly Gly Asp Asp Cys Ser Glu Pro Val Cys Gly Ser Leu Ala
                85                  90                  95
Asp Gly Val Asn Arg Ala Pro Arg Lys Gly Gly Ser Cys Asp Cys Lys
            100                 105                 110
Glu Gly Trp Ser Gly Ile Asn Cys Tyr Val Cys Gln Thr Asn His Ala
        115                 120                 125
Cys Asn Ala Met Met Pro Glu Gly Glu Glu Gly Val Cys Tyr Lys Gln
    130                 135                 140
Gly Val Thr Val Lys Glu Asn Tyr Gln Met Cys Asp Val Thr Asn Arg
145                 150                 155                 160
Lys Ile Leu Asp Gln Leu Gln Gly Arg Lys Pro Gln Val Thr Phe Ser
                165                 170                 175
Cys Glu Ala Asp Asp His Thr Cys Asn Phe Gln Phe Trp Val Asp Gln
            180                 185                 190
Lys Glu Ser Phe Tyr Cys Ala Leu Asp Thr Cys Asp Trp Asn Leu Glu
        195                 200                 205
Thr Gly Tyr Asn Gln Asn Lys Thr Thr Tyr Asn Cys Lys Asn Ile Asn
    210                 215                 220
Cys Lys Cys Ile Pro Gly Arg Met Leu Cys Gly Glu Glu Gly Ser Ile
225                 230                 235                 240
Asp Ile Gly Glu Phe Leu Ala Gln Glu Ile Lys Gly Pro Ala Ser Phe
                245                 250                 255
Arg Thr Val Thr Thr Glu Gly Gly Ser Pro Glu Asp Gly Ser Lys Phe
            260                 265                 270
Gln Glu Pro Ala Met Asp Asp Leu Ile Lys Ser Val Phe Gly Asp Pro
        275                 280                 285
Ser Ile Phe Leu Asn Cys Asp Ala Gly Glu Cys Leu Tyr His Thr Asp
    290                 295                 300
Val Pro Gly Tyr Val Arg Pro Ile Lys Gln Ile Asn Thr Pro Leu Ile
305                 310                 315                 320
Ala Gly Val Ile Ala Gly Cys Ala Leu Phe Val Val Ala Val Ile Leu
                325                 330                 335
Gly Val Trp Tyr Leu Ser Arg Arg Ser Tyr His Gly Arg Ile Tyr Leu
            340                 345                 350
Pro Leu Ser Asp Asp Ser Asp Asp Glu Ala Ala Arg Leu Leu Ala Asp
        355                 360                 365
His Lys Pro Ala Ala Leu Tyr Trp Asp Asn Val Ser Tyr Tyr Leu Asn
    370                 375                 380
Gly Lys Glu Ile Leu Ser Gly Ile Gln Gly Ala Ala His Pro Gly Glu
385                 390                 395                 400
Ile Thr Ala Ile Met Gly Ala Ser Gly Ala Gly Lys Thr Thr Phe Leu
                405                 410                 415
```

```
Asp Ile Leu Ala Arg Lys Asn Lys Arg Gly Thr Val Gln Gly Asp Phe
            420                 425                 430
Tyr Ile Asn Gly Glu Lys Leu Ser Asp His Asp Phe Lys Ser Met Val
        435                 440                 445
Gly Phe Val Asp Gln Glu Asp Thr Met Leu Pro Thr Leu Thr Val His
    450                 455                 460
Glu Thr Ile Leu Thr Ser Ala Leu Leu Arg Leu Pro Arg Asp Met Ser
465                 470                 475                 480
Arg Ala Asp Lys Glu Gln Arg Val Phe Glu Val Glu Lys Gln Leu Gly
                485                 490                 495
Ile His His Ile Lys Asp Gln Leu Ile Gly Ser Glu Glu Gly Lys Gly
            500                 505                 510
Arg Gly Ile Ser Gly Gly Glu Lys Arg Arg Val Gly Ile Ala Cys Glu
        515                 520                 525
Leu Val Thr Ser Pro Ser Met
    530                 535
```

<210> 28609
<211> 365
<212> PRT
<213> A.fumigatus

<400> 28609

```
His Arg Thr Leu Thr Glu Val Asn Ser Ile Val Ile Gln Phe Glu Asp
1               5                   10                  15
Phe Lys Asn Pro Phe Pro Ala Leu Glu Arg Tyr Arg Asp Ala Tyr Thr
            20                  25                  30
Cys Phe Asn Asp Asp Ile Gln Gly Thr Gly Ala Val Ile Leu Gly Gly
        35                  40                  45
Val Ile Asn Ala Val Lys Arg Ser Gly Leu Pro Cys Lys Glu His Arg
    50                  55                  60
Ala Val Phe Leu Gly Ala Gly Ser Ala Gly Val Gly Val Ala Lys Gln
65                  70                  75                  80
Ile Val Ala Phe Phe Met Arg Glu Gly Met Thr Glu Asp Glu Ala Arg
                85                  90                  95
Ser Cys Phe Tyr Leu Val Asp Thr Lys Gly Leu Val Thr Ala Asp Arg
            100                 105                 110
Gly Asp Lys Leu Ala Asp His Lys Val Tyr Phe Ala Arg Thr Asp Asn
        115                 120                 125
Asn Gly Gln Gln Phe Lys Thr Leu Asp Glu Val Val Asp His Val Lys
    130                 135                 140
Pro Thr Ile Leu Met Gly Leu Ser Thr Leu Gly Gly Val Phe Thr Pro
145                 150                 155                 160
Glu Ile Leu Arg Lys Met Ala Asp Trp Asn Thr His Pro Ile Ile Phe
                165                 170                 175
Pro Leu Ser Asn Pro Ser Ala Asn Ser Glu Cys Asp Phe Glu Ser Ala
            180                 185                 190
Ile Thr His Thr Asp Gly Arg Ala Leu Phe Ala Ser Gly Ser Pro Phe
        195                 200                 205
Gln Pro Phe Ser Phe Lys Asn Ser Ser Gly Glu Ser Arg Thr Tyr Tyr
    210                 215                 220
Pro Gly Gln Gly Asn Asn Met Tyr Val Phe Pro Gly Ile Gly Leu Gly
225                 230                 235                 240
Thr Ile Leu Ser Lys Ala Val Lys Val Thr Asp Glu Met Ile Tyr Ala
                245                 250                 255
Ser Gly Ala Ala Leu Ser Gln Ala Leu Thr Ala Glu Glu Ile Asp Leu
```

```
            260                 265                 270
Gly Leu Leu Tyr Pro Asp Leu Thr Arg Ile Arg Gln Val Ser Ile Val
        275                 280                 285
Val Ala Arg Lys Val Ile Arg Ala Ala Gln Asp Ala Gly Val Asp Arg
    290                 295                 300
Glu Thr Ser Leu Arg Asn Met Asp Asp Glu Ser Leu Asp Ala Trp Ile
305                 310                 315                 320
Lys Ala Arg Met Tyr Asp Pro His Ser Glu Val His Ala Leu Glu Arg
                325                 330                 335
Glu Val Gly Ala Leu Leu Ser Asn Leu Gly Pro Ala Ser Pro Ala Leu
            340                 345                 350
Asn Gly Tyr Val Glu Asp Gln Ser Lys Asp Ala Lys Leu
        355                 360                 365
```

<210> 28610
<211> 152
<212> PRT
<213> A.fumigatus

<400> 28610

```
Asp Leu Thr Leu Thr Ala Phe Ile Cys Leu Gly Met Tyr Leu Ser Trp
1               5                   10                  15
Glu Asp Arg Gly Asn Leu Ala Ala Val Ile Ala Asn Trp Pro Gln Pro
            20                  25                  30
Asn Val Glu Ile Thr Cys Ile Thr Asp Gly Ser Arg Ile Leu Gly Leu
        35                  40                  45
Gly Asp Leu Gly Ile Asn Gly Met Gly Ile Pro Ile Gly Lys Leu Ala
    50                  55                  60
Leu Tyr Thr Ala Cys Ala Gly Ile Arg Pro Glu Ala Thr Leu Pro Leu
65                  70                  75                  80
Thr Leu Asp Leu Gly Thr Ser Asn Lys Ala Leu Arg Glu Asp Pro Leu
                85                  90                  95
Tyr Met Gly Thr Arg Arg Asp Lys Ile Ser Pro Glu Glu Glu Arg Glu
            100                 105                 110
Phe Met Asp Glu Leu Met Ala Ala Leu Thr Glu Arg Trp Pro Gly Tyr
        115                 120                 125
Val Ala Pro Pro Pro His Leu Phe Pro Met Thr Pro Asp Ala Asn Gly
    130                 135                 140
Gly Gln Gln Tyr Arg His Ser Val
145                 150
```

<210> 28611
<211> 140
<212> PRT
<213> A.fumigatus

<400> 28611

```
Met Thr Ile Leu Leu Thr Ser Val Ser Val Arg Cys His Arg Lys Glu
1               5                   10                  15
Met Gly Arg Trp Ser His Ile Pro Arg Pro Ala Leu Gly Gln Ser Arg
            20                  25                  30
His Gln Leu Ile His Glu Phe Pro Phe Leu Leu Gly Gly Asp Phe Val
        35                  40                  45
Thr Ala Cys Pro His Val Gln Arg Ile Phe Pro Glu Ser Leu Val Ala
    50                  55                  60
Cys Pro Gln Ile Gln Ser Gln Gly Gln Gly Gly Leu Gly Thr Asp Pro
```

```
65                  70                  75                  80
Arg Thr Cys Ser Ile Gln Arg Glu Phe Thr Asn Arg Asn Ala His Ser
                85                  90                  95
Val Asn Ala Lys Ile Ser Gln Ser Glu Asn Ser Gly Pro Ile Gly Asp
            100                 105                 110
Ala Arg Asp Phe Asn Val Trp Leu Arg Pro Val Gly Asp Asp Ser Gly
        115                 120                 125
Gln Ile Ala Ala Val Leu Pro Ala Gln Ile His Ala
    130                 135                 140
```

<210> 28612
<211> 523
<212> PRT
<213> A.fumigatus

<400> 28612

```
Gln Phe Gly Lys Thr His Ser Arg Asn Pro Phe Leu Ala Pro Val Ser
1               5                   10                  15
Pro Ser Ser Ile Gly Ser Thr Gly Ala Pro Ala Gln Ser Ser Gly His
            20                  25                  30
Glu Ala Gly Thr Asn Tyr Asn Phe Glu Ala Pro Asp Leu Thr Asn Gly
        35                  40                  45
Asn Leu Ile Pro Pro Glu Val Pro Leu Ser Gln Gly Asp Trp Ala Gly
    50                  55                  60
Gln Trp Pro Thr Met Gly Thr Leu Asp Ala Met Pro Val Gln Leu Pro
65                  70                  75                  80
Ser Glu Pro Gln Asp Ala Phe His Ser Pro Leu Ala Lys Val Asn Gln
                85                  90                  95
Leu Arg Asn Asn Leu Gln Leu Trp Asp Ser Leu Val Leu Gln Ala Leu
            100                 105                 110
Pro Glu Leu Asp Tyr Ser Gln Leu Val Asp Leu Arg Ser Phe Val Lys
        115                 120                 125
Ala Ile Phe Cys Arg Leu Asp Thr Ser Ile Gln Glu Arg Leu Asp Leu
    130                 135                 140
Gly Ala Ser Asn Ile Pro Ser Pro Arg Asp Arg Tyr Leu Cys Lys Leu
145                 150                 155                 160
Cys Ser Gln Gly Asn Arg Lys Val Tyr Gly Thr Arg Gly Thr Phe Arg
                165                 170                 175
Arg His Val Ser Leu Thr His Gln Ala Glu Gln Lys Tyr Tyr Cys Pro
            180                 185                 190
Ala Cys Ser Phe Ser Thr Pro Arg Arg Asp Lys Phe Arg Gly His Leu
        195                 200                 205
Gln Val Lys His Gly Ser Phe Ala Leu Thr Leu Leu Asn Lys Gly Cys
    210                 215                 220
Leu Asp Ser Leu Ala Arg Pro Cys Pro Pro Pro Lys Thr Cys Gly Leu
225                 230                 235                 240
Cys Pro Lys Gln Val Asn Thr Trp Lys Arg Tyr Phe Glu Cys Ile Val
                245                 250                 255
Lys His Cys Arg Leu Pro Gly Gly Ser Ser Pro Tyr Thr Ser Ala Ser
            260                 265                 270
Gln Ser Arg Arg Gly Ser Gly Asn Thr Gly Gly Asp Gly Thr Asp Phe
        275                 280                 285
Asp Gly Gln Gln Gly Phe Asp Pro Ser Gly Ile Asp Gly Ser Gly Phe
    290                 295                 300
Pro Ser Ser Ser Ser Ala Glu Gly Asn Asn Met Asp Gly Gly Asp Tyr
305                 310                 315                 320
```

```
Asp Phe Asn Asn Ile Ser Gln Gln Phe Ser Phe His Ala Thr Ser Leu
                325                 330                 335
Ser Gln Arg Asn Thr Gln Asp Ser Ile Val Ala Asp Thr Val Asp Glu
            340                 345                 350
Ala Gln Gln Ser Pro Pro Leu Ala Ile Asn Ala His Ala Arg Thr Gly
        355                 360                 365
Pro Asn Ser Val Pro Asn Lys Asp Gly Pro Glu His Leu Ser Ser Val
    370                 375                 380
His Ser Pro Thr Ser Leu Gln Gly Tyr His Arg Thr Leu Asn Ser Thr
385                 390                 395                 400
Leu Lys Glu Cys Ser Ser Ala Ser Thr Lys Arg Lys Thr Ser Leu Asp
                405                 410                 415
Ser Phe Lys Gln Leu Ser Ala Ala Arg Asn Ala Pro His Ser Thr Asp
            420                 425                 430
Ser Ser Gly Arg Ser Arg Ile Pro Asn Ala Arg Ser Ser Pro Thr Asp
        435                 440                 445
Glu Thr Pro Arg Lys Asn Arg Cys Pro Asp Leu Gly Lys Ser Cys Gln
    450                 455                 460
Ile Lys Cys Arg Ile Cys Ser His Thr Met Gln Ser Cys Thr Leu Cys
465                 470                 475                 480
Thr Ala Ser Asn Gly Ala Glu Arg Lys Cys His Leu Cys Ala Gly Lys
                485                 490                 495
Ala Arg Gln Arg Ser Asn Lys Ser Arg Pro Trp His His Glu Thr Tyr
            500                 505                 510
Pro Asp Tyr Ala Tyr Ile Pro Gly Lys Ser Leu
        515                 520
```

<210> 28613
<211> 77
<212> PRT
<213> A.fumigatus

```
<400> 28613
Thr Ser Val Glu Thr Phe Val Ile Met Asn Arg Leu Asn Asn Gly His
1               5                   10                  15
Ile Ile Asp Asp Phe Asn His Glu Gln Asp Asp Ile Tyr Thr Gly Pro
            20                  25                  30
Asn Ala Ile Trp Arg Phe Ile His Tyr Thr Asp Pro Pro Thr Gln Thr
        35                  40                  45
Leu Gly Gly His Leu Ala Pro Ala Pro Thr Thr Asn Met Ala Phe Val
    50                  55                  60
Ser Gln Pro Pro Thr Ser Val Phe Leu Gly Ile Ser Lys
65                  70                  75
```

<210> 28614
<211> 133
<212> PRT
<213> A.fumigatus

```
<400> 28614
Ser Ser Thr Pro Ala Ser Thr Pro Asp Pro Thr Ala Asp Ala Ser Val
1               5                   10                  15
Ala Pro Ala Ala Ala Ser Ala Thr Thr Thr Ala Ala Ala Thr Ala Thr
            20                  25                  30
Thr Thr Thr Ala Ala Ala Thr Asn Ser Ile Asn Gly His Arg Leu Gly
        35                  40                  45
```

```
Pro Ser Asp Leu Gln Ser Ala Ala Ser Ala Lys Asp Thr Cys Thr Ile
    50                  55                  60
Thr Ser Arg Pro Arg Ser Trp His Leu Phe Ile Val Asn Ser Ala Val
65                  70                  75                  80
Val Ala Thr Lys Phe Thr Thr Thr Thr Ser Pro Ser Ser Ser Thr Thr
                85                  90                  95
Thr Asp Thr Phe Ala Ser Ser Thr Gly Ser Trp Gly Ala His Ser Val
            100                 105                 110
Ser Ser Gly Ser Ser Ile Ser Ser Arg Pro Gly Asp Ile Arg Phe Thr
        115                 120                 125
Ala Ser Pro Cys Ser
    130
```

<210> 28615
<211> 277
<212> PRT
<213> A.fumigatus

<400> 28615

```
Gln Leu Pro Pro Ala Ile Lys Val Asn Ala Cys Tyr Arg Gly Gln Ile
1               5                   10                  15
Lys Pro Arg Met Asp His Pro Ser Ser Gln Gly Met Met Pro Gly Leu
            20                  25                  30
His Cys Asn Ser Val Thr Pro Gly Ser Val Gln Pro Asp Tyr Trp Asn
        35                  40                  45
Asn Leu Asp Ser Leu Tyr Ser Gly Arg Asp Pro Pro His Gln His Pro
    50                  55                  60
His Leu Thr Gln Gln Gln Met His Gln Ser His Gln Gln Gln His Arg
65                  70                  75                  80
Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Pro Gln Gln
                85                  90                  95
Gln Thr Gln Ser Met Gly Ile Gly Trp Asp His Pro Ile Phe Ser Gln
            100                 105                 110
Gln His Pro Gln Arg Thr His Val Pro Ser His Gln Asp Gln Asp His
        115                 120                 125
Gly Ile Tyr Ser Ser Ser Thr Pro Gln Ser Trp Gln Gln Asn Ser Leu
    130                 135                 140
Gln Gln His Leu His His His Gln Gln Gln Gln Ile Leu Ser Pro Ala
145                 150                 155                 160
Pro Gln Gly Leu Gly Val Pro Thr Gln Tyr His Gln Val His Arg Tyr
                165                 170                 175
Pro Pro Gly Gln Val Thr Phe Asp Ser Arg Pro Leu Pro Ala Ala Asn
            180                 185                 190
Asn Pro Ser Tyr Gln Thr Tyr Ser Phe Pro Gln Asn Phe Tyr Ser Ser
        195                 200                 205
Gln His Met Ser Leu Pro Asp Ala Phe Pro Gln Ser Asn Pro Pro Gln
    210                 215                 220
Ala Ser Arg Ser Gln Thr Ser Gln Gln Asn His Tyr Gln Thr Val Ala
225                 230                 235                 240
His Gln Thr Pro Ile Ala Ser Tyr Ser Leu Pro Thr Gly Tyr Phe Glu
                245                 250                 255
Gly Asn Ser Val Ser Thr Gln Met Thr His His Leu Lys Asp Val Ser
            260                 265                 270
Leu Thr Tyr Ser Arg
        275
```

<210> 28616
<211> 114
<212> PRT
<213> A.fumigatus

<400> 28616
Pro Asn Ser Arg Cys Ile Ser Arg Thr Ser Ser Ser Ile Gly Asn Asn
1 5 10 15
Asn Ser Ser Ser Asn Ser Asn Asn Asn Asn Ser Arg Ser Asn Lys Leu
20 25 30
Asn Gln Trp Ala Ser Ala Gly Thr Ile Arg Ser Ser Val Ser Ser Ile
35 40 45
Arg Lys Gly His Met Tyr His His Ile Lys Thr Lys Ile Met Ala Ser
50 55 60
Ile His Arg Gln Leu Arg Ser Arg Gly Asn Lys Ile His Tyr Asn Asn
65 70 75 80
Ile Ser Ile Ile Ile Asn Asn Asn Arg Tyr Phe Arg Gln Leu His Arg
85 90 95
Val Leu Gly Cys Pro Leu Ser Ile Ile Arg Phe Ile Asp Ile Leu Gln
100 105 110
Ala Arg

<210> 28617
<211> 62
<212> PRT
<213> A.fumigatus

<400> 28617
Val His Ile Ser His Tyr Leu Gly Glu Val Leu Arg Asn Gly Pro Asp
1 5 10 15
Pro Ile Leu Pro Ser Phe Thr Ala Phe Ala Val Arg Trp Arg Lys Tyr
20 25 30
Gln Gly Met Ser Leu Asp His Arg Cys Glu Ser Asp Thr Thr Glu Leu
35 40 45
Met Ala Gly Phe Ile Pro Phe Tyr Ile Tyr Glu Glu Ile Asp
50 55 60

<210> 28618
<211> 147
<212> PRT
<213> A.fumigatus

<400> 28618
Asn Ser Arg Ala Glu Val Arg Gly Arg Pro Thr Ser Leu Leu Leu Gln
1 5 10 15
Ile Tyr Asp Val Glu Ser Ser Phe Leu Thr Gly Arg Tyr Gln Val His
20 25 30
Arg Leu Val Ala Pro Arg Asp Gln Lys Tyr Gln Ser Asn Phe Val Glu
35 40 45
Phe Lys Arg Ser Thr Lys Ile Val Tyr Arg Arg Tyr Ala Gly Leu Phe
50 55 60
Phe Cys Val Cys Val Asp Ala Thr Asp Asn Glu Leu Ala Tyr Leu Glu
65 70 75 80
Ala Ile His Phe Phe Val Glu Val Leu Asp Gln Phe Phe Gly Asn Val
85 90 95

```
Cys Glu Leu Asp Leu Val Phe Asn Phe Tyr Lys Val Arg Glu Val Tyr
            100                 105                 110
Ala Gly Gly Leu Cys Ser Arg Thr Leu Arg Ala Ala Gly Asp Val Ile
        115                 120                 125
Arg Leu Ser Asp Asn His Gly Ala Asn Arg Gly Met Cys Val Gly Ile
    130                 135                 140
Cys Asp Ser
145
```

<210> 28619
<211> 172
<212> PRT
<213> A.fumigatus

<400> 28619

```
Lys Thr Asp Pro Asp Ile Val Ala Arg Leu Pro Asp Leu Gln Phe Ile
1               5                  10                  15
Glu Gln Tyr Asp Pro Glu Asp Thr Asp Ser Ala Thr Ala Val Ser Gln
            20                  25                  30
Pro Tyr Ala Tyr Val Ala Ala Lys Val Ile Thr Leu Ser Glu Pro Gly
        35                  40                  45
Ala Lys Ala Pro Gly Leu Ser Trp Asn Pro Glu Asp Leu Ala Lys Asp
    50                  55                  60
Ser Pro Leu Glu Pro Ser Glu Met Glu Ala Leu Thr Gln Leu Arg Asp
65                  70                  75                  80
Lys Tyr Ala Ala Gly Glu Arg Ile Gly Trp Trp Ile Val Tyr Asn Gly
                85                  90                  95
Asp Pro Asp Arg Ala Phe Pro Arg Tyr Glu Glu Asp Asp Ser Tyr Asp
            100                 105                 110
Glu Tyr Asp Tyr Asp Asp Asp Asp Asp Asp Glu Tyr Thr Glu Ser Asn
        115                 120                 125
Gly Asp Ser Val Arg Asn Ser Thr Ala Pro Glu Thr Pro Pro Ser Pro
    130                 135                 140
Val Val Ser Leu Ala Leu Arg Thr Ser Leu Ile Leu Val Thr Asp Tyr
145                 150                 155                 160
Ile Asp Gly Leu Ala His Leu Arg Leu Asp Ser Pro
                165                 170
```

<210> 28620
<211> 427
<212> PRT
<213> A.fumigatus

<400> 28620

```
Ser Leu Cys Val Gln Leu Phe Thr Asp Asn Pro Ile Leu Thr Ile Val
1               5                  10                  15
Glu Gln Leu Ala Ile Gln Gln Gln Ile Glu Leu Leu Gln Gln Gln Gln
            20                  25                  30
Gln Gln Ile Ala Ala Thr His Gln Gln Tyr Val Asn Met Gly Leu Leu
        35                  40                  45
Gln Pro Gln Gln Leu Gly Gln Val Ser Ala Phe Ser Pro Ser Leu Gln
    50                  55                  60
Gly Gly Ala Ser Met Gly Gly Val Ser Pro Gln Ile Asn Ala Phe Gln
65                  70                  75                  80
Phe Pro Gln Leu Ala Gln Gln Gln Leu Gly Val Pro Met Asn Thr Pro
                85                  90                  95
```

```
Thr Gln His Ser His Arg Arg Asn Gln Ser Ala Leu Pro Gly Leu Pro
            100                 105                 110
Met Gly Pro Pro Pro Ala Pro Ser Ser Gly Ala Ser Gly Tyr Thr Asp
        115                 120                 125
Tyr Asn Ala Gln Gln Gly Asn Pro Gln Gln Lys Glu Asn Asn Asn His
    130                 135                 140
Gly Arg Asn Arg Gly Pro Pro Gly Gly Gly His Gln Arg Arg His Ser
145                 150                 155                 160
Leu Ala Leu Pro Glu Ala Lys Lys Ala Ala Glu Leu Ala Gln Gln Lys
                165                 170                 175
Arg Thr Ala Ser Gly Phe Gln Phe Pro Ala Pro Gly Ala Gly Gly Ser
            180                 185                 190
Ser Glu Asn Leu Ser Gly Ser Glu Asp Lys Pro Thr Ser Thr Thr Pro
        195                 200                 205
Gln Pro Pro Gln Gly Leu Gly Leu His Arg Ala Gly Asn Leu Arg Ala
    210                 215                 220
Gly Ala His Gly Arg Ser Gln Ser Val Ala Val Gly Asn Ser Arg Gly
225                 230                 235                 240
Ser Leu Ser Gly Arg Gly Met Gly Gly Phe Gln Phe Pro Gln Ser Ser
                245                 250                 255
Asp Ile Gly Gly Gln Ser Glu Asn Gln Arg Arg Gly Ser Gln Pro Gly
            260                 265                 270
His Ala Arg Thr Pro Ser Arg Asn Phe Asp Gly Asn Trp Arg Gln Pro
        275                 280                 285
Asn Asn Gln Asn Gln Ala Gln Asp Gln Gln Lys Ser Phe Gly Gln Gln
    290                 295                 300
Gly Gly Ser Thr Phe Gln Pro Gly His Arg Ala Arg Ala Ser Asn Gln
305                 310                 315                 320
Ser Ile Gly Ser Ile Gly Ser Phe Gln Tyr Pro Ala Gln Pro Gln Leu
                325                 330                 335
Ile Gln Leu Pro Gln Gly Gln Val Val Met Ala Pro Pro Gln Leu Phe
            340                 345                 350
Gly Ala Gly Gln Gln Leu Ser Pro Leu Gln Leu Ala Gln Leu Gln Ala
        355                 360                 365
Leu Gln Gln Gln Ser Gly Gln Leu Asn Gly Gln Gly Leu Gly Gly Leu
    370                 375                 380
Gln Ala Ser Gln His Ala Pro Pro Gln Leu Ser Ala Gln Gln Gln Gln
385                 390                 395                 400
Gln Gln Gln Gln Gln Gln Gln Arg Lys Thr Leu Phe Ile Pro Tyr Leu
                405                 410                 415
Pro Gln Ala Asn Leu Pro Ala Ser Pro Arg Gly
            420                 425
```

<210> 28621
<211> 242
<212> PRT
<213> A.fumigatus

<400> 28621

```
Phe Asp Val Pro Ser Ala Pro Leu Pro Leu His Phe Gln Thr Val Thr
1               5                   10                  15
Pro Gln Thr Glu Lys Leu Glu Leu Pro Ser Ile Ser Gln Val His Thr
            20                  25                  30
Arg Gly Pro Val Asp Ile Pro Trp Tyr Asn His His Ala Ala Glu Arg
        35                  40                  45
Pro Leu Leu Ser Gly Asp Lys Leu Pro Ala Leu Ser Leu Pro Thr Ala
```

```
    50                  55                  60
Ser Gln Pro Ile Val Ser Gly Gln Ser Tyr Arg Ala Ser Tyr Glu Glu
65                  70                  75                  80
Ser Ala Pro Gly Ser Thr Thr Ser Ser Ala Arg Thr Ser Leu Ser Ser
                85                  90                  95
Gly Thr Ala Pro Thr Ile Ser Glu Val Arg Thr Pro Pro Ser Val Asp
            100                 105                 110
Leu Val Ala Gly Gly His Gly Arg Leu Ser Leu Glu Ser Ser Ala Ser
        115                 120                 125
Gln Asp Tyr Thr Val Ala His Asn Gln Val Ser Asp Ser Tyr Tyr Pro
    130                 135                 140
Asn Pro Thr Pro Arg Gly Ser Met Asn Gln Thr His Pro Tyr Met Asp
145                 150                 155                 160
Phe Thr Pro Ser Asn Leu Ser Ile Gly Ala Thr Arg Thr Pro Pro His
                165                 170                 175
Ala Gly Glu Arg Gln Gly Ala Lys Gly Pro Leu Ser Ala Asn Ile Leu
            180                 185                 190
Lys Gln Thr Thr Cys Ser Trp Gln Pro Ser Pro Pro Ser Tyr Cys Pro
        195                 200                 205
Gly Gln Leu Leu Tyr Phe Ala Ile Met Ala Leu Ser Leu Thr Gly Gly
    210                 215                 220
Trp Pro Pro Ser Pro Glu Asn Gly Leu Asn Pro Pro Gly Ile Gln Gln
225                 230                 235                 240
Ser Glu
```

<210> 28622
<211> 89
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (26),(38),(41),(62),(80)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28622

```
Gly Leu Ser Leu Leu Leu Asn Leu Pro Ser Lys Gln Val His Thr Ser
1               5                   10                  15
His Thr Pro Val Asn His Ala Ala Val Xaa Tyr Ile Gly Gln His Pro
            20                  25                  30
Ser Arg Gly Thr Pro Xaa Ile Ser Xaa Gly Cys Ser Pro Ser Ile Lys
        35                  40                  45
Ser Tyr Leu Gly Asn Asn Ser Gly Ala Pro Pro Arg Val Xaa Pro Gln
    50                  55                  60
Pro Pro Lys Ile Pro Cys Ala Thr Leu Cys Leu Gly Lys Gly Thr Xaa
65                  70                  75                  80
Gly Glu Phe Ser Cys Val Tyr Pro Gly
                85
```

<210> 28623
<211> 109
<212> PRT
<213> A.fumigatus

<400> 28623

```
Ser Pro Gln Arg Leu Ser Tyr Leu Phe Thr Met Thr Ile Leu Lys Gln
1               5                  10                  15
Thr Leu Asp Asn Ala Glu Ile Gln Glu Ser Ala Ile Val Thr Met Thr
            20                  25                  30
Ala Gly Asn Lys Ser Gly Ala Ser Met Leu Glu Asn Ala Phe Gly Ser
        35                  40                  45
Gln Gly Ala Gln Val Met Leu Pro Glu Pro Ala Trp Ser Lys Val Arg
    50                  55                  60
Thr Tyr Cys Arg Asp Ala Phe Ser Glu Phe Phe Gly Thr Met Ile Leu
65                  70                  75                  80
Ile Leu Phe Gly Asp Gly Val Val Ala Gln Val Thr Leu Ser Lys Gly
                85                  90                  95
Glu Lys Gly Asp Tyr Gln Ser Ile Ser Trp Gly Trp Gly
            100                 105
```

<210> 28624
<211> 244
<212> PRT
<213> A.fumigatus

<400> 28624

```
Ser Ser Ser Ser Leu Glu Met Ala Trp Leu Pro Arg Ser His Leu Ala
1               5                  10                  15
Lys Glu Lys Arg Val Thr Ile Asn Gln Ser Pro Gly Ala Gly Gly Glu
            20                  25                  30
Tyr Ile Ser Trp Phe Cys Cys Ser Ile Leu Trp His Leu Leu Thr Gly
        35                  40                  45
Leu Leu Phe Arg Ile Gly Val Met Leu Gly Val Tyr Ala Ser Gly Ile
    50                  55                  60
Ser Gly Ala His Ile Asn Pro Ala Val Thr Phe Ala Asn Cys Val Phe
65                  70                  75                  80
Arg Lys Phe Pro Trp Arg Lys Phe Pro Val Tyr Ala Ile Ala Gln Ile
                85                  90                  95
Leu Gly Ala Met Cys Gly Ala Ala Ile Val Tyr Gly Asn Tyr Arg Ser
            100                 105                 110
Ala Ile Asp Gln Phe Glu Gly Gly Ala His Ile Arg Thr Val Pro Gly
        115                 120                 125
Tyr Ser Pro Thr Ala Thr Ala Gly Ile Phe Cys Thr Tyr Pro Ala Glu
    130                 135                 140
Phe Met Thr Arg Thr Gly Gln Phe Phe Ser Glu Phe Ile Ala Ser Ser
145                 150                 155                 160
Ile Leu Met Phe Leu Ile Phe Ala Leu Lys Asp Asp Gly Asn Ile Gly
                165                 170                 175
Ala Gly Pro Leu Thr Pro Leu Ala Leu Phe Phe Val Ile Phe Gly Ile
            180                 185                 190
Gly Ala Cys Phe Gly Trp Glu Thr Gly Tyr Ala Ile Asn Leu Ala Arg
        195                 200                 205
Asp Phe Gly Pro Arg Leu Val Ser Tyr Met Ile Gly Tyr Gly Pro Glu
    210                 215                 220
Val Trp Lys Ala Gly Asn Tyr Tyr Phe Trp Val Cys Leu Ala Leu Phe
225                 230                 235                 240
Glu Tyr Asp Asp
```

<210> 28625
<211> 271

<212> PRT
<213> A.fumigatus

<400> 28625
Phe Gly Ile Val Thr Thr Leu Leu Met Glu Met His Thr Val Val Phe
1 5 10 15
Pro Pro Gly Lys Pro Ala Pro Pro Pro Ala Ala Gln Pro Gln Ala Val
20 25 30
Ala Ala Pro Ala Pro Glu Lys Lys Lys Arg Val Arg Arg Trp His Arg
35 40 45
Arg Gly Phe Thr Gly Cys Leu Thr Cys Arg Arg Arg His Val Arg Cys
50 55 60
Asp Glu Ala Ser Pro Ser Cys Lys Asn Cys Thr Arg Leu Gly Leu Asp
65 70 75 80
Cys Asp Gly Thr Gln Gly Arg Met Thr Phe Lys Val Tyr Gly Pro Ser
85 90 95
Gln Gly Ala Gln Asp Leu Ser Pro Ser Pro Asn Asn Ile Ser Thr Ala
100 105 110
Asn Ala Ile Thr Val Lys Asn Gln Gln Ala Asp Ile Lys His Val Lys
115 120 125
Gln Glu Pro Arg Asp Glu Lys Asp Asp Leu Val Asp Gly Ile Val Ile
130 135 140
Ser Pro Thr Thr Val Gly Asp Ser Ala Pro Val Lys Tyr Arg Phe Gln
145 150 155 160
Asp Pro Leu Ser Pro Ser Gly Phe Met Pro Ser Ser Leu Asp Leu Val
165 170 175
Glu Gly Arg Tyr Tyr Thr His Phe Ile Glu Gln Val Ser Thr Leu Leu
180 185 190
Leu Ile Tyr Asp Asn Ser Asn Asn Val Asn Pro Phe Arg Gln Tyr Phe
195 200 205
Pro Glu Leu Ala Gln Ser Ser Pro Ser Val Ala Ser Ala Met Gln Ala
210 215 220
Leu Gly Ala Leu His Leu Ala Asn Thr Ser Ala Gly Pro Lys Arg Asn
225 230 235 240
Val His Phe Gln Gln Ala Met Gly Lys Tyr Gly Glu Val Val Lys Thr
245 250 255
Phe Arg Thr Ser Ser Pro Arg Gly Trp Lys Asp Pro Arg Arg Ser
260 265 270

<210> 28626
<211> 75
<212> PRT
<213> A.fumigatus

<400> 28626
Val Leu Leu Ala Ser Tyr Arg Gln Asp Ser His Leu His Leu Thr Glu
1 5 10 15
Gly Gly Cys Leu Leu Glu Ala Lys Thr Leu Arg Pro Ile Ile Trp Val
20 25 30
His Leu Glu Leu Gly Lys Glu Leu Pro Cys Thr Glu Lys Val Thr Trp
35 40 45
Lys Asp Val Thr Ser Ile Arg Lys Leu Thr Val Pro Gly Gln Leu Leu
50 55 60
Asp Gly Asn Asn His Arg Trp Thr Arg Gln Cys
65 70 75

<210> 28627
<211> 64
<212> PRT
<213> A.fumigatus

<400> 28627
Gly Ser Ile Pro Arg Arg Tyr Val Leu Thr Leu Ala Phe Thr Ile Arg
1 5 10 15
Lys Ala His Met Val Val Ala Ile Met Glu Ser Gly Asn Ala Val Gly
20 25 30
Pro Pro Trp Asn Gly Thr Asp Trp His Gln Pro Met Tyr Asp Arg Ile
35 40 45
Val Asn Lys Ala Gly Tyr Leu Asn Arg Ser Ser Arg Trp Ser Leu Cys
50 55 60

<210> 28628
<211> 62
<212> PRT
<213> A.fumigatus

<400> 28628
Glu Ile Tyr Gly Ser Phe Leu Ile Gln Ile Pro Phe Val Phe Ala Asn
1 5 10 15
Pro Val Gln Asn Ile Thr Pro Leu Gly Thr Asp Pro Ser Arg Leu Glu
20 25 30
Leu Gly Asn Met Ala Ala Arg Met Trp Thr Ser Phe Val Thr Asp Leu
35 40 45
Asn Pro Asn Gly His Gly Gly Thr Ser Gly Ser Arg Leu Asp
50 55 60

<210> 28629
<211> 267
<212> PRT
<213> A.fumigatus

<400> 28629
Thr Arg Leu Gly Ile Leu Ile Ala Pro His Asp Gly Val Tyr Ala Asp
1 5 10 15
Asn Ser Ser Cys Ser Thr Ser Ser Asp Thr Leu Gln Cys Leu Arg Glu
20 25 30
Val Pro Tyr Gln Ser Leu Tyr Asp Ile Ala Tyr Glu Gly Leu Glu Trp
35 40 45
Phe Ala Ala Ile Asp Gly Ser Phe Ile Lys Glu Tyr Pro Gln Ile Ser
50 55 60
Tyr Thr Glu Gly Arg Leu Ala Lys Val Pro Ile Leu Leu Gly Ser Asn
65 70 75 80
Thr Asp Glu Gly Thr Ser Phe Gly Thr Thr Gly Thr Asn Thr Asp Glu
85 90 95
Glu Cys Ile Asn Gln Leu Ile Cys Gly Phe Phe Cys Arg Pro Arg Gln
100 105 110
Arg Leu Val Leu Thr Met Thr Ala Ser Lys Arg Trp Val Leu Thr Arg
115 120 125
Glu Glu Ala Thr Arg Leu Leu Thr Tyr Tyr Pro Asn Asp Pro Ala Leu
130 135 140
Gly Cys Pro Tyr Gly Trp Gly Asn Val Thr Trp Pro Lys Leu Gly Leu
145 150 155 160

```
Met Tyr Lys Arg Tyr Glu Ser Met Ala Gly Asp Leu Thr Met Val Ala
                165                 170                 175
Pro Arg Arg Leu Leu Ala Gln Thr Met Ala Lys Tyr Thr Lys Gln Val
            180                 185                 190
Tyr Ser Tyr Arg Trp Asp Val Pro Ala Leu Asn Thr Ser Ser Thr Ile
        195                 200                 205
Gly Val Gly His Phe Ala Glu Val Ser His His His Leu His Arg Arg
    210                 215                 220
Ser Met Ala His Phe Ser Tyr Arg Ser Leu Leu Ser Leu Arg Ile Leu
225                 230                 235                 240
Cys Arg Thr Leu His Arg Trp Glu Leu Ile Pro Pro Val Ser Asn Trp
                245                 250                 255
Ala Thr Trp Pro Leu Gly Cys Gly Arg Pro Ser
            260                 265
```

<210> 28630
<211> 128
<212> PRT
<213> A.fumigatus

<400> 28630

```
Leu Thr Arg Thr Leu Arg Val Val Val Lys Met His Leu Lys Ser Ser
1               5                   10                  15
Cys Pro Tyr Trp Phe Leu Tyr Cys Ile Met Gly Pro Gln Asp Gln Thr
            20                  25                  30
Gly Ala Lys Arg Ile Arg Gly Lys Pro Val Pro Ser Gln Pro Gly Ser
        35                  40                  45
His Gly Pro Thr Val Met Asn Val Pro Pro Pro Ser Thr Gly Ser Arg
    50                  55                  60
Glu Ala Cys Asp Glu Cys Arg Ile Arg Lys Val Arg Cys Asn Lys Glu
65                  70                  75                  80
Tyr Pro Lys Cys Ser Ser Cys Arg Lys Ser Asn Leu Ala Cys Gly Phe
                85                  90                  95
Ser Asn Lys Gly Lys Arg Val Asn His Thr Lys Lys Leu Ser Val Phe
            100                 105                 110
Cys Val Leu Leu Val Asp Leu Asp Asp Ser Asn Leu Pro Val Pro Gly
        115                 120                 125
```

<210> 28631
<211> 98
<212> PRT
<213> A.fumigatus

<400> 28631

```
Lys His Ala Ser Phe Leu Ala Gly Lys Pro Cys Leu Leu Pro Ser Tyr
1               5                   10                  15
Asp Cys Gly Leu Pro Phe Pro Val Ala Lys Ser Glu His Leu Pro Arg
            20                  25                  30
Asp Gln Arg Ser Ala His Ile Ser Leu Ala Arg Ile Gln Glu Asp Val
        35                  40                  45
Tyr Gln Arg Leu Tyr Ser Ala Gln Thr Ala His Lys Gly Arg Glu Tyr
    50                  55                  60
Ile Ser Arg Gln Thr Gln Gln Ile Asn Arg Thr Leu Asp Asp Trp Glu
65                  70                  75                  80
Ile Gln His Lys His Ile Leu Ser Pro Ala Ser Thr Met Thr Ala Gln
                85                  90                  95
```

Glu Ala

<210> 28632
<211> 466
<212> PRT
<213> A.fumigatus

<400> 28632
Leu Ile Trp Met Ile Leu Ile Ser Leu Cys Leu Asp Arg Val Asn Asp
1 5 10 15
Val Glu Ile Leu Gly Asn Arg Leu Gly Lys Ile Glu Glu Ala Leu Ile
20 25 30
Arg Cys Leu Ser Ala Val Glu Arg Ser Gln Thr Pro Ser Asn Ala Thr
35 40 45
Ala Arg Gln Ser Ser Val Ile Pro Ser Asp Asp Ser Ser His Pro Asp
50 55 60
Pro Asn Asp Ser Ala Pro Thr Asp Gly Asn Thr Leu Thr Asp Ala Ser
65 70 75 80
Leu Glu Thr Asn Ala Glu Ala Cys Asn Asp Pro Thr Phe Pro Gly Ser
85 90 95
Thr Pro Ile Ala Ser Phe Tyr Thr Glu Ala Gln Ala Ala Cys Asp Arg
100 105 110
Leu Arg Ser Val Val Pro Phe Ala Ser Pro Asp Ser Gln His Ser Pro
115 120 125
Ala Ser Pro Asp Phe Ile Pro Asp Arg Thr Gly Ser Leu Gln Ser Arg
130 135 140
Leu Gln Glu Val Gly Glu Leu Phe Glu Lys Phe Ala Arg Glu Ser Pro
145 150 155 160
Val Met Ser Ile Pro Glu Ser Asp Gly Leu Leu Pro Ser Leu Pro Pro
165 170 175
Arg Ala Leu Val Glu Thr Cys Leu Glu Thr Tyr Phe Ala Cys Leu Ser
180 185 190
Pro Phe Leu Pro Leu Tyr Ser Arg Gln Ser Val Met Ala Ala Ile Asp
195 200 205
Glu Gln Tyr Gly Pro Arg Val Asn Ser Pro Asp Pro Ala Trp Val Ile
210 215 220
Ser Phe Asn Asn Ile Leu Leu Gln Thr Leu Asp Ala Arg Tyr Ser Ala
225 230 235 240
Ala Thr Arg Ala Gly Ser Ile Thr His Asn Leu Leu Glu Glu Glu Leu
245 250 255
Ile Lys Ser Leu Leu Leu Asn Tyr Arg Arg Gly Tyr Asn Asn Phe Glu
260 265 270
Arg Leu Leu Arg Pro Gln Leu Ala Asn Val Gln Ala Leu Leu Ser Met
275 280 285
Val Gly Arg Pro Phe Phe Met His Gly Ile Phe Thr Val Leu Pro Ala
290 295 300
Gln Ala Leu Ile Ala Leu Lys Tyr Phe Ser Leu Ala Thr Phe Glu Thr
305 310 315 320
Val Phe Ala Gln Ala Cys Gln Leu Ala Lys Ser Ile Gly Leu His Gln
325 330 335
Ser Ser Pro Asp Ser Glu Asn Ala Glu Gln Lys Asp Leu Trp Trp Ser
340 345 350
Leu Phe Ile Ile Asp Val Ser Leu Pro Ile Val Cys Val Thr Phe Pro
355 360 365
Cys Ser Arg Arg Asn Arg Ser Thr His Leu Ser Trp Pro Ala Ser Leu

```
    370                 375                 380
Ala Cys Phe Arg Arg Met Thr Ala Gly Cys Arg Ser Gln Trp Pro Ser
385                 390                 395                 400
Arg Ser Ile Ser His Gly Ile Asn Val Arg His Thr Ser Leu Trp Pro
                405                 410                 415
Gly Ser Lys Lys Thr Ser Thr Asn Val Ser Thr Arg Arg Lys Pro Leu
            420                 425                 430
Thr Arg Ala Ala Ser Thr Ser Val Val Lys Leu Ser Arg Ser Thr Glu
        435                 440                 445
His Trp Met Thr Gly Lys Ser Ser Thr Asn Thr Ser Ser Leu Leu Gln
    450                 455                 460
Ala Pro
465
```

<210> 28633
<211> 64
<212> PRT
<213> A.fumigatus

<400> 28633

```
Gly Arg His Leu Gly Asp Leu Tyr Leu Ile Phe Asn Pro Ser Ser Arg
1               5                   10                  15
Gly Ile Gln Asn Ser Ile Leu Gly Ile Leu Gly Asp Leu Leu Ala Arg
            20                  25                  30
Gly Trp Phe Asp Pro Ser Ser Gln Phe Asn Arg Ala Leu Gly Thr Val
        35                  40                  45
Ser Gly His Glu Phe Leu Val Tyr Tyr Thr Met Gly Arg Val Arg Ser
    50                  55                  60
```

<210> 28634
<211> 66
<212> PRT
<213> A.fumigatus

<400> 28634

```
Pro Tyr His Pro Gly Leu Arg Leu Ser Gln Asp Leu Met Asp Thr Ile
1               5                   10                  15
Gly Asp Lys Leu Ser Lys Glu Pro Asp Leu Ala Lys Thr Gly Leu Glu
            20                  25                  30
Ile Asp Tyr Ile Asp Pro Thr Gln Ile Cys Arg Thr Pro Ile Pro Glu
        35                  40                  45
Thr Ala Ser Pro Thr Arg Tyr Ser Ser Thr Leu Asp Ala Thr Leu Met
    50                  55                  60
Leu His
65
```

<210> 28635
<211> 360
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (92),(176)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28635
Arg Arg Phe Lys Ile Phe Phe Ser Phe Asp Tyr Val Ala Arg Gly Pro
1 5 10 15
Trp Asn Gln Asp Asp Val Thr Glu Leu Leu Leu Arg Tyr Lys Val Asn
20 25 30
Glu Ala Tyr Tyr Arg Asn Asn Gly Arg Pro Leu Ala Ser Thr Phe Glu
35 40 45
Gly Ser Glu Asn Ala Glu Glu Trp Ile Asn Ile Lys Ala Ser Thr Asp
50 55 60
Cys Phe Phe Ile Pro Asp Trp Ser Ser Leu Gly Ala Lys Ala Ala Leu
65 70 75 80
Glu Ile Gly Tyr Gly Ile Val Asp Gly Leu Phe Xaa Trp Ala Ala Trp
85 90 95
Pro Ser Gly Pro Gln Asp Met Asn Thr Gln Val Asp Leu Cys Tyr Ile
100 105 110
Lys Leu Leu Asn Glu Ser Glu Gly Leu Val Tyr Met Met Pro Val Ser
115 120 125
Pro Trp Phe Tyr Thr Asn Leu Pro Gly Tyr Gly Lys Asn Trp Leu Trp
130 135 140
Arg Gly Asp Asp Leu Trp His Asp Arg Trp Gln Glu Val Leu Ser Val
145 150 155 160
Arg Pro Glu Phe Ala Glu Ile Ile Ser Trp Asn Asp Tyr Gly Glu Xaa
165 170 175
His Tyr Ile Gly Pro Leu His Glu Gly Gly Tyr Glu Leu Phe Arg Thr
180 185 190
Gly Lys Ala Pro Phe Asn Tyr Ala Glu Asn Met Pro His Asp Gly Trp
195 200 205
Arg Thr Leu Leu Pro Phe Ile Ile Gly Thr Tyr Lys Arg Gly His Ala
210 215 220
Lys Val Lys Gln Glu Ser Leu Val Thr Trp Tyr Arg Thr Thr Pro Gly
225 230 235 240
Ser Ala Cys Gly Thr Gly Gly Thr Ser Ala Asn Thr Gln Ser His Ala
245 250 255
His Ile Glu Phe Ser Pro Leu Glu Val Val Ala Asp Arg Ile Phe Tyr
260 265 270
Ser Ala Leu Leu Thr Glu Tyr Ala Thr Pro Glu Ile Phe Ile Gly Ser
275 280 285
Thr Thr Gln Lys Gly Thr Trp Arg Asn Leu Pro Ala Ser Gly Arg Gly
290 295 300
Ile Tyr His Gly Ser Ala Pro Phe Asn Gly Ala Lys Gly Asp Val Glu
305 310 315 320
Val Thr Leu Trp Arg Glu Gly Asn Arg Ile Leu Thr Leu Lys Gly Lys
325 330 335
Gly Ile Ser Gly Ser Cys Tyr Asn Gly Val Gln Asn Trp Asn Ala Trp
340 345 350
Val Gly Ser Thr Gln Ser Pro Ser
355 360

<210> 28636
<211> 183
<212> PRT
<213> A.fumigatus

<400> 28636
His Glu Phe Ser Asn Pro Leu Arg Lys Arg Pro Pro Asp Leu Phe Tyr
1 5 10 15

```
Asp Asp Asn Glu Ser Arg Lys Tyr Thr Thr Ser Ser Arg Ile Arg Asn
            20                  25                  30
Ile Gln Ala Asp Met Thr His Arg Ala Leu Glu Leu Leu Asp Leu Arg
        35                  40                  45
Ser Pro Ser Leu Ile Leu Asp Val Gly Cys Gly Ser Gly Leu Ser Gly
    50                  55                  60
Glu Ile Leu Ser Gln Val Pro Pro Gln Gln Gly Gly Pro His Thr Trp
65                  70                  75                  80
Val Gly Met Asp Ile Ser Pro Ser Met Leu Asp Val Ala Leu Gln Arg
                85                  90                  95
Asp Val Glu Gly Asp Leu Leu Leu Ala Asp Ile Gly Gln Gly Val Pro
            100                 105                 110
Phe Arg Pro Gly Thr Phe Asp Ala Ala Ile Ser Ile Ser Ala Ile Gln
        115                 120                 125
Trp Leu Cys Asn Ala Glu Thr Ser Asp Val Ser Pro Glu Gly Arg Leu
    130                 135                 140
Arg Arg Phe Phe Glu Gly Leu Tyr Ser Ser Leu Arg Arg Gly Gly Arg
145                 150                 155                 160
Ala Val Cys Gln Phe Tyr Pro Lys Asn Ala Ala Gln Arg Gly Phe Gln
                165                 170                 175
Gln Pro Ala Glu Ile Gln Gln
            180
```

<210> 28637
<211> 79
<212> PRT
<213> A.fumigatus

<400> 28637

```
Leu Trp Ala Leu Ser Ala Leu Pro Pro Pro Val Lys Thr Ser Ile Asn
1               5                   10                  15
Trp His Val Phe Gly Met Val Ala Val Ser Thr Thr Glu Phe Gly Thr
            20                  25                  30
Met Lys Gly Phe Gln Ala Tyr Val Cys Leu Phe Glu Ile Ile Arg Gly
        35                  40                  45
Ser Ser Met Arg Cys Ser Trp Ser Cys Asp Arg Cys Gln Trp Lys Tyr
    50                  55                  60
Ala Glu Leu Pro Val Pro Met Ile Pro Tyr Leu Ala Trp Thr Leu
65                  70                  75
```

<210> 28638
<211> 67
<212> PRT
<213> A.fumigatus

<400> 28638

```
Thr Val Leu Cys Glu Leu Leu Asp Ala Leu Leu Gln Tyr Asp Pro Ala
1               5                   10                  15
Gln Arg Leu Ser Ala Lys Gln Ala Cys Met His His Tyr Phe Arg Asn
            20                  25                  30
Ser Ser Ser Ser Ser Ser Tyr Phe Asn Arg Thr Gln Gly Gly Ala Asn
        35                  40                  45
Gln Ser Leu Asp Arg Glu His Ile Thr Ala Ser Leu Met Leu Val Thr
    50                  55                  60
Asn Cys Glu
65
```

<210> 28639
<211> 111
<212> PRT
<213> A.fumigatus

<400> 28639
Asp Leu Leu Val Arg Ser Phe Leu Leu Val Arg Val Gly Gln Ile Glu
1 5 10 15
Phe Asp Thr Leu Phe Tyr Asn Pro His Gly Thr Pro Asp Gly Glu Ile
20 25 30
Trp Pro Gly Phe Ile Thr Phe Ser Asp Tyr Lys Pro Thr Phe Pro Lys
35 40 45
Trp Arg Arg Ser Pro Ala Pro Leu Ile Pro Gly Phe Arg Gln Cys Cys
50 55 60
Ala Ser Phe Trp Met Pro Cys Phe Asn Met Ile Gln Leu Arg Gly Tyr
65 70 75 80
Leu Gln Ser Arg Pro Ala Cys Thr Ile Thr Ser Ala Ile Ala Ala His
85 90 95
Pro His Pro Ile Ser Thr Val Leu Arg Ala Val Leu Thr Asn Leu
100 105 110

<210> 28640
<211> 69
<212> PRT
<213> A.fumigatus

<400> 28640
Ile Lys Tyr Leu Thr Phe Ser Arg Asp Ile Ile Cys Thr Thr Arg Ser
1 5 10 15
Pro Asn Pro Met Pro Tyr Val Ala Val Phe Gly Ser Leu Ser Tyr Arg
20 25 30
Pro Ala Ile Arg Gly Ser Arg Leu Ser Met Gly Ser Trp Gly Gln Ala
35 40 45
Thr Leu His Ile Ser Ile Gly Ile Gly His Asn Ser Asn Tyr Thr Ala
50 55 60
Trp Arg Ile Arg Gly
65

<210> 28641
<211> 70
<212> PRT
<213> A.fumigatus

<400> 28641
Ile Arg Ser Leu Thr Arg Ile Ala Leu Glu Asn Gly Ala Arg Ser Leu
1 5 10 15
Glu Met Met Asp Trp Val Ile Glu Glu Val Thr Phe Lys Ala Glu Thr
20 25 30
Phe Leu Lys Lys Glu Met Val Ile Val Leu Asp Gly Asp Val Val Lys
35 40 45
Ser Asn Ile Ala Ile Lys Asp Ile Ala Cys Pro Pro Gly Gly Cys Gly
50 55 60
Ala Phe Gly Glu Tyr Cys
65 70

<210> 28642
<211> 67
<212> PRT
<213> A.fumigatus

<400> 28642
Leu Ser Phe Pro Phe Arg Arg Gly Gln Gly Leu Gly Gly Glu Asp Asp
1 5 10 15
Pro Phe Ser Val Ile Asn Asn Gly Arg Ala Gly Thr Lys Gly Glu Phe
20 25 30
Leu Asp Leu Phe Thr Thr Tyr Ser Leu Asp Tyr Gln Tyr Leu Pro Cys
35 40 45
Glu Ile Asn Phe Lys Asp Thr Thr Glu Gly Cys Arg Ile Ala Ser Ser
50 55 60
Tyr Asn Asn
65

<210> 28643
<211> 131
<212> PRT
<213> A.fumigatus

<400> 28643
Val Met Ile Pro Gln Val Val Leu Arg Arg Leu Glu Met Gln Arg Val
1 5 10 15
Leu Phe Ile Ile Leu Glu Ala Arg Gln Asp Gly Glu Glu Arg Thr Lys
20 25 30
Asn Cys Ser Val Ala Phe Val Leu Val Gln Trp Trp Ser Tyr Ala Lys
35 40 45
Arg Leu Ala Cys Thr Gly Ala His Leu Ile Pro Gly Met Phe His Cys
50 55 60
Met Val Phe Ser Gly Tyr Val Phe His Ile His Met Phe Leu Gln Ala
65 70 75 80
Cys Ala Leu Leu Ser Ser Lys Leu Val Leu Arg Ser Gly Met Ile Met
85 90 95
Ser Ala Trp Cys Gln Val Ser Thr Gln Thr Pro Phe Lys Gly His Ile
100 105 110
Arg Phe Tyr Ser Ile Asn Asn Asn Ala Glu Val Leu His Ala Ser Leu
115 120 125
Lys Thr Val
130

<210> 28644
<211> 150
<212> PRT
<213> A.fumigatus

<400> 28644
Ser His Leu Ser Gln Ser Thr Thr His Arg Ser Ile Met Ala Glu Asn
1 5 10 15
Ala Leu Pro Ser Pro Lys Arg Tyr Ile Thr Glu Asn Asp Asp Glu Gly
20 25 30
Asn Ser Phe Phe Ser Asn Thr Leu Ser Glu Ser Leu Pro Val Val Asn
35 40 45
Asp Leu Gly Gly Ala Leu Ala Arg Leu Gly Tyr Thr Thr Asn Arg Pro
50 55 60

```
Pro Val Val Leu Thr Asn Gly Asn Asp Val Lys Leu Tyr Glu Thr Ser
65                  70                  75                  80
Leu Lys Glu Leu Pro Pro Leu Val Thr Pro Gly Gly Gly Ala Asn Val
                85                  90                  95
Trp Tyr Ile Asp Thr Pro Pro Asp Ser Glu Ser Pro Val His Arg Thr
            100                 105                 110
Val Ser Leu Asp Phe Val Phe Gln Ile Ala Gly Glu Ile Glu Leu Ile
        115                 120                 125
Leu Ser Ser Gly Glu Thr Arg Ile Phe Lys Pro Gly Asp Leu Thr Ile
    130                 135                 140
Gln Arg Ser Thr Leu His
145                 150
```

<210> 28645
<211> 240
<212> PRT
<213> A.fumigatus

<400> 28645

```
Ala Asn Pro Glu Ser Pro Ile Ser Glu Thr Gly Ser Ala Ser Ser Thr
1               5                   10                  15
Phe Ala Pro Glu Asp Arg Val Val Leu Gly Tyr Thr Arg Asn Asn Ala
            20                  25                  30
Gly Gly Leu Lys Asp Ala Ile Asp Phe Leu Ile Ser Arg Leu Val Ala
        35                  40                  45
His Gly Leu Asp Ala Thr Thr Val Lys Gly Ala Ile Pro Arg Pro Lys
    50                  55                  60
Ser Asp Ser Phe Glu Glu Ser Leu Pro Phe Phe Asp Ser Lys Leu Leu
65                  70                  75                  80
Gln His Ala Pro Ala Pro Ile Val Thr Asp Ser Pro Thr Arg Pro Ser
                85                  90                  95
Phe Pro Asp Glu Thr Ser Glu Arg Gly Ser Ile Phe Glu Arg Leu Arg
            100                 105                 110
Lys Pro Gly Ser Ile Ser Ser Phe Ser Ser Phe Ile Gly Arg Lys Asn
        115                 120                 125
His Ser Ala Ser Pro Gly Ser Phe Phe Lys His Ala Ser Ser Asn Ala
    130                 135                 140
Ser Lys Ala Ser Leu Val Ser Met Glu Ser Arg Asp Ser Gly Tyr Arg
145                 150                 155                 160
Asn Pro Trp Asn Asp Ser Gly Val Asn Leu Pro Glu Asp Asp Leu Pro
                165                 170                 175
Val Leu Gly Ser Ser His Ser His Ser Asn Ser Thr Asn Gly Trp Pro
            180                 185                 190
Ala Arg Phe Asp Thr Lys Phe Pro Phe Gly Thr Ala Pro Gly Asp Met
        195                 200                 205
Thr Pro Lys His Asp Pro Arg Ala Ser Phe Asp Ser Gly Arg Pro Ser
    210                 215                 220
Thr Ser Asn Ser Thr Ser Gly Tyr Pro Ala Pro Ile Gly Pro Pro Arg
225                 230                 235                 240
```

<210> 28646
<211> 61
<212> PRT
<213> A.fumigatus

<400> 28646

```
Lys Lys Leu Asn Tyr His Val Phe Phe Arg Ala Cys Glu Asp Lys Phe
1               5                  10                  15
Val Ile Leu Gly Gln Ser Glu Ser Gly Met Cys Leu Lys Glu Gln Ala
            20                  25                  30
Ser Gly Ile Ala Trp Val Cys Ile Asn Asp Asp Ile Asn Val Leu Ser
        35                  40                  45
Gln Ile Ser Cys Lys Thr His Leu Arg Val Asp Lys Ala
    50                  55                  60
```

<210> 28647
<211> 594
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (13)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28647

```
Arg Gly Ser Ser Gly Pro Cys Gly Arg Arg Leu Ala Xaa Asn Ile Met
1               5                  10                  15
Lys Lys Met Ala Leu Gln Thr Leu Pro Leu Leu Glu Thr Gln Asn Asn
            20                  25                  30
Ala Ser Ser Tyr Gly Met Ser Glu Ser Leu Phe Thr Ser Leu Lys Asp
        35                  40                  45
Ile Phe Glu Ser Val Val Gly Ser Gln Ser Arg Ile Gly Ile Ile Arg
    50                  55                  60
Pro Gln Gln Phe Leu Glu Val Leu Arg Arg Asp His Glu Met Phe Arg
65                  70                  75                  80
Thr Ala Met His Gln Asp Ala His Glu Phe Leu Asn Leu Leu Leu Asn
                85                  90                  95
Glu Val Val Ala Asn Val Glu Ala Glu Ala Ser Lys Gln Pro Pro Ile
            100                 105                 110
Glu Lys Ser Leu Pro Ala Pro Glu Thr Ala Asp Ser Val Asp Gln Ser
        115                 120                 125
Ser Ser Thr Gly Ser Lys Thr Pro Asn Thr Thr Arg Trp Val His Glu
    130                 135                 140
Leu Phe Glu Gly Leu Leu Thr Ser Glu Thr Gln Cys Leu Thr Cys Glu
145                 150                 155                 160
Lys Val Ser Gln Arg Asp Glu Val Phe Leu Asp Leu Ser Val Asp Leu
                165                 170                 175
Glu Gln His Ser Ser Val Thr Ser Cys Leu Arg Lys Phe Ser Ala Glu
            180                 185                 190
Glu Met Leu Cys Glu Arg Asn Lys Phe His Cys Asp Asn Cys Gly Gly
        195                 200                 205
Leu Gln Glu Ala Glu Lys Arg Met Lys Ile Lys Arg Leu Pro Arg Ile
    210                 215                 220
Leu Ala Leu His Leu Lys Arg Phe Lys Tyr Thr Glu Asp Leu Gln Arg
225                 230                 235                 240
Leu Gln Lys Leu Phe His Arg Val Val Tyr Pro Tyr His Leu Arg Leu
                245                 250                 255
Phe Asn Thr Thr Asp Asp Ala Glu Asp Pro Asp Arg Leu Tyr Glu Leu
            260                 265                 270
Tyr Ala Val Val Val His Ile Gly Gly Gly Pro Tyr His Gly His Tyr
        275                 280                 285
```

```
Val Ala Ile Ile Lys Thr Glu Asp Arg Gly Trp Leu Leu Phe Asp Asp
    290                 295                 300
Glu Met Val Glu Pro Val Asp Lys Asn Tyr Val Lys Asn Phe Phe Gly
305                 310                 315                 320
Asp Lys Pro Gly Leu Ala Cys Ala Tyr Val Leu Phe Tyr Gln Glu Thr
                325                 330                 335
Thr Leu Glu Ala Val Leu Lys Glu Gln Glu Gln Glu Asn Met Asp Ser
            340                 345                 350
Asn Leu Ala Ala Thr Asp Ala Asn Asp Thr Ile Leu Lys Gln Asn Gly
        355                 360                 365
Phe Pro Gln Ser Pro Leu Ala His Val His Ser Ala Ser Gln Ile Pro
    370                 375                 380
Ser His Glu Asp Asn Leu Arg Pro Asn Gly Leu Arg Arg Ala Pro Thr
385                 390                 395                 400
Ala Pro Gln Leu Ser Thr His His Glu His Gly Asp Pro Glu Ser Ala
                405                 410                 415
Pro Phe Ser Pro Leu Ser Pro Leu Ser Pro Leu Ser Gln Thr Pro Pro
            420                 425                 430
Val Pro Pro Val Pro Glu Arg Val Thr Thr Val Ala Thr Pro Pro Lys
        435                 440                 445
Asn Asp Ala Leu Ala Lys Lys Glu Arg Ala Arg Glu Glu Lys Glu Arg
    450                 455                 460
Lys Ala Ala Glu Lys Glu Arg Glu Lys Ala Glu Lys Leu Arg Arg Lys
465                 470                 475                 480
Glu Gln Glu Ala Arg Met Lys Glu Asn Gln Arg Arg Glu Glu Ala Glu
                485                 490                 495
Leu Lys Ala Ala Leu Glu Met Ser Lys Ala Ser Lys Ala Glu Glu Asp
            500                 505                 510
Arg Arg Leu Ser His Glu Asn Gly Lys Glu Lys Gln Gly Gly Ser Leu
        515                 520                 525
Ser Arg Leu Lys Arg Gly Ser Lys Ser Leu Ser His Arg Leu Gly Lys
    530                 535                 540
Asp Lys Glu Thr Arg Ser Val Ser Ser Asp Leu Pro Pro Val Pro Ile
545                 550                 555                 560
Pro Glu His Ser Thr Leu Ser Gln Thr Gly Pro Thr Ser Glu Gln Gln
                565                 570                 575
Gln Gln Gln Gln Gln Gln Gln Gln His Leu His Pro Gly Leu Glu Gly
            580                 585                 590
Gln Arg
```

<210> 28648
<211> 67
<212> PRT
<213> A.fumigatus

```
<400> 28648
Ala Phe Val Asn Cys Ile Gln Lys Gly Lys Ile Thr Asp Thr Leu Gln
1               5                   10                  15
Arg Arg Val Pro Glu Ser Leu Tyr Pro Val Ala Phe Asp Ile Trp Gly
            20                  25                  30
His Ser His Thr Ile Trp His Val Phe Val Thr Phe Ser Ile Gly Ala
        35                  40                  45
His Val Met Gly Leu Leu His Gly Leu Glu Tyr Ser Tyr Ser Gln Ala
    50                  55                  60
Glu Cys Arg
```

65

<210> 28649
<211> 202
<212> PRT
<213> A.fumigatus

<400> 28649
Gln Leu Leu Pro Gly Thr Lys Asn Ser Lys Met Val Phe Asn Gly Leu
1 5 10 15
Leu Arg Phe Arg Ile Ile Arg Ser Lys Gln Val Lys Glu Ile Ala Leu
20 25 30
Gly Gly Gly His Asp Gln Ser Gln Pro Val Glu Lys Gln Thr Leu Leu
35 40 45
Thr Ile Lys Gln Leu Pro Pro Trp Tyr Asp Pro Asn Pro Phe Ile Leu
50 55 60
Ser Gly Tyr Arg Pro Glu Thr Arg Ser Tyr Tyr Arg Cys Phe Ala Ser
65 70 75 80
Trp Leu Tyr Cys His Asn Glu Thr Gly Asn Ile Tyr Ser His Leu Ile
85 90 95
Pro Gly Ile Leu Leu Leu Ser Ser Gln Gly Ile Leu Tyr Glu Tyr Ile
100 105 110
Arg Thr Lys His Glu Asn Leu Ser Asn Phe Asp Trp Ser Ile Val Ser
115 120 125
Leu Gln Leu Val Thr Ala Ser Ile Cys Leu Leu Thr Ser Thr Thr Tyr
130 135 140
His Thr Leu Leu Asn His Ser Ala Ala Val Ala His Arg Trp Leu Gln
145 150 155 160
Leu Asp Tyr Ile Gly Ile Ile Ala Leu Ile Leu Gly Asn Phe Ile Ser
165 170 175
Gly Leu His Phe Gly Phe Tyr Cys Asn Pro Gln Leu Lys His Phe Tyr
180 185 190
Trp Ser Leu Val Ser Thr Leu Leu Val Val
195 200

<210> 28650
<211> 94
<212> PRT
<213> A.fumigatus

<400> 28650
Tyr Gly Cys Leu Gln Ile Leu Ala Phe Ser Ser Ala Thr Ala Val Ala
1 5 10 15
Leu Leu Ser Pro Gln Phe Arg Gly Leu Glu Trp Arg Ser Phe Arg Leu
20 25 30
Ala Ser Phe Val Cys Thr Gly Leu Ser Ala Phe Ala Pro Ile Gly His
35 40 45
Ala Cys Met Leu Trp Gly Val Pro Tyr Leu Trp Lys Ile Gly Val Lys
50 55 60
Tyr Tyr Leu Leu Glu Gly Val Cys Leu Ile Ile Gly Cys Tyr Phe Trp
65 70 75 80
Glu Val Gly Phe Arg Gln Leu Tyr Pro Glu Gly Glu Asp Tyr
85 90

<210> 28651
<211> 166

<212> PRT
<213> A.fumigatus

<400> 28651
Glu Ser Ser Lys Ser Ala Arg Pro Thr Thr Gly Ser Val Lys Thr Ser
1 5 10 15
Ser Thr Glu Ala Arg Phe Ser Arg Ser Thr Val Thr Pro Ala Arg Tyr
20 25 30
Val His Thr Tyr Arg Ser Pro Pro Ala Lys Val Asn Phe Leu Gln Asn
35 40 45
Leu Val Glu Trp Thr Tyr Val Gly Glu Leu Leu Ser Arg Gln Ser Ser
50 55 60
Gly Asp Leu Gly Pro Asn Arg Val Val Glu Arg Pro Lys Val Leu Tyr
65 70 75 80
Asn Glu Ala Thr Arg Lys Tyr Val Met Trp Met His Ile Asp Asp Ser
85 90 95
Ser Tyr Lys Glu Ala Lys Thr Gly Val Ala Thr Ser Ser Ser Val Cys
100 105 110
Gly Lys Tyr Thr Tyr Leu Tyr Val Trp Leu Phe Asp Cys Ala Ser Ala
115 120 125
Val His Asn Leu Thr Arg Trp Leu Ala Gly Arg Phe Ser Leu Trp Gly
130 135 140
Ser Ser Arg Ala Ile Trp Val Cys Ser Arg Met Met Thr Gly Pro Arg
145 150 155 160
Ile Tyr Ser Arg Arg Met
165

<210> 28652
<211> 85
<212> PRT
<213> A.fumigatus

<400> 28652
Pro Arg Leu Ala Val Tyr Ile Pro Met Val Asn Asp Leu Gln Asp Gly
1 5 10 15
Thr Ala Leu Ser Cys Ile Ile Val Glu Gly Ser Leu Ala Glu Tyr Gly
20 25 30
Phe Ile Met Leu Leu Ile Ser Arg Leu Val Ala Ala Leu Ala Leu Ala
35 40 45
Gly Thr Ala Ile Ala Ser Leu Gln Ile Val Ser Ser Gln Ser Pro Asp
50 55 60
Val Gly Tyr Ile Ala Asn Met Thr Gly Leu Asp Ser Arg Arg Asp Met
65 70 75 80
Asp Cys Glu Trp Tyr
85

<210> 28653
<211> 187
<212> PRT
<213> A.fumigatus

<400> 28653
Ser Gln Tyr Thr Met Ala His Thr His Ala Ser Ser Lys Lys Arg Arg
1 5 10 15
Arg Glu Pro Val Thr Ile Asp Thr Lys Leu Val Glu Ile Tyr Glu Asp
20 25 30

```
Leu Ala Asn Glu Lys Asp Glu Ile Arg Leu Lys Ala Ala Gln Ala Leu
        35                  40                  45
Val Ser Gln Phe Thr Pro Asp Lys Lys Pro Thr Asp Glu Gln Met Arg
    50                  55                  60
Lys Ala Leu Gln Arg Leu Phe Arg Gly Leu Cys Ser Ser Arg Lys Ala
65                  70                  75                  80
Ala Arg Ile Gly Phe Ser Ile Ala Leu Thr Glu Ile Leu Ala Gln Ile
                85                  90                  95
Phe Ala Ala Gln Arg Glu Glu Ser Glu Ile Thr Ile Pro Ala Val Val
            100                 105                 110
Gly Ile Trp Glu Ala Gln Ser Asn Ala Ser Gly Ser Glu Thr Gly Gln
        115                 120                 125
Val Lys Leu Gly Leu Asn Ser Ala Cys Leu Lys Thr Ala Leu Leu Thr
    130                 135                 140
Val Val Ser Gly Thr Lys Arg Ser Pro Leu Trp Pro Ala Val Trp Ser
145                 150                 155                 160
Gly Ser Ser Cys Gln Val Val Tyr Ser Val Gln Gly Arg Gly Ala Pro
                165                 170                 175
Gly Arg Val Asp Gln Ala Phe Gly Phe Gly Val
            180                 185
```

<210> 28654
<211> 133
<212> PRT
<213> A.fumigatus

<400> 28654

```
Gln Leu Ser Gln Glu Gln Arg Asp His His Phe Gly Arg Leu Phe Gly
1               5                   10                  15
Ala Glu Ala Leu Val Lys Ser Ser Ile Leu Phe Lys Gly Ala Val Pro
            20                  25                  30
Pro Ala Glu Trp Thr Lys Leu Leu Asp Leu Val Phe Asp Leu Ala Lys
        35                  40                  45
Lys Lys Pro Trp Ile Arg Glu Asp Cys Gly Trp Ile Ile Tyr Arg Cys
    50                  55                  60
Val Phe Asp Leu Ala Ser Gln Lys Ala Gly Ala Lys Tyr Val Glu Ile
65                  70                  75                  80
Ala Leu Glu Arg Leu Cys Ala Asn Asp Leu Ala Arg Thr Pro Glu Gly
                85                  90                  95
Val Ser Ile Trp Leu Ala Ala Gln Glu Ala Tyr Pro Ile Ala Glu Phe
            100                 105                 110
Pro Gly Gln Val Trp Glu His Asp Asp Pro Leu Asp Ser Pro Gly Glu
        115                 120                 125
Glu Pro Ser Trp Ala
    130
```

<210> 28655
<211> 215
<212> PRT
<213> A.fumigatus

<400> 28655

```
Asp Val Thr Asn Ser Ala Asp Lys Thr Gly Ile Glu Leu Ala Tyr Val
1               5                   10                  15
Ile Met Gly Ser Ile Gly Asn Asn Ile Asp Ala Ile Gln Arg Asp Leu
            20                  25                  30
```

```
Asp Glu Val Val Asp Ala Thr Lys Ala Tyr Lys Thr Ser Asp Asn Asp
        35                  40                  45
Tyr Ser Ala Arg Tyr Asp Leu Met Val Lys Ala Thr Arg Leu Leu Gln
    50                  55                  60
Thr Ile Arg Gly Pro Val Asp Met Leu Phe Ala Asn Phe Glu Asn Val
65                  70                  75                  80
His Thr Leu Pro Cys Ala Leu Asp Thr Arg Glu Thr Leu Thr Lys Ile
                85                  90                  95
Asp Gly Gln His Gly Cys Pro Pro His Pro Ala Arg Ser Arg Arg Leu
            100                 105                 110
Pro Arg Tyr Ala His Gly Arg Thr Lys His Leu Arg Gln Arg His Ile
        115                 120                 125
Arg Glu Asp Trp Asn Gly Gln Gly Ala Asp Trp Tyr Ile Ser Ser Val
    130                 135                 140
Thr Pro Arg Asn Pro Gln Asn Glu Lys Lys Arg Pro Ala Asp Ala Thr
145                 150                 155                 160
Val Arg Leu Met Arg Ala Leu Thr Pro Leu Gly Pro Phe Arg Glu Thr
                165                 170                 175
Gly Glu Glu Glu Tyr Ala His Thr Pro Phe Ser Glu Ile Tyr Met Val
            180                 185                 190
Pro Gln Met Asn Ala Ile Phe Lys Val Leu Tyr Val Cys Tyr Pro Leu
        195                 200                 205
Asp Leu Thr Trp Asp Arg Ser
    210                 215
```

<210> 28656
<211> 150
<212> PRT
<213> A.fumigatus

```
<400> 28656
Arg Asp Ser Pro Thr Asp Ala Arg Pro His Pro Pro Arg Ser Leu Pro
1               5                   10                  15
Arg Asn Arg Arg Gly Gly Ile Arg Pro His Pro Val Leu Arg Asn Leu
            20                  25                  30
His Gly Ala Ala Asp Glu Arg His Leu Gln Gly Ala Val Arg Leu Leu
        35                  40                  45
Pro Ala Arg Ser His Leu Gly Ser Ile Leu Met Phe Asp Arg Val Asp
    50                  55                  60
Glu Tyr Cys Pro Pro Met Leu Arg Asn His Glu Phe Leu Ala Arg Asn
65                  70                  75                  80
Asn Trp Lys Asn Thr Met Thr Leu Thr Asp Asn Pro Tyr Thr His Val
                85                  90                  95
His Asn Cys Thr Gly Gln Thr Met Phe Asp Tyr Ile Ser Gln Phe Pro
            100                 105                 110
Glu Arg Leu Ser Arg Leu Asn Asp Ala Met Met Ala Gln Glu Ser Gly
        115                 120                 125
Leu Val Leu His Gly Val Tyr Pro Phe Thr Gln Glu Ala Gly Gly Leu
    130                 135                 140
Trp Pro Ala Thr Thr Glu
145                 150
```

<210> 28657
<211> 62
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (60)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28657
Cys Arg Gly Thr Asp Arg Asp Arg His Arg Arg Leu Ser Ser Tyr Ala
1 5 10 15
Thr Val Lys Gly Gln Met Ile Val Met Arg Leu Lys Glu Lys Gln Asn
20 25 30
Lys Thr Val Arg Val Pro Gln Asp Thr Met Ile Ser Val Asn Leu Thr
35 40 45
Ala Leu Ser Gly Ile Val Ala Gly Gly Leu Ile Xaa Thr Ser
50 55 60

<210> 28658
<211> 76
<212> PRT
<213> A.fumigatus

<400> 28658
Ala Thr Leu Arg Ser Ala Ala Arg Glu Lys Arg Gly Lys Gly Arg Leu
1 5 10 15
Pro Leu Thr Ala Ala Arg Glu Asn Asp Gln Ile Thr Val Met Thr Ser
20 25 30
Tyr Arg Lys Thr Arg Gly Glu Met Leu Gly Pro Thr Ala Ala Thr Asn
35 40 45
Thr Leu Asn Gln Ile Lys Pro Asp Val Asn Ile Ala Gln Ala Lys Pro
50 55 60
Arg Ser Arg Met Leu Thr Ala Gln Asn Thr Ser Val
65 70 75

<210> 28659
<211> 84
<212> PRT
<213> A.fumigatus

<400> 28659
His Trp Gln Gly Ser Tyr Asn Pro Pro Ala Glu Ala Trp Thr Glu Leu
1 5 10 15
Asn Val Asp Ala Glu Ala Glu Leu Ala Asp Met Val His Gln Ile Gly
20 25 30
Glu Lys Arg Ile Glu Met Ser Leu Ile Leu Gly Leu Leu Lys Ala Ala
35 40 45
Val Phe Ser Gly Lys Tyr Pro Ser Glu Tyr Lys Thr Val Asp Asn Glu
50 55 60
Leu Leu Gly Leu Gly Ile Met Gly Glu Glu Glu Leu Glu Ala Met Phe
65 70 75 80
Gly Gly Glu Met

<210> 28660
<211> 305
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (46)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28660
Trp Arg Gln Ser Gly Ala Gln Asn Ile Arg Arg Cys Ala Trp Gly Val
1 5 10 15
Pro Asp Val Lys Ser Thr Glu Ser Cys His Ser Leu Ala Glu Tyr Cys
20 25 30
Gln Thr Lys Ser Cys Gly Arg Pro Tyr Lys Gln Gly Thr Xaa Gly Ile
35 40 45
Gly Ile Tyr Ser Asn Ala Leu Glu Asn Phe Ile Ser Thr Glu Tyr Glu
50 55 60
Ile Ile Ala Gln Ile Phe Thr Gly Asp Gln Arg Gly Leu Ala Leu Gln
65 70 75 80
Thr Thr Phe Arg Ser Ala Leu Ala Glu Tyr Ser Lys Thr Leu Arg Glu
85 90 95
Leu Asn Glu Tyr Ile Lys Ala Asn Leu Met Thr Asp Cys Phe Leu Ala
100 105 110
Phe Glu Ile Ile Glu Ile Val Thr Ala Met Ser Tyr Arg Val Asp Ser
115 120 125
Arg Thr Gly Glu Leu Lys Ser Leu Phe Ile Glu Ala Leu Arg Pro Val
130 135 140
Arg Glu Thr Ala Lys Ser Ser Leu Ser Glu Leu Leu Glu Glu Thr Lys
145 150 155 160
Arg Lys Ala Ala Ser Ile Pro Val Leu Pro Pro Asp Gly Gly Ser Val
165 170 175
Pro Leu Val Asn Glu Val Met Ser Ser Leu Thr Thr Leu Thr Gly Tyr
180 185 190
Ser Gly Pro Leu Ala Ser Ile Leu Thr Ser Leu Gly Asp Gly Asn Trp
195 200 205
Arg Ser Thr Ala Asn Ala Ser Gly Thr Ala Pro Leu Asp Val Ser Pro
210 215 220
Asp Ser Ser Ala Leu Leu Ser His Phe Ile Leu Asp Met Ile Glu Ala
225 230 235 240
Leu Met Ser Ser Leu Glu Ala Arg Gly Arg Ala Leu His Arg Ser Lys
245 250 255
Ala Val Gln Gly Leu Phe Leu Ser Asn Val Leu Cys Ile Val Asp Arg
260 265 270
Ala Ile Arg Gln Ser Pro Glu Leu Ala Arg His Leu Gly Thr Pro Asp
275 280 285
Ser Ile Ala Arg Ile Asp Thr Phe Arg Glu Ala Gly His Val His Phe
290 295 300
Ser
305

<210> 28661
<211> 107
<212> PRT
<213> A.fumigatus

<400> 28661
Thr Ser Arg Ala Gly Ala Arg Pro Ala Ser Gly Gly Ile Val Asp Ser
1 5 10 15

```
Ser Ala Ile Val Lys Ser Leu Ser Ser Lys Asp Lys Asp Ala Ile Lys
            20                  25                  30
Asp Lys Phe Lys Ala Phe Asn Ala Ser Phe Asp Glu Leu Val Asn Arg
        35                  40                  45
His Lys Ala Leu Tyr Met Glu Arg Glu Val Arg Gly Val Leu Ala Arg
    50                  55                  60
Glu Val Gln Ala Val Leu Glu Pro Leu Tyr Ala Arg Phe Trp Asp Arg
65                  70                  75                  80
Tyr His Glu Ile Asp Lys Gly Arg Gly Lys Tyr Val Lys Tyr Asp Lys
                85                  90                  95
Gly Ser Leu Ser Ala Gln Leu Ala Ala Leu Ala
            100                 105

<210> 28662
<211> 318
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (288)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28662
Thr Val Cys Tyr Leu Tyr Arg Met Ala Gly Cys Ala Lys Ile Leu Val
1               5                   10                  15
Ile Gly Ala Gly Glu Leu Gly Asn Gln Val Leu His Ala Leu Ala Gln
            20                  25                  30
His Pro Asn Arg Gly Gly Ala Thr Ile Ala Val Leu Leu Arg Pro Ser
        35                  40                  45
Ser Ile Ala Ser Thr His Pro Asp Lys Val Lys Glu Leu Glu Glu Leu
    50                  55                  60
Arg Asn Leu Asn Val Gln Leu Ile Pro Gly Asp Ile Ala Lys Asp Ser
65                  70                  75                  80
Glu Glu Gln Leu Ser Asp Ile Phe Gly Glu Tyr Gly Thr Ile Ile Gly
                85                  90                  95
Cys Thr Gly Phe Ala Ala Gly Ser Gly Thr Gln Leu Lys Leu Thr Arg
            100                 105                 110
Ala Val Leu Ala Ala Gln Val Pro Arg Tyr Val Pro Trp Gln Phe Gly
        115                 120                 125
Val Asp Tyr Asp Ile Ile Gly Arg Gly Ser Ala Gln Asp Leu Phe Asp
    130                 135                 140
Glu Gln Leu Asp Val Arg Asp Leu Leu Arg Ser Gln Asn Arg Thr Lys
145                 150                 155                 160
Trp Ala Ile Ile Ser Thr Gly Met Phe Thr Ser Phe Leu Phe Glu Pro
                165                 170                 175
Trp Phe Gly Val Val Asp Phe Lys Gly Asp Thr Val Thr Ala Leu Gly
            180                 185                 190
Ser Leu Asp Thr Lys Val Thr Val Thr Ala Pro Glu Asp Ile Gly Arg
        195                 200                 205
Ile Thr Ala Glu Ala Val Leu Gly Ser Arg Ala Asp Ser Val Phe Gly
    210                 215                 220
Asp Lys Pro Ile Tyr Val Ala Gly Asp Thr Leu Thr Tyr Glu Gln Leu
225                 230                 235                 240
Gly Gln Leu Val Glu Arg Ile Thr Gly Arg Lys Phe Thr Arg His Val
                245                 250                 255
```

```
Arg Thr Val Glu Ala Ala Arg Ala Asp Leu Ala Arg Asp Pro Gly Asn
            260                 265                 270
Thr Leu Phe Lys Tyr Gln Ile Val Phe Gly Glu Gly Arg Gly Val Xaa
        275                 280                 285
Trp Asp Leu Ser Glu Thr Trp Asn Cys Gln Val Gly Ile Arg Ala Leu
    290                 295                 300
Thr Ala Glu Glu Trp Ala Arg Arg Asn Leu Gln Asn Ile Met
305                 310                 315

<210> 28663
<211> 456
<212> PRT
<213> A.fumigatus

<400> 28663
Ser Cys Cys Phe Arg His Gln Phe His Leu Val Pro Phe Leu Pro Leu
1               5                   10                  15
Arg Leu Leu Pro Lys Leu Pro Arg Pro Ile Arg Gln Tyr Arg Pro Leu
            20                  25                  30
Arg Leu Arg Ser Glu Ile Ala Arg Arg Tyr Glu Glu Arg Leu Lys Ala
        35                  40                  45
Arg Pro Thr Ile Val Glu Arg Ser Ser Phe Ile Ala Leu Phe Val Ser
    50                  55                  60
Pro Phe Thr Leu Ser His Leu Lys Ser Pro His Glu Ala Pro Thr Tyr
65                  70                  75                  80
Pro Ala Leu Pro Ala Ser Ala Val Leu Thr Arg Met Leu Ile Pro Leu
                85                  90                  95
Arg Tyr Arg Arg Arg Ile Thr Leu Ile Ser Ala Val Leu Gly Leu Phe
            100                 105                 110
Leu Ile Tyr His Phe Ile Ser Ile Arg Pro Asn Leu Pro Arg Pro Leu
        115                 120                 125
Ser Thr Val Arg Ser Asn Leu Gln Gln Gln Arg Gln Gln Pro Lys Gln
    130                 135                 140
Lys Pro Asp Thr His Ser Asp Cys Pro Leu Leu Pro Gly Ile Glu Asp
145                 150                 155                 160
Val Leu Val Ile Met Lys Thr Gly Val Thr Glu Ala Leu Asp Lys Val
                165                 170                 175
Pro Val His Phe Glu Thr Thr Leu Arg Cys Ile Pro Asn Tyr Val Ile
            180                 185                 190
Phe Ser Asp Phe Glu Glu Glu Ile Ala Gly Val Arg Ile His Asp Ala
        195                 200                 205
Leu Arg Asn Met Asp Pro Glu Val Lys Arg Thr Val Pro Asp Phe Asp
    210                 215                 220
Leu Tyr Asn Arg Leu Gln Lys Leu Gly Arg Lys Gly Leu Gly Thr Gln
225                 230                 235                 240
Asp Phe Ala Asp Glu Ala Asn Ser Ala Ile Gly Lys Pro Asn Asn Pro
                245                 250                 255
Gly Trp Lys Leu Asp Lys Trp Lys Phe Leu Pro Met Val Gln Glu Thr
            260                 265                 270
Leu Arg His Lys Asn Asp Ala Lys Trp Tyr Val Phe Met Glu Ala Asp
        275                 280                 285
Thr Tyr Phe Ala Trp Pro Thr Leu Leu Glu Trp Leu Ser Asn Tyr Asp
    290                 295                 300
Pro Gln Lys Pro Leu Tyr Ile Gly Thr Glu Thr Gln Ile Ala Asp Val
305                 310                 315                 320
Ile Phe Ala His Gly Gly Ser Gly Phe Ile Ile Ser Arg Pro Ala Leu
```

```
                325                 330                 335
Gln Leu Ala Ala Asp Glu Tyr Ala Ala Arg Arg Val Glu Leu Asp Met
            340                 345                 350
Phe Thr Asp Glu His Trp Ala Gly Asp Cys Val Leu Gly Lys Val Leu
        355                 360                 365
Leu Asp Ala Gly Val Pro Leu Thr Tyr Ser Trp Pro Ile Leu Gln Asn
    370                 375                 380
Ser Asn Ile Arg Glu Leu Asp Pro Phe Thr Ala Gly Phe Tyr Arg Gln
385                 390                 395                 400
Pro Trp Cys Phe Pro Thr Val Ala Phe His His Leu Ser Ser Gln Asp
                405                 410                 415
Ile Arg Asn Leu Trp Glu Phe Glu Gln Arg Arg Arg Lys Val Arg Ser
            420                 425                 430
Ser Ser Ala Leu Gln Cys Ser Lys His Thr Cys Glu Gln Leu Ile Asn
        435                 440                 445
Gly Phe Ser Ser Pro Pro Asn Thr
    450                 455
```

<210> 28664
<211> 158
<212> PRT
<213> A.fumigatus

<400> 28664

```
Asn Ala Gln Phe Pro Thr Leu Thr Ser Thr Ile Asp Cys Arg Ser Ser
1               5                   10                  15
Ala Glu Arg Val Trp Glu Arg Arg Thr Ser Pro Thr Arg Pro Thr Gln
            20                  25                  30
Pro Leu Gly Asn Arg Thr Thr Gln Ala Gly Asn Trp Thr Ser Gly Asn
        35                  40                  45
Ser Ser Pro Trp Phe Arg Arg His Tyr Ala Thr Arg Met Thr Gln Ser
    50                  55                  60
Gly Thr Ser Ser Trp Lys Pro Ile Pro Thr Ser Pro Gly Pro Arg Cys
65                  70                  75                  80
Trp Asn Gly Cys Gln Thr Thr Thr Pro Arg Ser Arg Ser Ile Ser Ala
                85                  90                  95
Pro Lys Pro Arg Ser Arg Thr Ser Ser Ser Arg Thr Ala Asp Pro Ala
            100                 105                 110
Ser Ser Ser Pro Asp Leu Pro Cys Ser Ser Gln Arg Thr Ser Thr Gln
        115                 120                 125
Pro Ala Glu Ser Ser Ser Thr Cys Ser Pro Thr Ser Thr Gly Pro Ala
    130                 135                 140
Thr Ala Ser Ser Glu Arg Ser Cys Trp Met Pro Gly Ser His
145                 150                 155
```

<210> 28665
<211> 63
<212> PRT
<213> A.fumigatus

<400> 28665

```
Asp Arg Val Lys Gly Glu Thr Lys Ser Ala Met Lys Asp Glu Arg Ser
1               5                   10                  15
Thr Ile Val Gly Leu Ala Phe Ser Leu Ser Ser Tyr Leu Leu Ala Ile
            20                  25                  30
Ser Asp Leu Ser Leu Ser Gly Arg Tyr Cys Arg Ile Gly Arg Gly Ser
```

```
        35                  40                  45
Leu Gly Arg Arg Arg Arg Gly Arg Lys Gly Thr Arg Trp Asn Trp
    50                  55                  60
```

<210> 28666
<211> 119
<212> PRT
<213> A.fumigatus

<400> 28666

```
Leu Ile Leu Ala Glu Tyr Asp Asp Asp Thr Thr Ile Ile Pro Arg Ser
1               5                   10                  15
Thr Ser Val Ile Ala Arg Arg Leu Pro Ala Ser Arg Pro Gly Lys Gly
            20                  25                  30
Gly Ala Ala Arg Tyr Val Ser Gly Lys Met Pro Val Ser Ala Arg Gly
        35                  40                  45
Ala Pro Arg Asn Asp Ala Thr Met Ser Thr Arg Ala Ile Ser Asn Thr
    50                  55                  60
Ser Ser Thr Val Ser Asn Ser Val Leu Glu Leu Asn Asn Ala Gln Thr
65                  70                  75                  80
Glu Glu Glu Lys Ile Asn Ala Leu Phe Asn Leu Gln Ala Ser Gln Trp
                85                  90                  95
Lys Glu Gln Gln Gln Glu Met Ala Lys Tyr Ala Tyr Thr Cys Tyr Met
            100                 105                 110
Trp Met Tyr Trp Met Tyr Cys
        115
```

<210> 28667
<211> 173
<212> PRT
<213> A.fumigatus

<400> 28667

```
Leu His Ser Gln Thr His Leu Leu Asp Ala Gln Phe Asn Thr Met Ser
1               5                   10                  15
Ser Ser Val His Phe Lys Phe Lys Ser Gln Lys Glu Pro Ser Arg Val
            20                  25                  30
Thr Phe Asp Gly Thr Gly Ile Ser Val Phe Glu Leu Lys Arg Glu Ile
        35                  40                  45
Ile Asn Gln Ser Arg Leu Gly Asp Gly Ser Asp Phe Glu Leu Ser Ile
    50                  55                  60
Tyr Asn Glu Asp Thr Gly Glu Gly Lys Leu Cys Gly Phe Val Leu Ile
65                  70                  75                  80
Thr Phe Leu Arg Ala Gly Val Ser Arg Lys Lys Pro Glu Asn Ser Glu
                85                  90                  95
Lys Gly Lys Pro Glu Ser Val Ile Val Asp Leu Phe Leu Gln Ser Met
            100                 105                 110
Met Met Ile Pro Gln Ser Phe Pro Val Pro Leu Leu Leu Ser Leu Gly
        115                 120                 125
Gly Cys Leu Pro Leu Gly Leu Ala Lys Ala Ala Leu Leu Val Met Tyr
    130                 135                 140
Leu Gly Lys Cys Pro Leu Ala Leu Ala Val Arg Leu Val Met Met Leu
145                 150                 155                 160
Gln Cys Arg Pro Glu Leu Tyr Gln Ile Leu Ala Ala Gln
                165                 170
```

<210> 28668
<211> 134
<212> PRT
<213> A.fumigatus

<400> 28668
Pro Ile Thr Pro Leu Pro Met Asp Ala Thr Met Pro Pro Met Ser Ala
1 5 10 15
Pro Pro Thr Ser Cys Pro Ala Leu Asp Asn Met Phe Ile Arg Ala Cys
20 25 30
Pro Asp Ala Leu Cys Ser Gly Gly Val Ser Asp Ser Ile Met Tyr Leu
35 40 45
Arg Gly Ala Pro Met Thr Val Met Ser Pro Arg Ala Met Ser Thr Ser
50 55 60
Ala Ser Met Lys Arg Gly Val Val Asp Glu Arg Arg Ala Met Met Val
65 70 75 80
His Pro Thr Ile Arg Ile Arg Leu Pro Glu Ile Ile Thr Thr Leu Glu
85 90 95
Pro Thr Leu Ser Ser Arg Thr Pro Thr Met Gly Ala Glu Arg Ala Met
100 105 110
Val Val Thr Lys Gly Arg Arg Leu Lys Leu Ala Met Asp Ser Asp Ser
115 120 125
Glu Arg Ala Arg Arg Ala
130

<210> 28669
<211> 133
<212> PRT
<213> A.fumigatus

<400> 28669
Leu Gly Met Asn Thr Ile Ala Ala Trp Asp Arg Pro Leu Pro Ala Glu
1 5 10 15
Ile Ala Val Ala Met Arg Thr Ser Arg Leu Ala Ser Arg Ser Thr Cys
20 25 30
Thr Thr Gly Ser Gly Ala Ala Leu Ser Thr Leu Gln Ser Met Gly Val
35 40 45
Ser Ala Ala Ala Gln Met Arg Ser Thr Thr Thr Met Gly Leu Ile Lys
50 55 60
Leu Pro Val Arg Ser Val Val Ser Ile Trp Phe Ile Pro Thr Ala Arg
65 70 75 80
Glu Ala His Asn Asp Gly Lys Lys Arg Val Pro Leu Ala Ser Lys Ser
85 90 95
Pro Ser Ser Val Leu Ala Val Thr Gly Asn Ile Lys Lys Ser Pro Asp
100 105 110
Asn Tyr Arg Gly Arg Ile Trp Asp Val Asp Glu Glu Glu Pro Leu Pro
115 120 125
Thr Ile Gly Glu Val
130

<210> 28670
<211> 284
<212> PRT
<213> A.fumigatus

<400> 28670

```
Leu Ser Gly Asp Phe Phe Met Leu Pro Val Thr Ala Lys Thr Glu Asp
1               5                  10                  15
Gly Asp Phe Asp Ala Arg Gly Thr Leu Phe Leu Pro Ser Leu Trp Ala
            20                  25                  30
Ser Leu Ala Val Gly Ile Asn Gln Ile Asp Thr Thr Asp Leu Thr Gly
        35                  40                  45
Ser Leu Met Ser Pro Ile Val Val Val Leu Leu Ile Trp Ala Ala Ala
    50                  55                  60
Leu Thr Pro Ile Leu Trp Arg Val Glu Arg Ala Ala Pro Asp Pro Val
65                  70                  75                  80
Val Gln Val Asp Leu Leu Ala Ser Arg Glu Val Arg Ile Ala Thr Ala
                85                  90                  95
Ile Ser Ala Gly Asn Gly Leu Ser Gln Ala Ala Ile Val Phe Ile Pro
            100                 105                 110
Ser Tyr Ala Leu Leu Ala Leu Ser Leu Ser Glu Ser Met Ala Ser Phe
        115                 120                 125
Ser Leu Leu Pro Phe Val Thr Thr Met Ala Leu Ser Ala Pro Ile Val
    130                 135                 140
Gly Val Leu Leu Asp Arg Val Gly Ser Arg Val Val Met Ile Ser Gly
145                 150                 155                 160
Ser Leu Ile Leu Met Val Gly Cys Thr Ile Met Ala Leu Leu Ser Ser
                165                 170                 175
Thr Thr Pro Leu Phe Ile Leu Ala Glu Val Leu Met Ala Leu Gly Leu
            180                 185                 190
Ile Thr Val Ile Gly Ala Pro Leu Arg Tyr Ile Met Leu Ser Glu Thr
        195                 200                 205
Pro Pro Glu His Arg Ala Ser Gly Gln Ala Leu Ile Asn Ile Leu Ser
    210                 215                 220
Ser Ala Gly Gln Leu Val Gly Gly Ala Leu Ile Gly Gly Ile Val Ala
225                 230                 235                 240
Ser Met Gly Ser Gly Val Met Gly Tyr Arg Phe Ser Phe Leu Phe Leu
                245                 250                 255
Val Ala Val Ala Phe Thr Leu Phe Leu Leu Ser Thr Gly Leu Lys Gly
            260                 265                 270
Arg Lys Glu Gln Leu Glu Thr Met Lys Arg His Ile
        275                 280
```

<210> 28671
<211> 484
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (445)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28671

```
Phe Gly Asn Leu Gly Ser Glu Gly Ala Ala Lys Pro Lys Lys Ala Gln
1               5                  10                  15
Asp Asn Leu Lys Thr Asn Thr Phe Cys Val Pro Asp Asp Asp Asp Glu
            20                  25                  30
Val Ile Glu Ile Val Asp Glu Ala Pro Ile Asn Pro Glu Ser Thr Gly
        35                  40                  45
Ser Tyr Val Pro Glu Asp Pro Asp Thr Ser Ser Asp Ser Glu His His
    50                  55                  60
```

```
Gln Ser Ala Gly Asn Ser Thr Pro Val Thr Ser Pro Leu Asn Lys Asp
65                  70                  75                  80
Val Ser Val Glu Ser Val Glu Asn Lys Ser Ser Ala Pro Phe Ser Glu
                85                  90                  95
Leu Gln Ser His Val Ala Arg Ser Gln Gln Ser Pro Val Asp Leu Glu
            100                 105                 110
Glu Glu Asn Asn Glu His Arg Leu Val Thr Pro Arg Met Thr Pro Pro
        115                 120                 125
Ser Val Glu Asp Thr Tyr Glu Gly Ser Tyr Thr Gly Ile Ala Asp Asp
    130                 135                 140
Met Gly Asp Ile Asp Tyr Ala Pro Asp His Glu Pro Ala Pro Thr Gly
145                 150                 155                 160
Tyr Ser Arg Gly Asp Ser Thr Thr Gly Ser Asp Gly Trp Glu Glu Ser
                165                 170                 175
Glu Glu Gln Asp Glu Ser Asp Asp Asp Leu Met Pro His Ser Ser Leu
            180                 185                 190
Ser Val Asp Thr Asp Glu Phe Gly Arg Glu Ala Asp Ala Met Ala Ser
        195                 200                 205
Asn Asn Pro Ser Thr Ser Val Ile Tyr Glu Ser Leu Val Ala Val Asp
    210                 215                 220
Asn Gly Ala Arg Ser Glu Glu Glu Glu Arg Ser Gln Pro Thr Gln Asn
225                 230                 235                 240
Asp Ala Pro Cys Ser Lys Ala Val Thr Ser Gly Glu Arg Val Cys Leu
                245                 250                 255
Gln Thr Ala Ala Pro Asn Leu Asn Asn Trp Lys Ser Thr Ala Arg Glu
            260                 265                 270
Asn Ser Thr Glu Ser Ser Pro Leu Lys Phe Gly Trp Ser Ser Ile Pro
        275                 280                 285
Arg Pro Val Arg Val Ser Asn Leu Val Ser Arg Ser Ser Gly Arg Ser
    290                 295                 300
Leu Asp His Ser Leu Ala Cys Phe His Asn Thr Thr Ser Ser Thr Ser
305                 310                 315                 320
Gly Asp Lys Cys Trp Pro Asn Phe Gly His His Arg Ile Asn Pro Leu
                325                 330                 335
Pro Gln Arg Glu Ser Asn Gly Asn Ala Ile Ser Gln Asn His Arg Thr
            340                 345                 350
Pro Asp Ala Pro Tyr Ser Asp Gly Pro Phe Val Asn Ser His Thr His
        355                 360                 365
Thr Ala Phe Asp Glu Ser Asp Lys Gly Asn Thr Val His Ser Ala Ala
    370                 375                 380
Ser Thr Asn Ile Ser Gln Ser Ser Arg Glu Gln His Pro Asn Glu Glu
385                 390                 395                 400
Ser Val Glu Thr Trp Asp Asp Ser Ser Arg Val Glu Leu Gln Ser Lys
                405                 410                 415
Asn His Ser Val Ser Ser Met Ala Gly Ser Gly Val Thr Arg Asp Ser
            420                 425                 430
Asn Thr Arg His Ser Met Ala Asp Ile Gly Asp Thr Xaa Glu Trp Thr
        435                 440                 445
Ala Thr Ser Gly Phe Lys Leu Ser Arg Lys Arg Lys Val Pro Asp Met
    450                 455                 460
Glu Leu Asp Ala Glu Glu Leu Val Gln Ala Leu Arg Ala Thr Ser Arg
465                 470                 475                 480
Cys Asn Cys Gln
```

<210> 28672

<211> 244
<212> PRT
<213> A.fumigatus

<400> 28672
Leu Thr Ala Gly Thr Lys Gly Leu Leu His Leu Glu Val Ala Phe Glu
1 5 10 15
Asn Gly Leu Cys Lys Ile Arg Pro Thr Trp His Ser Glu Asn Met Leu
20 25 30
Pro Phe Thr Val Thr Arg Tyr Ala Arg Thr Leu Ile Asp Thr Val Arg
35 40 45
Leu Cys Ile Ser Asn Cys Asp Ala Ala Ile Gln Asp Cys Leu Arg Pro
50 55 60
Thr Ala Tyr Asp Leu Asp Glu Ile Trp Arg Trp Asn His Asn Leu Pro
65 70 75 80
Pro Thr Tyr Asn Phe Cys Met His Glu Ile Ile Ser Asp Gln Ala Gln
85 90 95
Lys Phe Pro Asp Lys Glu Ala Ile Ala Ser Trp Asp Gly Ser Leu Thr
100 105 110
Tyr Arg Gln Ile Asp Gln Tyr Ser Ser Phe Val Ala Arg Ser Leu Ile
115 120 125
Gly Met Gly Val Gly Leu His Asp Val Leu Pro Val Cys Phe Glu Lys
130 135 140
Ser Arg Trp Thr Ile Val Ala Val Leu Ala Val Met Lys Ala Gly Ala
145 150 155 160
Thr Phe Val Leu Met Asp Pro Thr Leu Pro Leu Ala Arg Leu Gln Asn
165 170 175
Met Ala Gln Gln Val Gly Ala Lys Met Met Val Ser Ser Arg Gly Gln
180 185 190
Tyr Asn Leu Ala Thr Glu Ile Ile Pro Asn Ala Asn Val Leu Val Val
195 200 205
Glu Glu Asn Thr Phe Ser Ser Leu Ser Ala Glu Gln Asn Gly Glu Pro
210 215 220
Leu Pro Thr Val Val Phe Thr Thr Gly Leu Glu Gly Ser Glu Ala Gly
225 230 235 240
Ala Ile Pro Arg

<210> 28673
<211> 538
<212> PRT
<213> A.fumigatus

<400> 28673
Asn Leu Glu Ala Ala Cys Gly Leu Leu Gln His Val Leu Gly Trp Lys
1 5 10 15
Ser Leu Leu Ala Gly Ile Thr Thr Leu Ala Leu Leu Met Leu Leu Asn
20 25 30
His Ala Cys Met Ala Arg Tyr Thr Leu Ala Gly Lys Asn Leu Met Ala
35 40 45
Cys Arg Asp Arg Lys Ile Ile Ala Leu Thr Glu Ala Leu Arg Gly Ile
50 55 60
Arg Gln Ile Lys Phe Ser Ala Ala Glu Asp Arg Trp Glu Glu Gln Leu
65 70 75 80
Asn Gln Leu Arg Asp Ala Glu Leu Leu Ala Gln Ala Thr Ser Phe Arg
85 90 95

```
Trp Asn Val Thr Cys Phe Ser Leu Trp Val Leu Ala Pro Ile Leu Leu
            100                 105                 110
Ser Val Ala Ser Leu Ser Val Tyr Thr Ile Ser His Gly Glu Leu Thr
        115                 120                 125
Ala Ser Val Ala Phe Thr Ala Ile Ser Ala Leu Thr Ser Ile Glu Asn
    130                 135                 140
Ala Leu Ser Thr Leu Pro Glu Leu Ile Thr Asn Ala Thr Asp Ala Leu
145                 150                 155                 160
Ile Ser Met Lys Arg Ile Ala Asn Phe Leu Asp Ala Pro Glu Arg Asn
                165                 170                 175
Ser Ser Thr Val Leu Leu Ser Pro Ser Ile Arg Phe Asp Asn Ala Thr
            180                 185                 190
Val Ala Trp Pro Asp Ser Thr Gln Thr Ser Asp Val Ser Pro Gly Thr
        195                 200                 205
Arg Phe Val Leu Arg Asn Leu Thr Val His Phe Pro Glu His Gly Leu
    210                 215                 220
Ser Leu Val Cys Gly Arg Thr Gly Ser Gly Lys Ser Leu Leu Leu Ser
225                 230                 235                 240
Ala Ile Leu Gly Glu Cys Glu Ile Leu Glu Gly Ile Val Lys Arg Pro
                245                 250                 255
Ser Ile Arg Ser Met Tyr Lys Arg Pro Gly Pro Gly Glu Asp Trp Ile
            260                 265                 270
Ile Asp Ser Ala Thr Ala Tyr Val Ala Gln Thr Pro Trp Val Glu Ala
        275                 280                 285
Ala Thr Ile Arg Gln Asn Ile Leu Phe Gly Met Pro Phe Asn Gly Glu
    290                 295                 300
Arg Tyr Lys Lys Val Leu Phe Ala Cys Ala Leu Val Arg Asp Leu Gln
305                 310                 315                 320
Met Leu Glu Gly Gly Asp Leu Thr Glu Val Gly Pro Asn Gly Val Asn
                325                 330                 335
Leu Ser Gly Gly Gln Lys Ala Arg Ile Ser Leu Ala Arg Ala Leu Tyr
            340                 345                 350
Ser Arg Ala Gly Ile Ile Ile Met Asp Asp Ile Phe Ser Ala Val Asp
        355                 360                 365
Val His Thr Ala Gln His Leu Tyr Glu His Ala Leu Thr Gly Glu Leu
    370                 375                 380
Ala Thr Arg Arg Thr Arg Ile Leu Val Thr His His Val Arg Leu Cys
385                 390                 395                 400
Leu Pro Arg Val Asp Tyr Val Ala Tyr Leu Asp Ser Gly Asn Leu Ile
                405                 410                 415
Phe Ala Ala Ser Leu Thr Gln Met Arg His Ser Ser Val Leu Glu Glu
            420                 425                 430
Leu Leu Arg Ser Gln Phe Asp Val Asp Asn Thr Ala Ala Val Tyr Glu
        435                 440                 445
Ile Pro Glu Ala Ser Ala Ser Gln Asp Arg Leu Ala Cys Phe Asn Glu
    450                 455                 460
Arg Cys Gln Ser Cys Pro Ala Asp Leu Arg Leu Ala Gln His Pro Ile
465                 470                 475                 480
Val Ser Lys Arg Pro Arg Asn Phe Ile Glu Glu Glu Ser Leu Glu Lys
                485                 490                 495
Gly Ala Ile Pro Leu Ser Val Phe Arg Arg Tyr Ile Gln Lys Cys Gly
            500                 505                 510
Gly Leu Arg Ala Trp Val Val Leu Ala Leu Cys Phe Ala Thr Tyr Thr
        515                 520                 525
Gly Leu Ala Leu Gly Lys Val Ser Phe Pro
    530                 535
```

<210> 28674
<211> 339
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (45),(50)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28674
Gly Pro Arg Arg Ile Gln Arg Arg Gly Arg Arg Ser Tyr Arg His Glu
1 5 10 15
Arg Ile Ala Pro Arg Arg Ser Glu Pro Ile Leu Gln Val Arg Lys Leu
20 25 30
Leu Val Asp Arg Lys Trp Leu Thr Asn Gln Val Gln Xaa Glu Ser Met
35 40 45
Leu Xaa Cys Cys Gly Thr Tyr Gly Phe Arg Pro Ser Ala Ser Arg Ile
50 55 60
Pro Asn Gly Gly Gly Arg Ser Cys Ser Thr Pro Gly Met Lys Phe Ile
65 70 75 80
Leu Ser Cys Ala Gly Pro Leu Ala Leu Asp Met Asp Ala Val Glu Val
85 90 95
Phe Leu Lys Thr Val Ile Asp Ala Arg Pro Gly Leu Tyr Asp Ser Ser
100 105 110
Val Ile Asp Gly Pro Trp Arg Gln Ala Thr Val Lys His Pro Leu Arg
115 120 125
Ile Gly Val Val Pro Pro Asp Tyr Ser Phe Pro Leu His Pro Pro Val
130 135 140
Lys Arg Thr Leu Ala Lys Ala Val Lys Leu Leu Lys Ala Gln Gly His
145 150 155 160
His Ile Ile Glu Leu Ser Ala Glu Glu Cys Lys Val Met Glu Ile Asn
165 170 175
Glu Val Ala Trp Asn Ile Phe Thr Leu Asp Ser Gly Ala Met Glu His
180 185 190
Leu Gln Ala Ala Gly Glu Pro Pro Val Pro Ala Leu Leu Asn Val Gln
195 200 205
Arg Gln Val Glu Ile Leu Arg Gln Ala Gly Lys Thr Tyr Leu Pro Asp
210 215 220
Phe Ser His Leu Asp Arg Leu Gly Arg Leu Ala Ala Leu Asn Thr Lys
225 230 235 240
Arg Ala Asp Leu Arg Glu Thr Trp Arg Lys Met Trp Ile Ser His Asp
245 250 255
Leu Asp Ile Cys Leu Ala Pro Ser Ala Gln Asn Thr Ala Val Pro His
260 265 270
Asp Met Phe Gly Leu Ala Pro Tyr Thr Thr Phe Leu Asn Cys Leu Asp
275 280 285
Val Ser Cys Leu Phe Cys Arg Leu Lys Ile Ser Ser Asn Asp Ala Gln
290 295 300
Tyr Pro Ser Cys Ile Ile Pro Phe Gly Arg Val Asn Glu Met Asp Ala
305 310 315 320
Arg Glu Thr Phe Glu Leu Ala Pro Gly Gln Ala Gly Pro Ser Cys Lys
325 330 335
Tyr Phe Cys

<210> 28675
<211> 121
<212> PRT
<213> A.fumigatus

<400> 28675
Arg Gln Thr Arg Pro Leu Ser Gln Ala Cys Arg Ile Ile Gln Met Asp
1 5 10 15
Ser Gln Asn Ser Ile Ser Gly Trp Gln His Lys Val Ala Gln Lys Gln
20 25 30
Gln Glu Cys Leu Gln Lys Ile Pro Ala Glu Trp Lys Ile Pro Glu Ser
35 40 45
Leu Leu Ser Ser Leu Gln Leu Pro Leu Ala Glu Asn Arg Asn Asp Leu
50 55 60
Ile Gln Gly Asp Ala Val Arg Lys Ala Gly Ile Leu Thr Glu Arg Glu
65 70 75 80
Leu Gln Ile Thr Glu Gln Tyr Thr Val Ser Gly Leu Leu Ser Ala Leu
85 90 95
Ala Asp Gly Arg Leu Thr Ser Leu Glu Val Thr Leu Ala Phe Ser Lys
100 105 110
Arg Ala Ala Val Ala Gln Gln Leu Val
115 120

<210> 28676
<211> 107
<212> PRT
<213> A.fumigatus

<400> 28676
Val Asn Cys Leu Thr Glu Thr Met Phe Pro Glu Ala Gln Glu Arg Ala
1 5 10 15
Lys Tyr Leu Asp Glu Leu Lys Val Gln Gly Lys Ser Ala Gly Pro Leu
20 25 30
His Gly Leu Pro Ile Ser Ile Lys Asp Leu Phe His Val Lys Gly Thr
35 40 45
His Ala Ser Ile Gly Met Ile Ser Phe Leu Asp Glu Lys Ser Thr Asp
50 55 60
Asn Ser Pro Leu Ile Asp Ile Leu Leu Ser Leu Gly Ala Val Ile Tyr
65 70 75 80
Val Lys Thr Asn Ile Pro Gln Thr Met Met Val Arg Leu Arg Thr Ser
85 90 95
Leu Gly Cys Met Ile Thr Asn His Phe Leu Pro
100 105

<210> 28677
<211> 485
<212> PRT
<213> A.fumigatus

<400> 28677
Asn Phe Ile Leu Val Ser Leu Leu His Arg His Leu Leu Val Met Pro
1 5 10 15
Leu Thr Ile Leu Ser Gln Ala Gln Leu Arg Ser Leu Leu Leu Ser Leu
20 25 30
Asn Arg Asp Glu Val Ser Ser Leu Gln Gln Ser Leu Ala Gln Ala Leu

```
        35                  40                  45
Leu Asp Tyr Ser Thr Gly Ser Gln Glu Gln Gly Cys Ala Ala Thr Tyr
    50                  55                  60
Gln Pro Leu Arg Thr Ala Ile Thr Arg Gln Asn Gly Cys Thr Thr Leu
65                  70                  75                  80
Phe Met Pro Ala Ser Thr Gly Arg Thr Ile Gly Met Lys Met Ile Ser
                85                  90                  95
Leu Gln Asp Gly Gly Ala Ala Gly Cys Ala Val Glu Gly Ala Phe Glu
            100                 105                 110
Ile Pro Glu Gly Thr Lys Thr Ala Ser Arg Ser Arg Ser Ala Gly Pro
        115                 120                 125
Arg Arg Ser Met Thr Ser Leu Ser Ser Glu Met Ser Asp Leu Ser Ile
    130                 135                 140
Ser Ser Gln Glu Glu Gly Ser Ser Ser Ser Ser Ser Ser Arg Ser Leu
145                 150                 155                 160
Arg Ser Asp Thr Val Asn Arg Gln Ser Val Gly Ser Ser Ser Ser Ser
                165                 170                 175
Gly Ile Ser Lys Thr Leu Gly Ala Trp Pro Gly Ala Gly Thr Arg Asp
            180                 185                 190
Thr Ser Pro Gln Gly Thr Val Thr Leu Leu Asp Ala Asp Ser Met Pro
        195                 200                 205
Phe Gly Leu Ile Asn Ala His Glu Leu Thr Pro Phe Arg Thr Ala Leu
    210                 215                 220
Ala Thr Met Met Ile Phe Asn Lys Arg Lys Arg Val Arg Thr Val Val
225                 230                 235                 240
Val Phe Gly Ala Gly Lys Gln Ala Tyr Trp His Ile Arg Leu Ala Leu
                245                 250                 255
Thr Leu Arg Ala Ala Asp Ile Lys Arg Val Val Ile Val Asn Arg Ser
            260                 265                 270
Phe Glu Arg Ala Ala Met Leu Leu Lys Asp Ile Tyr Ser Thr Glu Asn
        275                 280                 285
Ser Ser Trp Arg Gly Asp Val Lys Phe Ser Ala Val Ser Thr Asp Phe
    290                 295                 300
Gly Glu Tyr Asp Arg Ile Ile Gln Asp Ala Ile His Lys Ser Asp Ala
305                 310                 315                 320
Ile Phe Cys Cys Thr Pro Ser Ile Glu Pro Leu Phe Pro Ala Glu Leu
                325                 330                 335
Leu Thr Ser Arg Glu Gly Arg Gln Lys Gly Arg Phe Ile Ser Ala Ile
            340                 345                 350
Gly Ser Tyr Arg Pro His Met Ala Glu Leu His Pro Asp Ile Leu Arg
        355                 360                 365
Asp Glu Val Asn Ala His His Ser Gly Arg His Phe His Lys His Ile
    370                 375                 380
Lys Arg Ser Gly Val Val Val Val Asp Ser Leu Glu Ala Ala Leu Lys
385                 390                 395                 400
Glu Ala Gly Glu Leu Ile Gln Ala Gly Ile Lys Pro Asn Gln Val Val
                405                 410                 415
Glu Leu Gly Glu Leu Leu Met Val Arg Asp Ala Ser Arg Lys Asp Asn
            420                 425                 430
Asn Gln Asp Val Glu Asp Thr Lys Ser Leu Arg Glu Trp Val Glu Arg
        435                 440                 445
Gly Asn Val Ile Tyr Lys Ser Val Gly Met Gly Leu Met Asp Leu Val
    450                 455                 460
Thr Gly Gly Asp Leu Ile Gln Met Ala Arg Thr Arg Asn Leu Gly Thr
465                 470                 475                 480
Ser Val Glu Asp Phe
```

485

<210> 28678
<211> 194
<212> PRT
<213> A.fumigatus

<400> 28678
Lys Ile Arg Pro Ser Cys Arg Leu Leu Lys Thr His Leu Asp Ala Leu
1 5 10 15
Ala Leu Asn Phe Ala Ala Ser Leu Lys Asp Leu Lys Pro Leu Lys Ser
20 25 30
Ala Phe Ala Val Ala Glu Ala Asn Gly Phe Gln Leu Phe Leu Ser Phe
35 40 45
Asp Tyr Val Gly Ala Gly Pro Phe Asp Lys Ala Thr Val Ile Thr Ile
50 55 60
Ile Asn Glu Phe Lys Ser Ser Ser Ala Tyr Tyr Thr Tyr Lys Gly Lys
65 70 75 80
Pro Phe Val Ser Thr Phe Glu Gly Pro Gly Asn Ala Ala Asp Trp Lys
85 90 95
Asp Ile Lys Ala Glu Thr Gly Cys Phe Phe Ile Pro Ser Trp Ser Ser
100 105 110
Leu Gly Ala Lys Glu Ala Leu Lys Leu Gly Thr Pro Asp Gly Leu Phe
115 120 125
Ser Trp Ala Ala Trp Pro Trp Asp Asn Gln Asp Met Asp Thr Tyr Val
130 135 140
Asp Ala Ser Tyr Leu Asp Tyr Leu Gly Gln Ala Gly Gly Lys Glu Tyr
145 150 155 160
Met Met Pro Val Ser Pro Trp Phe Tyr Thr Asn Leu Pro Gly Tyr Glu
165 170 175
Lys Asn Cys Leu Trp Arg Gly Asn Val Ser Arg Arg Ala Lys Gln Thr
180 185 190
Glu Lys

<210> 28679
<211> 254
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (221)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28679
Ser Ile Glu Tyr Leu Gly Asp Asp Leu Trp Arg Asp Arg Trp Glu Glu
1 5 10 15
Val Met Val Val Gln Pro Asp Phe Val Gln Ile Ile Ser Trp Asn Asp
20 25 30
Tyr Gly Glu Ser His Tyr Ile Gly Pro Leu Tyr Asn Ile Asp Lys Tyr
35 40 45
Glu Ala Phe Ser Val Gly Glu Ala Pro Val Asn Tyr Ala His Gly Met
50 55 60
Pro His Asp Gly Trp Arg Leu Phe Leu Pro Tyr Tyr Ile Asp Ile Tyr
65 70 75 80

```
Lys Asn Gly Lys Ala Ser Ile Thr Lys Glu Gly Val Val Gly Trp Tyr
                85                  90                  95
Arg Pro Asn Pro Ser Ser Glu Cys Asn Asp Gly Gly Thr Ala Ala Ile
            100                 105                 110
Thr Ala Ser Gln Leu Gln Tyr Glu Phe Arg Pro Ala Glu Val Val Gln
        115                 120                 125
Asp Lys Ile Phe Tyr Ser Ala Leu Leu Thr Ser Met Ala Thr Val Thr
    130                 135                 140
Val Thr Val Gly Gly Val Ser Ile Pro Ala Thr Trp Gln Asp Ile Pro
145                 150                 155                 160
Asp Gly Gly Val Gly Val Tyr His Gly Ser Val Gly Tyr Gly Thr Phe
                165                 170                 175
Tyr Gly Asp Val Lys Ile Ser Ile Ser Arg Ala Arg Ser Thr Ile Ala
            180                 185                 190
Lys Phe Ser Ser Ala Ala Ile Thr Thr Ser Cys Thr Asp Gly Tyr Ala
        195                 200                 205
Asn Trp Asn Ala Val Val Gly Ser Ala Lys Gly Pro Xaa Ile Ser Ala
    210                 215                 220
Val Ser Pro Lys Leu Ala Ile Asp Lys Ser Gly Cys Ile Glu Gly Thr
225                 230                 235                 240
Thr Pro Ser Asn Phe Glu Gly Leu Cys Lys Phe Asn Cys Gln
                245                 250
```

<210> 28680
<211> 295
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (12)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28680

```
Trp Tyr Cys Pro Asn Gly Thr Cys Val Cys Tyr Xaa Asn Gly Ala Pro
1               5                   10                  15
Arg Val Lys Pro Lys Pro Thr Gly Met Lys Gly Tyr Pro Ile Ala Val
            20                  25                  30
Glu Ala Ser Ser Tyr Ile Val Leu Cys Ser Phe Ala Arg Gln Tyr Gly
        35                  40                  45
Tyr Cys Pro His Ala Ala Cys Ala Pro Val Glu Val Pro Leu Ser Glu
    50                  55                  60
Pro Thr Val Ser Arg Phe Leu Pro Ser Ala Cys Thr Ala Gly Thr Gly
65                  70                  75                  80
Gln Gly Asp Leu Ala Gly Leu Cys Ser Tyr Ala Cys Thr Cys Thr Gly
                85                  90                  95
Thr Gly Ala Leu His Gln Pro Pro Ala Ala Asn Ser Thr Phe Thr Ala
            100                 105                 110
Phe Tyr Gln Gly Asp Gly Asp Asp Ala Gly Leu Cys Lys Phe Ala Cys
        115                 120                 125
Gln His Gly Tyr Cys Pro Asp Ala Cys Ala Ser Thr Glu Gly Glu Val
    130                 135                 140
Pro Ser Cys Asp Glu Asp Asp Asp Asp Ser Pro Asp Cys Ala Leu Glu
145                 150                 155                 160
Asp Thr Pro Asp Leu Cys Asp Leu Ser Leu His Phe Ser Ser Trp Glu
                165                 170                 175
```

```
Ala Leu Gln Ala Ala Thr Asp Ile Pro Glu Leu Cys Met Pro Met Tyr
            180                 185                 190
Ala Met Gln Val Leu Met Asp Thr Leu Asn Thr Ala Leu Arg Asn Tyr
        195                 200                 205
Thr Asp Val Asn Asn Gly Tyr Asp Glu Lys Phe Gly Tyr Tyr Val Lys
    210                 215                 220
Tyr Leu Arg Gly Met Val Pro Glu Val Ile Asn Lys Val Ile Ala Asp
225                 230                 235                 240
Asn Gly Lys Tyr Val Gln Cys Ser Gln Ala Ile Asn Gly Gly Trp Ser
                245                 250                 255
Lys Pro Arg Ser Cys Phe Ile Pro Leu Val Ser Asp Ser Trp Thr Val
            260                 265                 270
Lys Tyr Thr Phe Val Asp Glu Gln Gly Phe Tyr Asp Glu Leu Gln Ser
        275                 280                 285
Lys Tyr Gly Ile Gln Arg Asp
    290                 295
```

<210> 28681
<211> 142
<212> PRT
<213> A.fumigatus

```
<400> 28681
Leu Ser Asn Arg Ser Gln His Thr Leu Trp Arg Leu Asp Gln Met His
1               5                   10                  15
Ile Tyr Arg Arg Gln Ser Leu Pro Ser Gln Gln Lys Leu Leu Asn Ile
            20                  25                  30
Leu His Arg Gln Pro Phe Lys Thr His Met Arg Val Asn Arg Thr Ala
        35                  40                  45
Gly Ile Met Pro Thr Ser Ser Ser Leu Ala His Val Ser Pro Ala Gly
    50                  55                  60
Asp Ala His Thr Ala Pro Leu His Glu His Pro Thr Gln Gln Pro Thr
65                  70                  75                  80
Ser Ala Leu His Gln Glu Pro Ala Ile Ala Pro Pro Arg Gln Pro Met
                85                  90                  95
Ile Pro Ala Arg Tyr Arg Arg Thr Ala Pro Arg Ala Arg Thr Ser Pro
            100                 105                 110
Ala Ser Pro His Arg Ser Ala Ser Ser Pro Gln Thr Ala Leu Arg Pro
        115                 120                 125
Pro Arg Asn Pro Pro Thr Pro Ala Ile Arg Pro Thr Arg Pro
    130                 135                 140
```

<210> 28682
<211> 109
<212> PRT
<213> A.fumigatus

```
<400> 28682
Leu Arg Arg Cys Leu Pro Pro Leu Val Lys Thr Asp Ser Ser His Leu
1               5                   10                  15
Leu Gln Pro Leu Asp Ile Ser Cys Phe Gly Pro Leu Lys His Ala Tyr
            20                  25                  30
Gly Gly Leu Val Glu Gln Lys Met Arg Leu Gly Tyr Asn Tyr Ile Asn
        35                  40                  45
Lys Phe Asn Phe Leu Lys Ala Tyr Pro Ala Ala His Leu Glu Val Phe
    50                  55                  60
```

```
Thr Pro Leu Asn Ile Gln Asn Gly Phe Ala Ala Ala Gly Ile His Pro
65                  70                  75                  80
Leu Lys Leu Glu Arg Val Leu Glu Lys Leu Asn Ile His Ile Ser Thr
                85                  90                  95
Pro Thr Pro Pro Leu Ser Arg Ala Ser Thr Asn Ser Ser
            100                 105
```

<210> 28683
<211> 144
<212> PRT
<213> A.fumigatus

<400> 28683

```
Leu Thr Thr Pro His Thr Leu Gln Gln Leu His Lys Gln Ala Ser Ser
1               5                   10                  15
Val Lys Lys Leu Leu Lys Gln Gln Ser Gln Ser Pro Leu Thr Pro Ser
            20                  25                  30
Lys Leu Ala Ile Gln Gln Leu Ile Lys Gly Cys Lys Met Ala Ile His
        35                  40                  45
Asn Thr Ala Leu Leu Ala Lys Glu Asn His Asp Leu Arg Ala Ala Asn
    50                  55                  60
Glu Lys Glu Lys Gln Lys Arg Lys Gln Ser Arg His Gln Met Thr Pro
65                  70                  75                  80
Asn Glu Gly Leu Ser Ile Gln Glu Ala Arg Asp Leu Ile Gln Ala Arg
                85                  90                  95
Asn Glu Gln Gly Asn Glu Val Glu Gly Ser Ser Ile Asp Ser Ala Pro
            100                 105                 110
Leu Pro Leu Glu Pro Pro Lys Arg Ala Pro Pro Arg Cys Leu Asn Tyr
        115                 120                 125
Phe Ile Ile Gly His Thr Arg Val Arg Cys Pro Thr Arg Asn Thr Ser
    130                 135                 140
```

<210> 28684
<211> 66
<212> PRT
<213> A.fumigatus

<400> 28684

```
Gly Glu Phe Arg Thr Arg Leu Leu Val Phe Gly Phe Phe Trp Ile Gly
1               5                   10                  15
Thr Leu Pro Arg Lys Ile Cys Ile Phe Ala Ser Gly Tyr Val Thr Leu
            20                  25                  30
Thr Thr Ser Val Thr Pro Asp Pro Thr Ile Val Val Trp Asp Ser Leu
        35                  40                  45
Arg Ile Gly Gln His Tyr Tyr Val Thr Ile Gln Lys Gly Met Leu Val
    50                  55                  60
Gln Gln
65
```

<210> 28685
<211> 139
<212> PRT
<213> A.fumigatus

<400> 28685

```
Pro Ser Ser Leu Gln Thr His Ser Ser Thr Pro Thr Ser Pro Ala Glu
```

```
1               5                   10                  15
Leu Trp Arg Ser Arg Ser Glu Ser Ile Leu Glu Thr Ala Leu Glu Thr
            20                  25                  30
Cys Ile Ile Val Ser Met Ala Pro Ala Glu Asn Ile His Ile Pro Arg
        35                  40                  45
Gly Ser Arg Pro Glu Pro Gly Pro Leu Tyr Ser Asp Phe Phe Gln Gln
    50                  55                  60
Gln Val Ala Lys Gln Arg Asn Asn Asn Tyr His Ser Thr Ser Leu Arg
65                  70                  75                  80
Asn Met Val Ala Thr Ser Val Asn His Thr Ala Leu His Pro Gly Gly
                85                  90                  95
Val Gln Tyr Val Phe Pro Tyr Leu Pro Cys Cys Leu Val Asn Pro Leu
            100                 105                 110
Gln Cys Leu Cys His Ser Ala Ser Val Ser Ile Ser Ser Ser Cys Leu
        115                 120                 125
Ser Ser Ser His His Thr Phe Thr Gln Thr Lys
    130                 135
```

<210> 28686
<211> 106
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (15),(47)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28686

```
Thr Arg Ile Gly Trp Ile Ser Pro Gln Ala Arg Ile Pro Leu Xaa Asn
1               5                   10                  15
Asn Gly Thr Thr Lys Gly Arg Ile Trp Arg Lys Glu Thr Pro Arg Pro
            20                  25                  30
Ser Gly Thr His Ser Gly Gln Gly Ala Pro Gln Thr Cys Lys Xaa Tyr
        35                  40                  45
Pro Ile Ser Ser Thr Leu Lys Gly Arg Ile Asp Ser Gly Thr Met Ala
    50                  55                  60
Ser Asp Thr Ser Ser Arg Leu Ser Glu His Val Thr His Asn Asp Ala
65                  70                  75                  80
Ser Gly Leu Pro Thr Phe Thr Trp Pro Arg Thr Arg Tyr Arg Leu Gly
                85                  90                  95
Ser Pro Asn Asp Ser Asp Pro Asn Ser Pro
            100                 105
```

<210> 28687
<211> 203
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (33)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28687

```
Gly Thr Thr Glu Pro Pro Arg Glu Gly Phe Gly Gly Lys Arg Pro Pro
```

```
1               5                   10                  15
Asp Pro Val Glu Arg Thr Gln Gly Arg Gly His His Arg His Ala Arg
            20                  25                  30
Xaa Thr Gln Tyr Leu Pro His Leu Lys Asp Glu Ser Ile Pro Glu Gln
        35                  40                  45
Trp Pro Val Thr Gln Ala Pro Ala Phe Pro Ser Thr Ser Arg Thr Met
    50                  55                  60
Met Pro Pro Val Ser Pro Pro Leu Pro Gly His Glu Pro Val Thr Asp
65                  70                  75                  80
Ser Gly Val Pro Met Thr Ala Ile Arg Ile Pro Leu Glu Asp Val Glu
                85                  90                  95
Arg Pro Pro Ser Pro Pro Ala Lys Ala Phe Leu Ser Gln Pro Gly Thr
            100                 105                 110
Ser Ala Glu Leu Pro Ser Ala Ala Glu Pro Ser Ser Ala Pro Ala Pro
        115                 120                 125
Asn Ala Glu Pro Thr Thr Leu Arg Val Leu Val Ala Glu Asp Asp Pro
    130                 135                 140
Val Asn Ser Lys Ile Val Glu Lys Arg Leu Ser Lys Leu Gly His Ala
145                 150                 155                 160
Val Ile Leu Thr Gly Asn Gly Glu Glu Cys Ala Ala Ala Phe Arg Arg
                165                 170                 175
Asp Ser Thr Lys Val Asp Val Val Leu Met Asp Ile Gln Val Ile Asn
            180                 185                 190
Phe Ile Ser Ser Val Met Tyr Ser Arg Pro Cys
        195                 200
```

<210> 28688
<211> 72
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (6),(23),(24),(26)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 28688
Ile Gly Thr Leu His Xaa Glu Lys Leu Ala Pro Phe Lys Glu Gln Ser
1               5                   10                  15
Glu Lys Lys Lys Gly Ala Xaa Xaa Cys Xaa Ile Pro Asn Ile Pro His
            20                  25                  30
Leu Lys Phe Asn His Leu Leu Ala Glu Ile Thr Phe Phe Ser Thr Pro
        35                  40                  45
Ile Ser Leu Pro Leu Ala Trp Ala Pro Pro Pro Asn Ala Cys Tyr Gly
    50                  55                  60
Phe Leu Pro Ala Pro Thr Gly Ala
65                  70
```

<210> 28689
<211> 175
<212> PRT
<213> A.fumigatus

```
<400> 28689
Pro Ala Leu Ser Ile Val Tyr Ser Gly Asp Ile Asn Pro Val Arg Lys
1               5                   10                  15
```

```
Ile Cys Tyr Ile Gly Leu Ala Asn Asn Leu Ser Ser Gly Ile Ala Ser
            20                  25                  30
Arg Pro Lys Asp Glu Lys Val Thr Trp Thr Leu Asp Lys Tyr Asn Arg
        35                  40                  45
Thr Pro Gly Thr Leu Phe Thr Gly Leu Arg Val Leu Ala Asp Arg Ala
    50                  55                  60
Thr Gln Ile Pro Asp Leu Pro Asp Ser Gly Val Arg Gln Val Val Val
65                  70                  75                  80
Arg Ile Thr Ser Arg Gln Ser Thr Ser Lys Val Thr Ile Pro Thr Lys
                85                  90                  95
Arg Gly Ala Glu Ser Ala Val Ala Ala Glu Pro Thr Pro Ala Lys Gln
            100                 105                 110
Gln Asp Cys Thr Glu Tyr Ile Val Ile Gln Lys Leu Arg Trp Thr Gly
        115                 120                 125
Glu Glu Gln Glu Trp Arg Ile Trp Gly His Ala Thr Pro Thr Thr Val
    130                 135                 140
Glu Asp Leu Asp Ser Pro Phe Phe Ala Pro Gly Leu Thr Leu Ser Glu
145                 150                 155                 160
Arg Met Asp Ala Met Lys Asp Met Met Thr Gly Lys Lys Met Met
                165                 170                 175
```

<210> 28690
<211> 102
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (98)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28690

```
Phe Val Leu Phe Ser Val Ile Lys Gly Val Trp Thr Val Arg Pro Arg
1               5                   10                  15
Tyr Glu Leu Tyr His Ile Lys Ile Ala Leu Leu Val Ile His Val Ile
            20                  25                  30
Thr Gly His Ile Ser Lys Leu Asp Cys Gln Tyr Ile Gln Gly Arg Asn
        35                  40                  45
Thr Tyr His Val Leu Lys Val Asn Tyr Glu Thr Gly Val Val Ser His
    50                  55                  60
Gln Lys Asp Ser Gln Ser Asn Val Lys Arg Arg Asn Met Tyr Ile Gly
65                  70                  75                  80
Gly Tyr Val Lys Thr Met Gly Asn Met Ile Gly Glu Ser Arg Thr Thr
                85                  90                  95
Ile Xaa Met Cys Asn Leu
            100
```

<210> 28691
<211> 115
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (28),(56),(91)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28691
Ile Cys Lys Lys Pro Ile Arg His Leu Ile Arg His Ser Glu Thr Pro
1 5 10 15
Asp Lys Trp Lys His Ile Ala Glu Ile Asp Met Xaa Val Lys Val Ala
20 25 30
Thr Gly Cys Ser Gln His Ser His Ala Ser Ala Val Pro Cys Cys Ser
35 40 45
Leu Thr Pro Ser Gly Val Cys Xaa Pro Leu Leu Ile Asp Arg Pro Thr
50 55 60
Ser Ser Asp Gly Lys Asp Glu Arg Pro Leu Asp Pro Phe Gln Tyr Asp
65 70 75 80
Cys Pro Glu Gln Asp Gly Thr Leu Leu Ser Xaa Glu Asn Met Ile Asp
85 90 95
Ser Arg Ser Lys Leu Thr Trp Leu Ala Val Phe Ala Ser Ser Ala Val
100 105 110
Gly Pro Lys
115

<210> 28692
<211> 637
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (410)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28692
Thr Asp Asp Asn Thr Ser Phe Val Glu Met Thr Glu Glu Lys Ala Val
1 5 10 15
Pro Gly Lys Leu Glu Val Ala Leu Phe Leu Ala Ala Ser Lys Gly Tyr
20 25 30
Asp Thr Ile Val Lys Leu Leu Leu Ser Thr Pro Gly Val Arg Leu Asp
35 40 45
Phe Lys Asp Glu Asp Gly Arg Asn Ala Val Ser Leu Ala Ala Glu Gly
50 55 60
Gly His Glu Ser Val Leu Gln Ile Leu Leu Glu Thr Gly Gln Val Asp
65 70 75 80
Val Asn Ala Val Asp Thr Lys Thr Gly Gln Ser Pro Leu Cys Trp Ala
85 90 95
Val Lys Asn Gly His Ala Gly Val Val Ser Lys Leu Leu Ala Val Glu
100 105 110
Asn Ile Asp Pro Asn Ile Pro Asp Ala Asn Gly Glu Thr Pro Leu Tyr
115 120 125
Ala Ala Val Lys Ser Glu Asn Gly Gly Ile Ile Asp Gln Leu Leu Ala
130 135 140
Arg Ala Asp Leu Asn Ala Asn Thr Pro Asp Ala Ala Gly Gln Thr Pro
145 150 155 160
Leu Tyr Trp Ala Val Lys Asn Gly Asn Glu Ala Val Ala Gly Ala Leu
165 170 175
Leu Gly Arg Ala Glu Val Asp Pro Asn Ala Ala Gly Ala Asp Gly Gln
180 185 190
Thr Pro Leu Tyr Leu Ala Val Arg Asn Gly His Glu Gly Ile Met Asn
195 200 205

```
Arg Leu Leu Ala Arg Gly Glu Thr Asn Pro Asp Ile Pro Asp Ala Asn
    210                 215                 220
Gly Gln Thr Pro Leu Tyr Trp Ala Val Glu Gln Gly Asn Leu Pro Phe
225                 230                 235                 240
Val Val Gln Leu Leu Lys Val Asn Ala Asp Pro Asp Val Lys Asp Asn
                245                 250                 255
Gln Gly Arg Thr Pro Leu Leu Trp Ala Ala Glu Lys Gly His Glu Glu
            260                 265                 270
Val Val Arg Leu Leu Ile Gly Ser Arg Arg Val Asn Val Asn Ala Ala
        275                 280                 285
Asp Ala Val Gly Arg Thr Pro Leu Trp Trp Ala Ala Arg Asn Gly His
    290                 295                 300
Leu Pro Val Val Arg Leu Leu Val Arg Asn Gly Ala Asp Arg Glu Ala
305                 310                 315                 320
Gln Pro Ser Pro Asp Asp Glu Lys Val Ala His Gly Thr Pro Leu Tyr
                325                 330                 335
Gln Ala Gly Arg Lys Tyr His Thr Asp Ile Val Lys Tyr Leu Ile Lys
            340                 345                 350
Lys Gly Ala Asp Ile Asp Cys Pro Cys Gly Glu Ser Gly Leu Pro Leu
        355                 360                 365
Leu Leu Ala Leu Val Val His Asp Arg Thr Lys Arg Gly Met Lys Met
    370                 375                 380
Leu Asn Ala Leu Leu Glu Lys Gly Ala Asn Val Asn Ala Arg Asp Thr
385                 390                 395                 400
Lys Gly Arg Thr Thr Leu His Ile Leu Xaa Lys Asp Gly Asp Met Asp
                405                 410                 415
Leu Thr Ala Leu Phe Leu Gln Arg Gly Ala Gln Val Asn Ala Ala Ala
            420                 425                 430
Lys Asp Gly Thr Thr Pro Leu His Leu Ala Val Ile His Glu His Glu
        435                 440                 445
Glu Ile Val Glu Met Leu Leu Ala Asn Gly Gly Asp Pro Glu Ala Ala
    450                 455                 460
Asp His Thr Gly Asp Thr Pro Leu His Leu Ala Val Phe Ala Gly His
465                 470                 475                 480
Arg Arg Leu Val Gly Leu Leu Leu Glu Lys Asp Cys Asp Ile Asn Val
                485                 490                 495
Thr Asn His Cys Gly Glu Thr Pro Leu His Lys Ala Val Glu Arg Gly
            500                 505                 510
His Arg Lys Met Val Glu Phe Leu Leu Arg Asn Gly Ala Glu Leu Glu
        515                 520                 525
Met Gln Asp Asp Tyr Lys Arg Thr Pro Leu His Arg Ala Val Lys Ala
    530                 535                 540
Lys Asn His Val Met Arg Leu Leu Val Asn Lys Gly Ala Asn Ile His
545                 550                 555                 560
Ala Thr Asp Met Tyr Gly Gln Thr Ala Leu His Ile Ala Ala Glu Ala
                565                 570                 575
Gly Leu Arg Asp Asp Val Asp Phe Leu Leu Gly His Gly Ala Glu Ala
            580                 585                 590
Glu Ala Lys Asp His Lys Gly Arg Ile Pro Leu Asp Leu Ala Val Lys
        595                 600                 605
Ala Gly Glu Val Glu Val Glu Glu Leu Leu Gln Glu Met Ser Leu Val
    610                 615                 620
Val Val Asp Ala Ser Ser Gly Ser Glu Glu Ser Gly Gly
625                 630                 635
```

<210> 28693

<211> 67
<212> PRT
<213> A.fumigatus

<400> 28693
His Asp Val Ala Ser Lys Gln Ala Asp Phe Pro Ser Ile Met Ser Gln
1 5 10 15
Arg Ala Leu Val Leu Gln Glu Ile Gly His Arg Leu Val Glu Val Asp
20 25 30
Arg Pro Ile Pro Gln Pro Gly Pro Gly Glu Leu Leu Ile Lys Leu Thr
35 40 45
Ser Val Gly Cys Arg Pro His Leu Leu Leu Leu Pro Cys Thr Ala Gln
50 55 60
Thr Asn Asp
65

<210> 28694
<211> 181
<212> PRT
<213> A.fumigatus

<400> 28694
Val Ile Leu Leu Leu Pro Ser Phe Ser Leu Pro Leu Ala Ala Ala Cys
1 5 10 15
Gln Ser Ala Val Arg Leu Val His Phe Arg Leu Val Leu Ala Phe Leu
20 25 30
Phe Pro Val Ala Arg Gln Ser Ser Pro Arg Pro Leu Arg Arg Cys Leu
35 40 45
Leu His Asn Thr Thr Ser Asn Pro His Phe Phe Ala His Thr Val Phe
50 55 60
Asn Phe Ser His Pro Arg Asp Lys Ser Leu Lys Ser Lys Asn Tyr Val
65 70 75 80
Leu Ile Leu Leu Arg His Pro Lys Pro Ala Ala His Val Ala Arg Leu
85 90 95
Tyr Gly Leu Leu Pro Arg Pro Thr Thr Gln Arg Thr Ser Pro Arg Ser
100 105 110
His Pro Leu Pro His Leu Leu Ile Leu Pro Phe Phe Phe Tyr Met Gln
115 120 125
Lys Phe Met Arg Asp Gly Cys Pro Asn Cys Asp Asn Val Leu Gly Leu
130 135 140
Arg Gly Asn Asn Asp Ala Ile Gln Glu Cys Thr Ser Gln Val Phe Glu
145 150 155 160
Gly Leu Ile Thr Leu Arg Asp Pro Ser Thr Ser Trp Val Ala Arg Trp
165 170 175
Gln Arg Leu Glu Gly
180

<210> 28695
<211> 62
<212> PRT
<213> A.fumigatus

<400> 28695
Glu Glu Ser Thr Ala Ile Ala Ser Met Ser Lys Ser Ser Asn Ala Asp
1 5 10 15
Gly Gly Ser Pro Thr Ser Ile Ala Phe Ser Asn Ser Asn Arg Arg Thr

```
            20                  25                  30
Ser Phe Ser His Ser Ala Ser Phe Ser Phe Ala Ser Arg Leu Leu Gly
        35                  40                  45
Ser Phe Phe Thr Thr Ala Leu Lys Ser Leu Arg Ala Ser Arg
    50                  55                  60
```

<210> 28696
<211> 104
<212> PRT
<213> A.fumigatus

<400> 28696

```
Ser Leu Pro Ala Gln Thr Pro Arg Leu Leu Pro Ile Pro Leu Leu Phe
1               5                   10                  15
Ser His Pro Trp Lys Ser Pro Ser Cys Pro Ser Thr Asp Ser Ile Ala
            20                  25                  30
Pro Phe Ala Ser Val Asp Tyr Tyr Ala Leu Gln Met Ala Ala Ser Asp
        35                  40                  45
Leu Glu Ala Ala Thr Ala Leu Lys Val Gln Gly Asn Lys Ala Phe Ala
    50                  55                  60
Glu His Glu Trp Pro Thr Ala Val Glu Phe Tyr Thr Gln Ala Ile Asp
65                  70                  75                  80
Lys Tyr Asp Arg Glu Pro Ser Phe Phe Ser Asn Arg Ala Gln Val Cys
                85                  90                  95
Leu Gly Arg Ser Gly Arg Leu His
            100
```

<210> 28697
<211> 104
<212> PRT
<213> A.fumigatus

<400> 28697

```
Tyr Ser Gly Ala Gln Ala Tyr Ile Lys Leu Glu Ala Tyr Gly Phe Ala
1               5                   10                  15
Ile Ala Asp Ala Thr Lys Ala Leu Glu Leu Asp Pro Ser Tyr Val Lys
            20                  25                  30
Val Gly Arg Met Cys Ile Phe Pro Arg His Leu Leu Arg Lys Tyr Trp
        35                  40                  45
Leu Thr Ala Leu Leu Gly Ile Leu Glu Lys Ser Ser Cys Glu His Arg
    50                  55                  60
His Ile Glu Leu Pro Arg Ser Pro Gln Arg Leu Gln Gly Cys Arg Glu
65                  70                  75                  80
Lys Gly Ala Gln Gln Pro Arg Cys Glu Thr Lys Ala Gly Arg Val Arg
                85                  90                  95
Glu Ala Cys Ala Ala Val Arg Val
            100
```

<210> 28698
<211> 139
<212> PRT
<213> A.fumigatus

<400> 28698

```
Ala Tyr Trp Arg Arg Ala Leu Ala Asn Thr Ala Ile Leu Asn Tyr Arg
1               5                   10                  15
```

```
Glu Ala Leu Lys Asp Phe Lys Ala Val Val Lys Lys Glu Pro Asn Asn
            20                  25                  30
Arg Asp Ala Lys Leu Lys Leu Ala Glu Cys Glu Lys Leu Val Arg Arg
        35                  40                  45
Leu Glu Phe Glu Lys Ala Ile Glu Val Gly Glu Pro Pro Ser Ala Phe
    50                  55                  60
Glu Asp Leu Asp Ile Asp Ala Ile Ala Val Asp Ser Ser Tyr Asp Gly
65                  70                  75                  80
Val Arg Leu Glu Lys Glu Met Thr Gln Glu Phe Ile Asp Asp Met Ile
                85                  90                  95
Glu Arg Phe Lys Asn Gly Lys Lys Ile His Arg Lys Tyr Ala Phe Gln
            100                 105                 110
Ile Ile Lys Ala Val Lys Asp Ile Val Tyr Ala Asp Leu His His Gly
        115                 120                 125
Gly Arg Arg Ile Arg Ala Lys Arg Ile Gln Arg
    130                 135
```

<210> 28699
<211> 156
<212> PRT
<213> A.fumigatus

<400> 28699

```
Leu Ala Phe Ser Asp Arg Phe Pro Arg Val Arg Ala Cys Leu Phe Asp
1               5                   10                  15
Met Asp Gly Leu Leu Ile Asp Ser Glu Asp Lys Tyr Thr Glu Ile Thr
            20                  25                  30
Asn Ala Ile Leu Gln Glu Phe Gly Lys Pro Leu Leu Pro Trp Glu Ile
        35                  40                  45
Lys Ala Gln Leu Gln Gly Arg Pro Gln Pro Glu Val Ser Pro Pro Gln
    50                  55                  60
His Pro Gln Ser Val Gln Ser Leu Arg Leu Lys Gly Leu Val Pro Thr
65                  70                  75                  80
Leu Leu Arg Ser Val Leu Ile Phe Tyr Gly Lys Gly Lys Gln Asp Leu
                85                  90                  95
Pro Pro Leu Gly Ser Thr Ser His Gln Pro Arg Gly Ile Arg Arg Glu
            100                 105                 110
Ala Gly Arg Pro Ala Ser Gln Val Leu Pro Pro Val Ala Ala Thr Thr
        115                 120                 125
Gly Ser Gln Asn Ser Pro Val Gln Ala Ser Leu Asp Pro Glu Asp Gly
    130                 135                 140
Pro Thr Cys Leu His Ser Pro Gly Asp Ile Ile Ala
145                 150                 155
```

<210> 28700
<211> 237
<212> PRT
<213> A.fumigatus

<400> 28700

```
Tyr Ser Thr Val Lys Ala Ser Lys Ile Phe His His Trp Ala Gln Leu
1               5                   10                  15
Pro Ile Ser Pro Glu Glu Tyr Gly Ala Lys Gln Ala Ala Leu Gln Ala
            20                  25                  30
Lys Tyr Phe Pro Gln Ser Gln Pro Leu Pro Gly Val Arg Thr Leu Leu
        35                  40                  45
```

```
Ser Lys Leu Leu Ser Thr Gln Lys Thr Asp Gln Pro Val Tyr Ile Ala
    50                  55                  60
Leu Ala Thr Ser Ser His Ser Lys Asn Phe Lys Leu Lys Thr Asp His
65                  70                  75                  80
Leu Gln Asp Leu Phe Ser Ala Phe Pro Glu Ser Gln Arg Val Leu Gly
                85                  90                  95
Asp Asp Pro Arg Ile Gly Lys Gly Arg Gly Lys Pro Leu Pro Asp Ile
            100                 105                 110
Tyr Leu Leu Ala Leu Glu Thr Ile Asn Glu Gly Leu Arg Gln Arg Gly
        115                 120                 125
Glu Pro Glu Ile Arg Pro Glu Glu Cys Leu Val Phe Glu Asp Ala Val
    130                 135                 140
Pro Gly Val Glu Ala Gly Arg Arg Ala Gly Met Arg Val Ile Trp Cys
145                 150                 155                 160
Pro His Pro Gly Leu Leu Gly Ala Tyr Lys Gly Arg Glu Ala Glu Val
                165                 170                 175
Leu Ala Gly Leu Thr Gly Glu His Lys Glu Glu Glu Lys Ser Val Pro
            180                 185                 190
Glu Lys Glu Ala Glu Glu Leu Ala Ala Trp Arg Ile Lys Gly Ala Gly
        195                 200                 205
Asn Pro Gly Glu Ile Asp Asp Gly Trp Gly Glu Leu Val Ser Thr Leu
    210                 215                 220
Glu Asp Phe Ser Tyr Glu Lys Tyr Gly Ile Arg Pro Ala
225                 230                 235

<210> 28701
<211> 216
<212> PRT
<213> A.fumigatus

<400> 28701
Glu Asn Leu Thr Lys Ser Lys Gln Lys Pro Thr Asn Cys Ser Arg Leu
1               5                   10                  15
Ala Ala Met Ile Arg Leu Phe Pro Ala Met Thr Gly Pro Leu Pro Ser
            20                  25                  30
Cys Pro Asn Tyr Leu Asp Tyr Glu Val Ala Val Leu Arg Ser Asn Met
        35                  40                  45
Ala Ala Cys Tyr Leu Lys Leu Glu Asp Trp Lys Ala Ala Val Asp Ser
    50                  55                  60
Ala Thr Thr Cys Leu Asp Arg Leu Glu Asn Ile Ile Pro Leu Ser Gln
65                  70                  75                  80
Gln Asn Gln Asp Glu Asp Leu Pro Lys Gln Asn Ser Gln Leu Ser Lys
                85                  90                  95
Gln Thr Asp Ala Val Ile Glu Ile Ser Gly Glu Asn Glu Glu Ala Glu
            100                 105                 110
Lys Glu Glu Leu Lys Arg Leu Glu Lys Met Asp Glu Lys Lys Asn Asp
        115                 120                 125
Val Met Arg Ile Arg Ala Lys Ala Leu Met Arg Arg Ala Arg Ala Lys
    130                 135                 140
Ser Gln Leu Gly Gly Trp Gly Asn Leu Gln Ala Ala Glu Glu Asp Tyr
145                 150                 155                 160
Lys Val Leu Thr Gly Met Glu Asn Leu Pro Ile Asp Asp Lys Arg Val
                165                 170                 175
Val Gln Arg Ala Leu Arg Glu Leu Pro Ala Arg Ile Asn His Ala Arg
            180                 185                 190
Glu Lys Glu Thr Ala Glu Met Met Ser Lys Leu Lys Asp Val Ser Arg
```

```
        195                 200                 205
Gln Leu Phe Arg Thr Asp Pro Gly
    210                 215

<210> 28702
<211> 77
<212> PRT
<213> A.fumigatus

<400> 28702
Val Cys Cys Leu Asn Thr Gln Arg Leu Phe Leu Arg Leu Met Leu Pro
1               5                  10                  15
Ser Ser Arg Ser Arg Val Ala Thr Gly Val Thr Phe Lys Gln Ala Lys
            20                  25                  30
Gly Glu Leu Ala Lys Leu Gly Trp Asp Pro Arg Thr Gln Thr Lys Gly
        35                  40                  45
Asp Lys Leu Tyr Trp Leu Asn Gly Ser Thr Tyr Gln Lys Leu Asp Glu
    50                  55                  60
Gln Ser Trp Ala Ser Ile Glu Ser Gly Arg Ala Lys Leu
65                  70                  75

<210> 28703
<211> 167
<212> PRT
<213> A.fumigatus

<400> 28703
His Cys Ile Ala Thr Thr Leu Gly Ile Thr Gly Ser Arg Tyr Ser Val
1               5                  10                  15
Arg Tyr Cys Arg Leu Glu Asn Arg Ser Glu Lys Lys Thr Asp Glu Gly
            20                  25                  30
Val Asp Phe Ala Pro Thr Ala Phe Gln Asn Leu Leu Tyr Gln Ala Ala
        35                  40                  45
Gly Asp Gln Gly Thr Leu Pro Phe Ala Gly Arg Gln Arg Ser Ile Asn
    50                  55                  60
Ser Ile Val Leu Leu Ser Asn Gly Ile Ser Phe Ala Ile Gln Val Val
65                  70                  75                  80
Val Phe Leu Val Ile Gly Ser Phe Ala Asp Phe Gly Thr Trp Arg Pro
                85                  90                  95
Asn Ile Leu Ile Val Leu Ser Val Ile Ala Tyr Ala Ile Gly Phe Gly
            100                 105                 110
Trp Leu Gly Val His Thr Gln Glu Arg Trp His Ile Ala Val Gly Leu
        115                 120                 125
Tyr Ile Val Gly Leu Ile Ala Tyr Gln Thr Thr Leu Thr Phe Trp Thr
    130                 135                 140
Ala Ala Phe Pro Gly Leu Ala Arg Asn Thr Ala Glu Met Lys Asp Arg
145                 150                 155                 160
Ala Asp Ala Val Cys Gly Arg
                165

<210> 28704
<211> 147
<212> PRT
<213> A.fumigatus

<400> 28704
```

```
Pro Cys Ala Val Leu Ser Pro Pro Cys Gly Gly His Ala Ser Asp Ala
1               5                  10                  15
Asn Ala Tyr Pro Thr Leu Ser Gln Pro Pro Val Pro Arg Ala Pro Thr
            20                  25                  30
Pro Ala Asn His Val Thr Ser Leu Pro Pro Leu Lys Val Leu Ser Gly
        35                  40                  45
Glu Tyr Ser His Pro Ser Gln Pro Asn Ala Gln Ser Pro His His Asp
    50                  55                  60
Leu Gly Ser Gly Lys Arg Leu Leu Trp Glu Thr Asn His Thr Leu Ser
65                  70                  75                  80
Lys Arg Ser His Glu Glu Thr Phe Gly Ser Asp Glu Arg Pro Leu His
                85                  90                  95
Asn Gly Met Arg Pro Asp Met Asp Gln Tyr Pro Ser Met Gly Arg Lys
            100                 105                 110
Gln Pro Asp Tyr Gly Arg Leu Pro Phe Tyr Thr Asp Ser Arg Asp Glu
        115                 120                 125
Met Ala Tyr Lys Arg Ala Asn Gly Arg Met Val Met Lys Ile Leu Pro
    130                 135                 140
Ala Leu Pro
145
```

<210> 28705
<211> 187
<212> PRT
<213> A.fumigatus

```
<400> 28705
Thr Cys Asn Arg Pro Asp Leu Pro Pro Val Lys Pro Ser Ala Ile Ala
1               5                  10                  15
Met Gly Thr Ile Phe Thr His Thr Ala Ser Leu Gly Ile Leu Ala Pro
            20                  25                  30
Val Phe Gly Asp Thr Tyr His Arg Ala Gln Ala Ala Asn Ser Lys Glu
        35                  40                  45
Glu Phe Ile Lys Ser Lys Glu Ala Ala Gly Ala Ala Ala Ala Trp Gly
    50                  55                  60
Ser Ser Leu Val Gly Ser Ala Val Gln Thr Tyr Gly Val Ala Ala Leu
65                  70                  75                  80
Ile Asn Ala Thr Gly Thr Leu Ser Tyr Lys Gly Ala Ala Tyr Leu Gly
                85                  90                  95
Ser Leu Ile Phe Met Ala Ser Ser Ala Pro Ser Val Ser Ile Pro Ile
            100                 105                 110
Leu Ser His Gln Ile Leu His Asp Met Leu Thr Leu His Tyr Val Ser
        115                 120                 125
Ser Leu Ser Ala Lys Ser Ser Pro Lys Ser Asp Pro Ser Ile Leu Leu
    130                 135                 140
Leu Leu Val Leu Ser Ala Gly Cys Leu Arg Gln Leu Gly Leu Val Cys
145                 150                 155                 160
Ser Leu Pro Gly Gly Val Leu Ala Gln Ile Leu Ser Ile Arg Ser Asp
                165                 170                 175
Ser Trp Leu Met Val Arg Glu Ile Met Ile Leu
            180                 185
```

<210> 28706
<211> 182
<212> PRT
<213> A.fumigatus

<400> 28706
Ala Gly Val Thr Asp Cys Arg Glu Lys Asn Ile His Ser Arg Ile Ala
1 5 10 15
Leu Thr Leu Thr Lys Leu Ile Leu Gly Arg Arg Gly Val Gln Val Thr
20 25 30
Arg Ser Trp Arg Gln Thr Ile Gly Ala Gln Asn Ala Leu Asp Ala Pro
35 40 45
Leu Val Leu Leu Lys Tyr Gly Ser Glu Ala Thr Leu Phe Ser Leu Leu
50 55 60
Phe Asn Leu Asn Gln Leu Leu Leu Ser Cys Leu Pro Gly Leu Gln Asn
65 70 75 80
Val Val Leu Gly Arg Arg Pro Ala Thr Tyr Cys Lys Lys Ala Asn Ser
85 90 95
Val Cys Leu Val Asp Tyr Ala Lys Ser Gly Val Ile Ser Pro Asp Val
100 105 110
Ala Leu Pro Val Arg Val Val Gly Asn Val Cys Cys Trp Asp Ser Asn
115 120 125
Gly Val Ile Ile Arg Leu Arg Arg Glu Ser Thr Arg Ser Arg Lys Ser
130 135 140
Ile Leu Arg Val Lys Trp Asp Ser Ser Arg Ala Ile Gly Ile Asp Gly
145 150 155 160
Lys Lys Thr Ala Lys Thr Phe Pro Tyr Pro Arg Arg Leu Asp Gly Val
165 170 175
Phe Leu Ile Ile Lys Thr
180

<210> 28707
<211> 65
<212> PRT
<213> A.fumigatus

<400> 28707
Ile Leu Ile His Lys Ile Ile Ile Ser Leu Thr Ile Asn Gln Glu Ser
1 5 10 15
Leu Leu Ile Glu Arg Ile Cys Ala Ser Thr Pro Pro Gly Lys Glu Gln
20 25 30
Thr Lys Pro Asn Cys Leu Lys His Pro Ala Asp Ser Thr Asn Ser Asn
35 40 45
Ser Ile Glu Gly Ser Leu Phe Gly Glu Asp Leu Ala Asp Lys Leu Glu
50 55 60
Thr
65

<210> 28708
<211> 237
<212> PRT
<213> A.fumigatus

<400> 28708
Trp Ser Thr Phe Ser Leu Leu Ser Phe Asp Asp Gln Lys Tyr Thr Val
1 5 10 15
Gln Ser Thr Gly Ile Trp Glu Arg Leu Arg Arg Leu Leu Ala Ile Asp
20 25 30
Pro Asn Arg Ser Thr Gly Val Pro Leu Asn Ser Gln Tyr Arg Leu Pro
35 40 45

```
Thr Pro Gly Ala Leu Pro Pro Gln Ser Tyr Asp Asp Pro Val Thr Val
    50                  55                  60
Pro Ala Ala Asp Ile Ala Asp Asn Pro Tyr Trp Lys Arg Asp Val Arg
65                  70                  75                  80
Arg Asn Tyr Pro Arg Leu Ser Ile Val Asn Gln Ala Asp Ala Val Gly
                85                  90                  95
Leu Leu Thr Val Gly Ser Arg Ala Ala Pro Lys Asp Asp Val Leu Gln
            100                 105                 110
Thr Gly Gln Ala Gly Glu Gln Gln Leu Val Glu Val Lys Gln Gln Gly
        115                 120                 125
Glu Glu Arg Gly Leu Ala Ala Ile Phe Glu Lys Asp Lys Arg Gly Ile
    130                 135                 140
Gln Gly Val Leu Gly Ala Asp Gly Leu Pro Pro Thr Pro Cys Asn Leu
145                 150                 155                 160
Asn Ala Ser Ala Ala Lys Tyr Gln Leu Gly Gln Gly Gln Gly Tyr Pro
                165                 170                 175
Ala Val Tyr Val Phe Leu Ser Ala Ile Cys Tyr Pro Ser Leu His Phe
            180                 185                 190
Asn Leu Gly Ile Leu Ala Gly Arg Ser Ser Lys Tyr Ser Leu Thr Ala
        195                 200                 205
His Leu Lys Leu Asn Cys Tyr Leu Leu Ser Val Leu Gly Arg Lys Ser
    210                 215                 220
Ser Ile Ser Glu Lys Cys Ser Asn Val Glu Trp Val Arg
225                 230                 235

<210> 28709
<211> 63
<212> PRT
<213> A.fumigatus

<400> 28709
Pro Pro Asn Leu Ala Pro Gln Ala Ser Ser Pro Glu Gln Pro Met Glu
1               5                   10                  15
Ser Ser Pro Leu Thr Gln Tyr Leu Gly Ala Gln Cys Pro Pro Ile Asn
            20                  25                  30
His Cys Leu Ala Phe Met Thr Leu Met Leu Glu Arg Ala Ala Leu Leu
        35                  40                  45
Leu Glu Ser Phe Val Pro Ser His Gly Thr Cys Leu Ala Arg Lys
    50                  55                  60

<210> 28710
<211> 360
<212> PRT
<213> A.fumigatus

<400> 28710
Arg Trp Gln Glu Cys Arg Asn Leu Pro Glu Leu Cys Ser Val Asp Met
1               5                   10                  15
Thr Ile Ala Asp Ser Tyr Ala Arg Ser Ser Ile Phe Phe Ile Ser Thr
            20                  25                  30
Tyr Phe Ser Asp Tyr Ile Ile Val Pro Leu Ser Ser Lys Ala Gln Val
        35                  40                  45
Ile Glu Ala Leu Glu Arg Arg Gly Phe Gln Phe Glu Ile Thr Thr Glu
    50                  55                  60
Ala Phe Ile Asn His Asn Gln Ser Gln Tyr Ser Gly Tyr Ser Ser Pro
65                  70                  75                  80
```

```
Val Ser Ser Arg Ser Ala Ser Ser Leu Gly Ser Pro Pro Ala Thr Pro
                85                  90                  95
Pro Pro Ser Ser Leu Asp Glu Leu Gln Gly Arg Thr Phe Ala Ser Leu
            100                 105                 110
Arg Lys Asn His Ile Val Pro Ser Val Asp Arg Ser Leu Arg Leu Val
        115                 120                 125
Gln Cys Ala Ala His His Pro Tyr Ser Ser Asp Ala Ser Ser Ile Ser
    130                 135                 140
Ile Leu Arg Thr Ala Leu Thr Thr Ala Leu Val Val Asp Arg Pro Arg
145                 150                 155                 160
Phe Leu Ser Leu Thr Leu Thr Ala Ala Asp Pro Ala Ala Ser Leu Leu
                165                 170                 175
Leu Glu Gln Arg Leu Leu Pro Arg Phe Leu Asn Asp Gly Thr Ser Ser
            180                 185                 190
Ala Glu Ser Thr Asp Glu Thr Ser Leu Leu Leu Gly Ser Lys Glu Asp
        195                 200                 205
Val Leu Val Pro Ile Thr Leu Asp Leu Arg Lys Leu Pro Leu Glu Ala
    210                 215                 220
Thr Gly Ile Val Cys Gly Val Ala Ser Arg Leu Ala Asp Ala Thr His
225                 230                 235                 240
Gly Ala Trp Asp Glu Ser Thr Glu Ala Ser Thr Val Ala Leu Ser His
                245                 250                 255
Ser Phe Asn Gly Ile Ser Ser Phe Glu Ser Ser Leu Asn Arg Tyr Phe
            260                 265                 270
Ser Ser Ser Val Asp Ser Gly Gly Pro Val Arg Pro Pro Ala Gln Asn
        275                 280                 285
Pro Thr His Arg Thr Pro Asn Gly Asp Leu Ser Thr Pro Ser Thr His
    290                 295                 300
His Leu Gln Pro Asp Leu Asp Thr Ser Leu Glu Ala Val Glu Ile Ser
305                 310                 315                 320
Phe Leu Ser Thr Ala Arg Ala Gly Thr Ile Leu Val Gly Glu His Glu
                325                 330                 335
Leu His Arg Ala Met Asp Ala Leu Glu Ala Glu Ser His Glu Pro Asp
            340                 345                 350
Leu Pro Ala Gly Val Leu Glu Val
        355                 360
```

<210> 28711
<211> 113
<212> PRT
<213> A.fumigatus

```
<400> 28711
Glu Ser Phe Pro Thr His Thr Pro Thr Ser Met Pro Ser Thr Thr Ile
1               5                   10                  15
Ile Arg Gln Leu Ala Ile Ser Leu Ala Leu Cys Asn Ser Ala Leu Gly
            20                  25                  30
Gln Val Val Asn Gly Ala Asp Tyr Asn Lys Pro Asn Gly Gly Pro Pro
        35                  40                  45
Ala Ser Phe Phe Ala Ala Ala Ser Thr Met Pro Val Ala Ala Leu Gln
    50                  55                  60
Ala Ala Ala Ala Lys Ala Thr Lys Val Pro Ser Leu Ala Thr Tyr Pro
65                  70                  75                  80
Val Ser Gln Asp Lys Gly Ala Ala Lys Ser Thr Ile His Thr Asp Trp
                85                  90                  95
Ala Ser Phe Arg Phe Ser Pro Arg Glu Leu Ala Gly Ser Ala Leu Lys
```

100 105 110

Tyr

<210> 28712
<211> 113
<212> PRT
<213> A.fumigatus

<400> 28712
Phe Val Ser Asn Ser Glu His Met Val Leu Pro Leu Trp Arg Ser Leu
1 5 10 15
His Ser Val Asn Leu Met Leu Pro Lys Glu Glu Arg Arg Ala Met Leu
20 25 30
Leu Arg Ile Phe Asn Asp Glu Pro Gln Leu Leu Asn Ile Thr Gln Gln
35 40 45
Gly Thr Pro Gln Ser Ser Thr Pro Val Val Glu Thr Asn Glu Glu Asp
50 55 60
Val Ser Gly Met Ala Pro Thr Glu Ala Glu Glu Asn Ala Leu Lys Gln
65 70 75 80
Glu Asn Leu Ala Ile Gly Glu Asp Gln Gln Glu Gln Val Asp Thr Arg
85 90 95
Glu Thr Trp Thr Lys Ala Gly Asp Glu Asp Asp Arg Phe Asn Thr Thr
100 105 110
Val

<210> 28713
<211> 135
<212> PRT
<213> A.fumigatus

<400> 28713
Lys Trp Asn Met Glu Thr Asn Thr Thr Ser Arg Ile Glu Glu Thr Thr
1 5 10 15
Pro Arg Lys Arg Ile His Phe Ser Ile Thr Leu Pro Ser Ser Ala Ser
20 25 30
Gly Tyr Ser Ala Thr Met Pro Leu Phe Asn Gln Phe Leu Arg Phe Thr
35 40 45
Asp Lys Leu Val Ala Ser Ala His Phe Arg Pro Glu Val Met Arg Lys
50 55 60
Ile Lys His Val Arg Glu Glu Glu Ile Lys Lys Leu Arg Arg Ala Ala
65 70 75 80
Glu Glu Glu Lys Ala Glu Glu Arg Arg Leu Ala Ala Glu Lys Ile Lys
85 90 95
Lys Glu Glu Arg Glu Arg Leu Leu Arg Gly Met Thr Ala Glu Glu Gln
100 105 110
Arg Lys Phe Leu Glu Arg Glu Ser Gln Lys Gly Gln Arg Arg Ser Met
115 120 125
Lys Lys Tyr Thr Lys Arg Ala
130 135

<210> 28714
<211> 267
<212> PRT
<213> A.fumigatus

<400> 28714
Asp Thr Gln Gly Ala Thr Ala Val Pro Tyr Thr Lys Trp Tyr Arg Val
1 5 10 15
Trp Glu Arg Thr Ser Pro Lys Asp Phe Ile Gln Glu Ala Met Val Met
20 25 30
Pro Leu Ile Leu Leu Ile Val Val Phe His Leu Trp Gly Thr Arg Lys
35 40 45
Asn Arg Arg Arg Ala Arg Glu Trp Ala Gln Ala His Ala Pro Ala Leu
50 55 60
Gln Ser Glu Phe Ala Val Val Gly Phe Asp Gly Val His Lys Phe Thr
65 70 75 80
Gly Ala Val Asp Ser Ala Pro Ala Glu Leu Ile Ser Pro Glu Ser Thr
85 90 95
Leu Lys Glu Lys Ser Ala Gln Glu Phe Ile Ser Tyr Ala Thr Gly Arg
100 105 110
Gln Asn Val Ala Phe Val Asp Met Ser Ile Lys Leu Pro Asn Arg Tyr
115 120 125
Asn Pro Ile Val Tyr Trp Ser Asp Tyr Ala Leu Ser Phe Phe Phe Asp
130 135 140
Ser Trp Gln Ala Pro Ala Glu Thr Phe Glu Ala Ile Ala Tyr Thr Phe
145 150 155 160
Asp Gly Arg Glu Lys Asp Leu Val Pro Val Pro Ala Asn Asp Thr Ser
165 170 175
Ser Leu Lys Val Asn Asn Ser Ala Tyr Asp Gly Phe Ile Trp Ala Val
180 185 190
Val His Lys Asn His Met Arg Lys Phe Arg Leu Asp Arg Tyr Asp Ala
195 200 205
Ser Met Thr Phe Thr Lys Asp Asn Ala Lys Leu Pro Ser Trp Val Thr
210 215 220
Val Met Thr Glu Ser Ala Glu Ile Thr Asp Thr Leu Leu Thr Pro Glu
225 230 235 240
Leu Ile Gln Ala Ile Glu Lys Ala Gly Asp Ser Phe Arg Tyr Phe Ile
245 250 255
Val Thr Asp Gln Pro Val Asp Lys Pro Leu Lys
260 265

<210> 28715
<211> 413
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (389),(401)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28715
Met Gly Cys Phe Leu Val Arg Glu Val Ser Trp Leu Val Arg Asn Glu
1 5 10 15
Ala Ala Phe Val Tyr Leu Asp Ser His Ile Ser Asn Pro Leu Phe His
20 25 30
Arg Pro Glu Leu Ser Thr Phe Ser Pro Gln Gln Val Ile Arg Cys Arg
35 40 45
Ser Phe Ser Phe Ile Gly Ile Gly Ser Gly Lys Leu Glu Ser Ser Ser
50 55 60

```
Gln Lys Ala Phe Tyr Ser His Ala Ile Ala Val Leu Gln Met Arg Gly
65                  70                  75                  80
Cys Leu Gln Leu Ala Arg Trp Leu Ser Ala Ala Pro Lys Gly Thr Ala
                85                  90                  95
Ala Ser Leu Thr Arg Ala Pro Phe Val Leu Ala Asn Ala Pro Arg Tyr
            100                 105                 110
Phe Thr Ser Ser Ala Ser Arg Ala Gly Ser Arg Ser Thr Ala Thr Lys
        115                 120                 125
Pro Leu Ser Asp Leu Glu Lys Arg Ile Ser Ala Ile Pro Ile Glu Arg
    130                 135                 140
Tyr Arg Asn Phe Cys Ile Val Ala His Val Asp His Gly Lys Ser Thr
145                 150                 155                 160
Leu Ser Asp Arg Leu Leu Glu Leu Thr Gly Thr Ile Glu Pro Gly Ser
                165                 170                 175
Asn Lys Gln Val Leu Asp Lys Leu Asp Val Glu Arg Glu Arg Gly Ile
            180                 185                 190
Thr Val Lys Ala Gln Thr Cys Ser Met Ile Tyr Asn His Asn Gly Glu
        195                 200                 205
Asp Tyr Leu Leu His Leu Val Asp Thr Pro Gly His Val Asp Phe Arg
    210                 215                 220
Ala Glu Val Ser Arg Ser Tyr Ala Ser Cys Gly Gly Ala Leu Leu Leu
225                 230                 235                 240
Val Asp Ala Ser Gln Gly Ile Gln Ala Gln Thr Val Ala Asn Phe Tyr
                245                 250                 255
Leu Ala Phe Ala Gln Gly Leu Glu Leu Ile Pro Val Ile Asn Lys Val
            260                 265                 270
Asp Leu Pro Ser Ala Glu Pro Glu Arg Ala Leu Glu Gln Met Lys Asn
        275                 280                 285
Ser Phe Glu Leu Asp Thr Glu Asn Ala Val Met Val Ser Ala Lys Thr
    290                 295                 300
Gly Leu Asn Val Glu Lys Leu Leu Pro Thr Val Ile Glu Lys Ile Pro
305                 310                 315                 320
Ala Tyr Gly His Phe Pro Val Asp Ser His Glu Leu Leu Pro Leu Leu
                325                 330                 335
Thr Leu Ser Ser Pro Ile Gly Asp Cys Lys Lys Pro Leu Arg Met Leu
            340                 345                 350
Leu Val Asp Ser Trp Tyr Asp Ser Tyr Lys Gly Val Ile Cys Leu Val
        355                 360                 365
Arg Ile Phe Asp Gly Glu Ile Arg Ala Gly Gln Gln Val Val Ser Phe
    370                 375                 380
Ala Ser Ser Pro Xaa Lys Glu Pro Arg Ile Arg Glu Lys Ser Pro Ser
385                 390                 395                 400
Xaa Ala Pro Pro Asn Pro Pro Thr Lys Glu Lys Glu Asn
                405                 410
```

<210> 28716
<211> 88
<212> PRT
<213> A.fumigatus

<400> 28716

```
Ser Asn Pro Val Thr Ala Asp Asp His Val Lys Ala Tyr Ile Lys Lys
1               5                   10                  15
Ile Met Ser Gln Leu Asn Lys Trp Met Leu Gly Gly Lys Ile Ser Lys
            20                  25                  30
Leu Val Val Val Ile Thr Asp Lys Glu Thr Gly Glu His Val Glu Arg
```

```
        35                  40                  45
Trp Gln Phe Asp Val Trp Gln Pro Pro Glu Trp Met Arg Ala Glu Ala
    50                  55                  60
His Gln Asn Leu Leu Ser Pro Gly Pro Asp Ile Trp Lys Ala Cys Gln
65                  70                  75                  80
Glu Pro Asn Phe Ser Glu Ile Cys
                85
```

<210> 28717
<211> 104
<212> PRT
<213> A.fumigatus

<400> 28717

```
Tyr Asn Leu Val Leu Cys Asn Arg Asp Thr Glu Asn Gln Ser Ser Thr
1               5                  10                  15
Ala Val Glu Lys Thr Glu Lys Glu Ile Gln Glu Glu Ile Gln Ala Ile
            20                  25                  30
Phe Arg Gln Ile Thr Ala Ser Val Thr Phe Leu Pro Val Leu Asp Gly
        35                  40                  45
Asp Cys Thr Phe Asn Val Leu Val Tyr Ala Asp Ala Asp Ser Asp Val
    50                  55                  60
Pro Val Glu Trp Gly Asp Ser Asp Ala Lys Glu Ile Lys Asn Ala Glu
65                  70                  75                  80
Lys Val Gln Leu Arg Ser Phe Ser Thr Asn Asn His Arg Val Glu Thr
                85                  90                  95
Leu Val Ser Tyr Arg Leu Ala Glu
            100
```

<210> 28718
<211> 66
<212> PRT
<213> A.fumigatus

<400> 28718

```
Leu Met Val Ser Thr Thr Ile Phe Met Thr Ser Arg Leu Pro Leu Asn
1               5                  10                  15
Asn Cys Tyr Asn Gly Leu Val Arg Gly Ser Asp Gln Phe Ala Asp Lys
            20                  25                  30
Lys Thr Pro Gly Phe Ser Pro Pro Ala Asp Asp Ser Pro Tyr Val Leu
        35                  40                  45
Ala Pro Ile Ala Thr Ile Tyr Leu Ser Ala Ser Gln Ala Arg Ile Leu
    50                  55                  60
Asn Leu
65
```

<210> 28719
<211> 275
<212> PRT
<213> A.fumigatus

<400> 28719

```
Ser Thr Glu Tyr Lys Met Arg Ser Phe Leu Phe Gly Gly Leu Val Ala
1               5                  10                  15
Leu Ser Ser Thr Leu Gly Ala Phe Ala Ala Asn Tyr Asn Ser Ser Ala
            20                  25                  30
```

```
Tyr Ser Asp Ser Ala Ser Gly Ile Asp Phe Gln Arg Trp Cys Asp Ala
        35                  40                  45
Asn Thr Gly Phe Cys Phe Gly Leu Ala Leu Pro Glu Thr Val Gly Thr
    50                  55                  60
Asp Phe Val Gly Gln Leu Val Val Pro Leu Asp Ser Ser Lys Gly Trp
65                  70                  75                  80
Gly Gly Val Ser Leu Gly Gly Ser Met Thr Ser Thr Leu Leu Ile Ala
                85                  90                  95
Ala Trp Pro Asn Gly Asn Ser Val Val Ser Ser Leu Arg Lys Thr Thr
            100                 105                 110
Asn Tyr Ala Asn Pro Asp Val Tyr Ser Gly Gly Ala Ser Leu Thr Glu
        115                 120                 125
Ile Pro Asp Gly Thr Ser Val Asn Arg Thr His Leu Thr Tyr Thr Phe
    130                 135                 140
Leu Cys Ser Gly Cys Ile Leu Gly Gln Pro Ala Thr Phe Asp Ala Thr
145                 150                 155                 160
Asp Glu Thr Tyr Phe Leu Gly Trp Ala Leu Ser Lys Thr Ser Pro Thr
                165                 170                 175
Thr Pro Ala Ser Ala Ser Ser Ala Leu Thr Tyr His Ala Ala Gly Phe
            180                 185                 190
Gly Ser Phe Glu Met Leu Leu Gly Gln Ala Lys Ser Ser Lys Tyr Ser
        195                 200                 205
Thr Trp Ala Ala Met Ala Lys Ser Thr Gly Gly Ser Pro Ser Ser Thr
    210                 215                 220
Pro Ser Ala Ser Ala Ser Val Thr Pro Ser Pro Ser Arg Ser Pro Val
225                 230                 235                 240
Pro Ser Val Thr Pro Thr Val Ser Asn Ser Thr Tyr Asp Tyr Ile Val
                245                 250                 255
Val Gly Gly Gly Ala Pro Gly Ile Phe Thr Thr Arg Arg Gln Gly Arg
            260                 265                 270
Val Thr Leu
        275
```

<210> 28720
<211> 176
<212> PRT
<213> A.fumigatus

```
<400> 28720
Thr Thr Arg Asn Gly Arg Cys Leu Ala Thr Arg Asp Leu Gly Lys Ala
1               5                   10                  15
Met Ile Pro Leu Ile Leu Asp Arg Phe Thr Ile His Gly Pro Asn Gly
            20                  25                  30
Glu His Ala Cys Tyr Val Thr Ala Thr Ala Arg Ala Ser Leu Ser Ala
        35                  40                  45
Leu Lys Asp Gly Ser Trp Val Arg Leu Phe Glu Leu Asp Val Ala Arg
    50                  55                  60
Thr Leu Ala Ala Gln Leu Val Leu Ala Val Asp Tyr Val His Ala Gln
65                  70                  75                  80
Gly Phe Val His Gly Asp Leu His Leu Gly Asn Ile Leu Leu Lys Val
                85                  90                  95
Pro Pro Ser Phe Asp Arg Leu Ser Pro Glu Gln Leu Tyr Glu Glu Tyr
            100                 105                 110
Gly Ala Pro Glu Leu Glu Pro Val Ile His Leu Asp Gly Asn Pro Leu
        115                 120                 125
Pro Pro Gly Val Pro Ser His Gly Ile Ala Pro Ile Trp Leu Arg Glu
```

```
    130                 135                 140
Ala Ser Glu Lys Ile Met Leu Ala Glu Ala Arg Ile Leu Leu Ser Asp
145                 150                 155                 160
Cys Gly Glu Ser Ser Thr Arg Gly Trp Lys Asp Pro Arg Gly Arg Tyr
                165                 170                 175

<210> 28721
<211> 292
<212> PRT
<213> A.fumigatus

<400> 28721
Phe Ala Ser Arg Ile Ser Cys Ser Thr Arg Ser Trp Gly Thr Pro Val
1               5                   10                  15
Gly Asn Thr Ile Leu Leu Gly Val Asp Asp Phe Phe Pro Gly Ser Glu
            20                  25                  30
Pro Gly Val Pro Leu Pro Leu Gly Leu Val Cys Gly Val Asp Leu Gly
        35                  40                  45
Ile Gly Val Glu Val Val Ile Thr Thr Ser Ser Pro Ser Ala Lys Asp
    50                  55                  60
Thr Glu Arg Arg Cys Ala Asp Phe Ser Ala Gly Glu Ser Leu Arg Lys
65                  70                  75                  80
Ala Glu Cys Asn Cys Phe Thr Arg Ser Arg Ala Gly Val Cys Phe Asp
                85                  90                  95
Gly Val Ala Ser Phe Ser Thr Asn Asp Ala Arg Arg Ile Val Asp Ala
            100                 105                 110
Leu Leu Glu Lys Arg Gly Val Pro Ile Asp Val Val Ala Ser Trp Asp
        115                 120                 125
Asn Gly Thr Ile Thr Cys Gly Leu Leu Gly Gly Leu Phe Val Ile Pro
    130                 135                 140
Arg Pro Arg Pro Ala Phe Ala Asp Ser Gly Phe Ser Glu Thr Leu Gly
145                 150                 155                 160
Arg Arg Pro Ile Pro Glu Asn Asp Gly Ala Leu Ser Cys Leu Arg Thr
                165                 170                 175
Asn Gly Leu Leu Thr Gly Gly Ser Asp Ser Asp Trp Leu Gly Leu Phe
            180                 185                 190
Ser Leu Ser Asp Asp Pro Gly Leu Leu Ala Ser Asn Arg Gly Ser Leu
        195                 200                 205
Phe Gly Cys Ser Ser Ser Lys Leu Phe Phe Leu Leu Arg Cys Arg Thr
    210                 215                 220
Ala Gly Asn Pro Pro Leu Asp Glu Leu Ser Leu Leu Pro Phe Thr Thr
225                 230                 235                 240
Gly Ser Ser Val Ser Ser Ala Ser Ala Ser Ala Gly Thr Leu Ser Asn
                245                 250                 255
Ala Ala Thr Ser Leu Ser Phe Ile Ala Thr Ser Pro Ser Leu Ser Lys
            260                 265                 270
Ser Leu Asn Cys Ser Ser Thr Ser Ser Ser Ser Ser Ser Ser Ser Asp
        275                 280                 285
Ser Arg Pro Cys
    290

<210> 28722
<211> 552
<212> PRT
<213> A.fumigatus
```

<400> 28722
Thr Gly Ser Val His Leu Gln Leu Pro Trp Thr Ile Ala Ser Val Ala
1 5 10 15
Gly Thr Cys Arg Ser Pro Pro Val Glu Gln Glu Glu Ile Pro Met Ser
20 25 30
Pro Pro Arg Trp Gly Glu Ser Pro Val His Glu Asn Asp Ser Gln Asp
35 40 45
Pro Lys Gly Val Val Val Ala Ala Thr Pro Gln His Lys Arg Met Glu
50 55 60
Ser Gln Glu Leu Gly Glu Ser Pro Ser Pro Glu Arg Gln Trp Ala Pro
65 70 75 80
Thr Pro Lys Thr Gln Thr Ser Pro Ala Lys Arg Gly Ser Val Ser Lys
85 90 95
His Val Pro Ala Thr Arg Ser Ile Ser Gln Phe Val Ala Glu Pro Asp
100 105 110
Phe Pro Thr Ser Asn Arg Thr Glu Arg Glu Arg Ile Gly Ser Glu Ser
115 120 125
Pro Leu Ser Pro Arg Gln Ala Pro Ser Arg Pro Glu Arg Glu Val Asp
130 135 140
Glu Glu Glu Glu Val Glu Thr Asp Ile Ser Gln Gln Gly Arg Glu Ser
145 150 155 160
Asp Glu Glu Glu Glu Glu Glu Glu Val Glu Glu Gln Phe Asn Asp Leu
165 170 175
Asp Asn Asp Gly Asp Val Ala Met Asn Asp Ser Asp Val Ala Ala Leu
180 185 190
Asp Lys Val Pro Ala Glu Ala Glu Ala Glu Glu Thr Asp Glu Pro Val
195 200 205
Val Asn Gly Ser Lys Glu Ser Ser Ser Lys Gly Gly Leu Pro Ala Val
210 215 220
Arg Gln Arg Lys Arg Lys Lys Ser Leu Glu Glu Glu Gln Pro Asn Lys
225 230 235 240
Glu Pro Arg Leu Glu Ala Arg Ser Pro Gly Ser Ser Asp Lys Glu Asn
245 250 255
Asn Pro Ser Gln Ser Leu Ser Glu Pro Pro Val Ser Ser Pro Leu Val
260 265 270
Arg Arg His Glu Arg Ala Pro Ser Phe Ser Gly Ile Gly Arg Arg Pro
275 280 285
Ser Val Ser Glu Lys Pro Glu Ser Ala Lys Ala Gly Leu Gly Leu Gly
290 295 300
Ile Thr Lys Ser Pro Pro Ser Lys Pro Gln Val Met Val Pro Leu Ser
305 310 315 320
Gln Glu Ala Thr Thr Ser Ile Gly Thr Pro Leu Phe Ser Ser Lys Ala
325 330 335
Ser Thr Ile Arg Arg Ala Ser Leu Val Glu Asn Asp Ala Thr Pro Ser
340 345 350
Lys Gln Thr Pro Ala Leu Asp Arg Val Lys Gln Leu His Ser Ala Leu
355 360 365
Arg Lys Asp Ser Pro Ala Glu Lys Ser Ala Gln Arg Arg Ser Val Ser
370 375 380
Phe Ala Glu Gly Glu Asp Val Val Ile Thr Thr Ser Thr Pro Ile Pro
385 390 395 400
Lys Ser Thr Pro Gln Thr Asn Pro Lys Gly Lys Gly Thr Pro Gly Ser
405 410 415
Glu Pro Gly Lys Lys Ser Ser Thr Pro Ser Lys Met Val Phe Pro Thr
420 425 430
Gly Val Pro Gln Glu Arg Val Glu Gln Leu Met Arg Glu Ala Asn Gln

```
        435                 440                 445
Lys Phe Ala Lys His His Lys Asp Lys Glu Glu Val Glu Glu Met Ile
    450                 455                 460
Lys Val Ala Lys Glu Gln Asn Lys Asp Pro Ala Phe Val Arg Asn Leu
465                 470                 475                 480
Glu Glu Leu Leu Ala Lys Leu Asp Arg Val Gln Lys Leu Glu Lys Arg
                485                 490                 495
Asn Arg Ser Ser Glu Arg Asp Arg Leu Glu Arg Ala Arg Ala Asp Leu
            500                 505                 510
Arg Ala Lys Arg Glu Glu Ile Ala Lys Met Glu Ala Asp Met Gly Ile
        515                 520                 525
Ser Ser Gln Asp Lys Gln Gln Lys Ala Asp Ser Ala Lys Ser Ser Pro
    530                 535                 540
Arg Gly Trp Lys Phe Pro Arg Cys
545                 550
```

<210> 28723
<211> 103
<212> PRT
<213> A.fumigatus

<400> 28723

```
Arg Thr Met Glu His Ser Ser Pro Leu Ala Ala Met Gln Pro Pro Ser
1               5                   10                  15
Val Met Phe Gly His Cys Phe Arg Ser Asp Ala Pro Thr Ser Tyr Pro
            20                  25                  30
Thr Phe Gly Pro Arg Ser Gly Leu Gly Pro Asn Ser Phe Asn Phe Lys
        35                  40                  45
Glu Leu Ser Met Asn Lys Ala Ser Gly Asp Tyr Rhe Gly Met Asn Pro
    50                  55                  60
Val Arg Gly Ser Ser Pro Thr Ala Ser Leu Ala Ala Asp Leu Ser Gln
65                  70                  75                  80
Asn Phe His Ile Asp Gln Arg Leu Ala Asp Ala Leu Arg Cys Leu Ser
                85                  90                  95
Cys Phe Leu Cys His Ala Leu
            100
```

<210> 28724
<211> 68
<212> PRT
<213> A.fumigatus

<400> 28724

```
Glu Lys Pro Thr Gln Gly Asp Phe Leu Gly Lys Gly Gln Leu Leu Leu
1               5                   10                  15
Gln Thr Ile Leu Pro Gly Ile Tyr Tyr Asn Gly Lys Met Lys Tyr Gly
            20                  25                  30
Gln Thr Pro Gln Thr Pro Cys Asn Ser Val Phe Asp Ser Leu Phe Phe
        35                  40                  45
Phe Leu Asn Cys Val Ser Cys Ser Asn Ser Arg Pro His Lys Ser Trp
    50                  55                  60
Glu Thr Pro Phe
65
```

<210> 28725
<211> 144

<212> PRT
<213> A.fumigatus

<400> 28725
Ser Trp Ile Ser Arg Phe Ser Ser Leu Ala Met Asn Ile Met Asn Ile
1 5 10 15
His Gln Ser Leu Cys Met Ala Gly Arg Leu Pro Val Phe Thr Ser Arg
20 25 30
Leu Cys Ser Gly Lys Arg Leu Leu Cys Tyr Thr Ala Gln Lys Ser Ser
35 40 45
Lys Ser Asp Ala Lys Thr Gly Ser Cys Met Ile Tyr Pro Ser Asn Asn
50 55 60
Arg Leu Ser Leu Leu Lys Phe Leu Glu Val Gln Ser Pro Ser Glu Asp
65 70 75 80
Pro Ser Lys Val Arg Asp Asn Asn Gln Glu Ser Lys Pro Lys Val Thr
85 90 95
Arg Ser Val Ala Gln Ala Asp Glu Glu Leu Arg Glu Arg Leu Glu Gln
100 105 110
Met Ser Gly Glu Gly Gly Ala Ser Gly Ile Glu Tyr Glu Asp Gly Lys
115 120 125
Pro Thr Ala Met Lys Arg Ser Val Arg Asn Asn Met Phe Arg Tyr Ile
130 135 140

<210> 28726
<211> 74
<212> PRT
<213> A.fumigatus

<400> 28726
Thr Val Glu Phe Asn Ala Phe Tyr Lys Glu Asn Ile Ile Ile Tyr Leu
1 5 10 15
Tyr Ile Pro Pro Tyr Thr Ser Tyr Leu Leu Gln Ser Leu Asp Ile Ser
20 25 30
Val Phe Ser Pro Leu Lys His Ala Tyr Arg Lys Leu Val Lys Gly Ile
35 40 45
Ile Val Ile Gly Asn Asn Tyr Ile Asn Lys Glu Asp Phe Leu His Leu
50 55 60
Tyr Pro Pro Val Tyr Lys Lys Val Phe Asn
65 70

<210> 28727
<211> 88
<212> PRT
<213> A.fumigatus

<400> 28727
Trp Glu Pro Leu Val Arg Ala Ser Phe Val Thr Thr Pro Gln Val Thr
1 5 10 15
Pro Thr Ala Leu Ser Leu Ser Glu Met Pro Met Gln Val Gly Thr Lys
20 25 30
Gln Arg Val Ser Ile Leu Arg Gln Ala Cys Leu Ala Cys Asp His His
35 40 45
Arg Cys Met Ile Ser Arg Lys Phe Asp Ile Ile Glu Ala Arg Lys His
50 55 60
Leu Gln Glu Asn Gly Asp Asn Ser Lys Asp Asp Asp Gly Ser Leu Leu
65 70 75 80

Ser Ile Glu Leu Trp Val Gly Phe
85

<210> 28728
<211> 132
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (90)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28728
Arg Val Arg Arg Asn Arg His Ala Gly Ile Pro Arg Glu Ser Val Ala
1 5 10 15
Phe Ser Asp Gln Asp Ile Pro Gly Asn Gly Lys Ser Arg Arg Glu Asn
20 25 30
Thr Gly Asn Tyr Arg Lys Ser Ile Arg His Thr Gly Leu Arg Val Gln
35 40 45
Gln Leu Ala Asn Asn Val Glu Gln Asn Lys Glu Leu Glu Ala Ser Glu
50 55 60
Glu Arg Lys Arg Lys Ala Lys Gln Leu Glu Met Gln Arg Lys Glu Ala
65 70 75 80
Ala Arg Ser Gly Arg Ser Met Ala Pro Xaa Ala Pro Ser Tyr Pro Val
85 90 95
Tyr Thr Pro Pro Ser Arg Pro Ala Ala Pro Glu Thr Tyr Asp Thr Tyr
100 105 110
Glu Ala Glu Lys Lys Lys Ser Phe Ala Lys Tyr Ala Leu Ile Ser Tyr
115 120 125
Val Pro Tyr Leu
130

<210> 28729
<211> 285
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (276)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28729
Glu Ala Val Ala Asn Gln Ala Arg Phe Phe Arg Arg Leu Pro Thr Arg
1 5 10 15
Gly Lys Gly Met Gln Leu Gly Lys Lys Ser Lys Thr Thr Asp Ile Tyr
20 25 30
Glu Lys Val Arg Gly Asp Leu Gly Pro Glu Val Asp Glu Ser Ser Pro
35 40 45
Leu Val Thr Pro Gln Val Pro Thr Pro Ala Ala Glu Arg Val Pro Ser
50 55 60
Ala Arg Ala Ser Leu Ser Ala Asp Arg Glu Pro Val His Ile Thr Ile
65 70 75 80
Ala Glu Thr Ile Ser Ala Lys Leu Thr Arg Glu Gly Ala Leu Lys Ser
85 90 95

```
Phe Glu Val Lys Gly Asp Leu Gln Leu Arg Ile Thr Asp Pro Ser Phe
            100                 105                 110
Thr Lys Ile Lys Leu Asp Leu Leu Ala Asn Pro Thr His Gly Ala Gln
        115                 120                 125
Phe Arg Thr His Pro Asn Val Asp Lys Ala Val Phe Thr Ser Ser Ser
    130                 135                 140
Ala Ile Gln Leu Lys Asp Leu Thr Lys Arg Phe Pro Ala Asn Asn Ser
145                 150                 155                 160
Ile Gly Val Leu Arg Trp Arg Val Ala Ser Ser Gly Ser Glu Asn Ala
                165                 170                 175
Asp Ile Leu Pro Ile Thr Phe Thr Val Trp Val Asn Lys Gly Ser Asp
            180                 185                 190
Ser Thr Thr Val Thr Ile Glu Tyr Glu Leu Thr Gly Ser Asp Thr Leu
        195                 200                 205
Arg Asp Val Val Val Ser Ile Pro Phe Gly Ala Thr Glu Pro Thr Val
    210                 215                 220
Ser Ser Phe Asp Ala Val Tyr Glu Val Ser Gly Asp Ser Leu Asp Trp
225                 230                 235                 240
Asn Ile Gly Thr Val Asp Glu Thr Asn Ala Ser Gly Ser Phe Glu Phe
                245                 250                 255
Glu Ser Ala Gly Asp Gly Asp Glu Tyr Glu Phe Phe Pro Met Asn Val
            260                 265                 270
Arg Phe Ser Xaa Val Ser Pro Ser Val Glu Val Asn Val
        275                 280                 285

<210> 28730
<211> 234
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (200)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28730
Val Val Leu Ala Ala Ser Ile Cys Thr Arg Gly Gly Lys Ala Val Leu
1               5                   10                  15
Ser Arg Gln Phe Arg Glu Ile Ala Arg Ser Arg Ile Glu Ala Leu Leu
            20                  25                  30
Ala Ser Phe Pro Lys Leu Ala Asp Ser Gly Thr Gln His Thr Thr Val
        35                  40                  45
Glu Gln Asp Asn Val Arg Phe Val Tyr Gln Pro Leu Asp Glu Leu Tyr
    50                  55                  60
Ile Val Leu Ile Thr Asn Arg Gln Ser Asn Ile Leu Gln Asp Ile Asp
65                  70                  75                  80
Ser Leu His Leu Phe Ala Gln Val Thr Thr Ser Ile Cys Lys Ser Leu
                85                  90                  95
Asp Glu Arg Glu Ile Val Arg Asn Ala Phe Glu Leu Leu Ser Ala Phe
            100                 105                 110
Asp Glu Ile Val Thr Leu Gly Tyr Arg Glu Asn Leu Ser Leu Ser Gln
        115                 120                 125
Ile Lys Thr Phe Leu Glu Met Glu Ser His Glu Glu Arg Ile Gln Glu
    130                 135                 140
Ile Ile Glu Arg Val Tyr Asp Thr Leu Ala Phe Gly Tyr Asn Ser Leu
145                 150                 155                 160
```

```
Leu Ile Met Leu Asn Arg Thr Lys Ser Leu Lys Pro Ala Arg Ser Ala
                165                 170                 175
Lys Glu Arg Arg Ser Ser Trp Arg Cys Ser Glu Arg Arg Gln Leu Ala
            180                 185                 190
Val Ala Gly Leu Trp His Pro Xaa Pro His Pro Ile Leu Tyr Thr Leu
        195                 200                 205
Leu His His Val Leu Leu Leu Pro Lys His Thr Ile Leu Met Arg Arg
    210                 215                 220
Arg Arg Arg Ser His Leu Arg Ser Met Pro
225                 230
```

<210> 28731
<211> 65
<212> PRT
<213> A.fumigatus

<400> 28731
```
His Thr Pro Asp Thr Tyr Ala Met Ala Thr Ala Ser Ser Leu Ala Phe
1               5                   10                  15
Thr Asn Met Glu Val Pro Gly Leu Asp Asp Thr Met Glu Met Ala Ser
            20                  25                  30
Pro Tyr Gln Gly His Val Asp Asp Phe Asp Ile Asp Leu Asp Val Met
        35                  40                  45
Glu Asp Gln Ala Cys Leu His Leu Arg Gly Trp Thr Asp Pro Arg Leu
    50                  55                  60
Ser
65
```

<210> 28732
<211> 133
<212> PRT
<213> A.fumigatus

<400> 28732
```
Ser His His Pro Trp Arg Gln Ala Ser Ala Met Pro Ile Ile Val Val
1               5                   10                  15
Ala Val Ser Ala Arg Ser Val Leu Leu Phe Ser Phe Thr Phe Leu Ala
            20                  25                  30
Ser Arg Ser Leu Leu Pro Ser Tyr Asp Ser Ile Ser Tyr Ile Asn Ile
        35                  40                  45
Thr Met Ser Thr Glu Met Glu Val Asp Val Pro Gln Glu Glu Val Pro
    50                  55                  60
Gln Gly Gln Ser Gly Gly Gly Gly Ser Asp Pro Arg Thr Gln Ala Gly
65                  70                  75                  80
Ala Val Ala Val Arg Ser Ile Glu Gly Trp Ile Ile Ile Ala Thr Asn
                85                  90                  95
Ile His Glu Glu Ala Ser Asp Glu Tyr Val Thr Asp Leu Phe Ala Glu
            100                 105                 110
Tyr Gly Glu Ile Asn Asn Phe Ser Leu Asn Leu Asp Arg Arg Thr Gly
        115                 120                 125
Tyr Val Lys Val Ser
    130
```

<210> 28733
<211> 73
<212> PRT

<213> A.fumigatus

<220>
<221> UNSURE
<222> (34)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28733
Pro Trp Ser Thr Pro Pro Ser Pro Pro Thr Thr Gln Ser His Ser Pro
1 5 10 15
Thr Pro Ala Ser Ala Pro Pro Gly Tyr Pro Thr Ser Arg Thr Ser Thr
20 25 30
Ala Xaa Val Tyr Pro Thr Pro His Thr Glu Thr Pro Arg Gly Val Val
35 40 45
Leu His Pro Ser Arg Ser Trp Ser Pro Thr Ser Pro Glu Ala Cys Arg
50 55 60
Asp Ser Arg Arg Arg Thr Pro Gly Arg
65 70

<210> 28734
<211> 176
<212> PRT
<213> A.fumigatus

<400> 28734
Pro Pro Val Thr Val Leu Trp Ser Ser Ala His Ala Lys Thr Trp Gln
1 5 10 15
Ile Val Ile Leu Cys Ile Val Phe Phe Gly Phe Val Trp Ala Gly Phe
20 25 30
Leu Phe Val Leu Ser His Leu Ser Lys Lys His Ser Trp Ile Leu Pro
35 40 45
Val Phe Ala Cys Gly Leu Gly Ala Pro Arg Trp Ala Gln Ile Trp Trp
50 55 60
Gly Val Ser Gly Ile Gly Tyr Tyr Met Pro Trp Val Ala Gly Gly Leu
65 70 75 80
Thr Gly Gly Ala Leu Ala Ser Arg Ser Ile Trp Leu Trp Leu Gly Val
85 90 95
Leu Asp Ala Ile Gln Gly Leu Gly Phe Gly Met Ile Leu Leu Gln Thr
100 105 110
Leu Ile Arg Met His Met Cys Phe Thr Leu Ile Val Cys Gln Val Leu
115 120 125
Gly Ser Ile Ala Thr Ile Cys Ala Arg Ala Phe Ala Pro Asn Asn Val
130 135 140
Gly Pro Gly Pro Ile Ser Pro Asp Pro Thr Tyr Gly Ala Ser Ala Val
145 150 155 160
Ala Asn Ala Trp Phe Trp Ile Ala Leu Ile Phe Gln Leu Leu Ile Trp
165 170 175

<210> 28735
<211> 176
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (11),(17)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28735

```
Val Gly Leu Leu Met Phe Phe Gly Leu Pro Xaa Tyr Tyr Arg Gln Ser
1               5                  10                  15
Xaa Gly Lys Val Pro Ser Phe Tyr Arg Ser Val Phe Arg Arg Lys Ile
            20                  25                  30
Val Ile Trp Asn Phe Ala Val Val Ile Ile Gln Asn Phe Phe Leu Ser
        35                  40                  45
Ala Pro Tyr Gly Arg Asn Trp Asn Cys Lys Ser Pro Ser Ser Val His
    50                  55                  60
Val Asn Glu Asp Pro Asn Pro Leu Leu Gln Ser Ser Gly Val Arg Pro
65                  70                  75                  80
Thr Gln Lys His Gly Arg Ser Ser Phe Ser Ala Leu Ser Ser Ser Val
                85                  90                  95
Ser Ser Gly Pro Ala Ser Ser Ser Ser Ser Ala Thr Ser Pro Arg Asn
            100                 105                 110
Thr Ala Gly Ser Cys Pro Cys Ser Pro Ala Val Ser Val Pro Pro Ala
        115                 120                 125
Gly Pro Arg Ser Gly Gly Val Ser Arg Ala Ser Gly Thr Thr Cys Pro
    130                 135                 140
Gly Ser Pro Ala Gly Ser Arg Val Ala Pro Trp Arg Leu Ala Ala Ser
145                 150                 155                 160
Gly Cys Gly Trp Ala Phe Ser Thr Gln Ser Arg Ala Trp Val Ser Val
                165                 170                 175
```

<210> 28736
<211> 198
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (165)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28736

```
Arg Pro Ser Trp Arg Asn Ile Asn Thr Gln Cys Lys Leu Leu Gln Ile
1               5                  10                  15
Val Asn Ile Gln Leu Phe His Trp Ala Tyr Ile Thr Gln Ser Ser Thr
            20                  25                  30
Gln His Thr Met Ala Ser Asp Asn Asp Asp Thr Ile Tyr Leu Tyr Asn
        35                  40                  45
Pro Ser Leu Gly Ala Ser Ile Leu Phe Thr Ile Leu Tyr Ile Leu Pro
    50                  55                  60
Leu Ile Tyr Gln Ser Tyr Met Thr Leu Val Tyr Pro Arg Lys Ala His
65                  70                  75                  80
Thr Pro Arg Ala Asn Tyr Phe Ile Pro Met Val Ile Gly Ala Ala Leu
                85                  90                  95
Glu Val Ala Gly Tyr Ala Val Arg Cys Ala Ser Val Arg Lys Pro Ala
            100                 105                 110
Asp Ile Ala Leu Tyr Ala Val Ser Ser Thr Ile Ile Val Ile Ala Pro
        115                 120                 125
Val Phe Val Cys Ala Ser Leu Tyr Met Leu Leu Gly Lys Leu Glu Thr
    130                 135                 140
Ser Ser Asp Ser Gly Ala Lys Gln Pro Pro Ala Ala Phe Leu Cys Gly
```

145 150 155 160
Gly Ser Gly Lys Xaa Leu Pro Trp Met Phe Val Thr Leu Asp Ile Leu
165 170 175
Ala Val Leu Thr Gln Gly Ser Gly Ser Gly Ile Ala Ser Ser Glu Asp
180 185 190
Trp Glu Gly Ser Thr Lys
195

<210> 28737
<211> 456
<212> PRT
<213> A.fumigatus

<400> 28737
Tyr Pro Ile Leu Phe Ser Ile Ala Leu Phe Ile Pro Gly Gly Ile Pro
1 5 10 15
Asp Ile Ala His Leu Leu Thr Met Ile Ile Pro Ala Thr Phe Lys Pro
20 25 30
Ser Leu Thr Arg Ile Arg Ser Lys Arg Arg Ser Lys Gly Ile Lys Asn
35 40 45
Gly Asp Thr His Ser Ile Cys Pro Ala Cys Leu Tyr His Leu Ser Ile
50 55 60
Ile Gln Gly Arg Thr Thr Ile Pro Ser Thr Leu Leu Leu His His Val
65 70 75 80
Gln Leu Asp Thr Pro Ser Glu Ser Asn Cys Leu Ile Asn Gly Glu Thr
85 90 95
Leu Lys Glu Cys Pro Val Trp Glu Thr Ser Pro Leu Pro Cys Leu Pro
100 105 110
Ile Leu Leu Ser Pro Thr Arg Phe Gly Thr Phe Gly Gly Arg Phe Ala
115 120 125
Pro Glu Ser His Met Asp Ala Leu Gln Glu Leu Thr Leu Ala Phe Asp
130 135 140
Arg Phe Ser Ser Asp Tyr Ser Phe Trp Lys Glu Phe Val Thr Phe Pro
145 150 155 160
Gly Ile Arg Pro Ser Pro Leu Arg Phe Ala Glu Asn Leu Thr Arg Ile
165 170 175
Ala Gly Gly Ala Asn Ile Trp Leu Lys Arg Glu Asp Leu Asn Gln His
180 185 190
Gly Ser His Asn Ile Arg Ser Ile Val Gly Gln Ala Leu Leu Ala Arg
195 200 205
Arg Leu Gly Lys Ala Glu Val Val Met Glu Cys Gly Ser Ala Arg His
210 215 220
Gly Ile Val Cys Ala Ala Thr Cys Ala Arg Leu Ser Met Glu Cys Thr
225 230 235 240
Ile Leu Met Gly Ser Arg Asp Ala Thr Asp Gln Lys Asp Ser Val Asp
245 250 255
Met Ile Arg Lys Leu Gly Ala Thr Val Leu Thr Ala Asp Met Gly Ala
260 265 270
Ser Ser Gly Arg Gly Thr Leu Arg Ala Ala Val Asn Glu Ala Leu Arg
275 280 285
Tyr Ser Val Ala His Leu Ser Thr Ala Tyr His Ile Met Ser Gly Pro
290 295 300
Ile Gly Pro His Pro Leu Pro Thr Ile Thr Arg Thr Phe Gln Ser Ile
305 310 315 320
Leu Gly Glu Glu Ile Lys Thr Gln Phe Gly Gly Ala Ser Gly Asp Arg
325 330 335

```
Leu Pro Asp Ala Leu Val Ser Pro Val Gly Pro Gly Ser Ala Ala Val
            340                 345                 350
Gly Met Phe Tyr Pro Phe Ile Glu His Pro Ser Val Lys Leu Leu Gly
        355                 360                 365
Val Glu Ala Ala Asp Ala Ala Pro Leu Ser His Asp Glu Ile Gly Val
    370                 375                 380
Leu His Gly Cys Arg Thr Tyr Leu Leu Gln Asp Glu His Gly Gln Ile
385                 390                 395                 400
Leu Asp Ser Ser Ser Ile Ser Pro Asp Leu Asp Phe Pro Ser Val Gly
                405                 410                 415
Pro Glu Leu Ala His Trp Lys Glu Thr Ala Arg Val Glu Tyr Val Thr
            420                 425                 430
Ala Thr Asp Thr Glu Ala Leu Arg Gly Leu Asp Ile Leu Arg Ser Gln
        435                 440                 445
Glu Gly Ile Val Pro Gly Ala Met
    450                 455
```

<210> 28738
<211> 527
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (518)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28738

```
Gln Ser Ala Asp Val Ala Phe Lys Leu His Leu Arg Ala Ser Ser Asn
1               5                  10                  15
Pro Glu Val Arg Val Asp Leu Leu Val Glu Leu Pro Thr Thr Tyr Pro
            20                  25                  30
Lys Thr Tyr Pro Asn Leu Ser Leu Gly Asn Ser Glu Asn Ile Ser His
        35                  40                  45
Arg Ala Arg Leu Lys Ile Gln Asp Ile Ile Arg Asn Lys Pro Lys Glu
    50                  55                  60
Leu Leu Gly Ser Glu Met Ile Tyr Glu Leu Ala Val Ser Ile Gln Asp
65                  70                  75                  80
Val Leu Glu Asp Val Ala Gln Ala Gln Ala Gln Asp Lys Asp Leu Pro
                85                  90                  95
Ser Leu Glu Glu Glu Arg Met Val Gln Glu Ala Ala Ala Asn Gln Arg
            100                 105                 110
Ala Glu Leu Glu Arg Gln Glu Glu Leu Arg Lys Gln Glu Ala Ala Thr
        115                 120                 125
Ala Glu Glu Glu Arg Ala Leu Gln Gln Leu Leu Glu Asp Lys Leu Arg
    130                 135                 140
Glu Arg Thr Lys Ala Arg Leu Ser Arg Arg Lys Ser Arg Ser Ser Gly
145                 150                 155                 160
Thr Gly Leu Ser Gly Ser Ile Asp Ala Val Asp Gln Phe Pro Asp Ala
                165                 170                 175
Ile Thr Phe Asp Pro Pro Leu Ile Ile Asn Asp Thr Asn Glu Gln Pro
            180                 185                 190
Leu Ala Phe Ser Ala Val Phe Gly Lys Thr Leu Leu Gln Ser Ser Pro
        195                 200                 205
Gly Lys Gln Thr Phe Thr Val Arg Pro Val Val Ser Gly Ser Arg Ser
    210                 215                 220
```

```
His Ala Pro Leu Ile Val Leu Lys Glu Leu Ser Leu Asp Gly Asn Gly
225                 230                 235                 240
Thr Ala Pro Ile Cys Tyr Arg Glu Arg Met Arg Ala Ser Glu Asp Lys
                245                 250                 255
Leu Glu Ala Leu Lys Arg Leu Arg His Pro Asn Leu Val Asp Phe Ile
            260                 265                 270
Gly Phe Lys Ile Ser Arg Pro Leu Asp Ser Ile Asp Ala Gln Asp Ser
        275                 280                 285
Thr Trp Arg Val Tyr Leu Leu Leu Glu Tyr Ala Asn Lys Gly Ser Leu
    290                 295                 300
Ser Glu Phe Leu Asp Ile Val Gly Ser Val Ser Val Glu Ile Ile Arg
305                 310                 315                 320
Ala Trp Met Ile Gln Leu Leu Glu Ala Leu Glu Phe Tyr His Arg Ser
                325                 330                 335
Gly Phe Val His Gly Asp Ile His Cys Gly Arg Ile Leu Leu Phe Arg
            340                 345                 350
Asn Pro Gln Gly Gly Thr Ile Val Lys Leu Gln Gly Ser Ile Glu Asp
        355                 360                 365
Ala Leu Pro Asp Thr Glu Asn Ser Lys Arg Ser Leu Thr Ile Ser Lys
    370                 375                 380
Ser Pro Phe Trp Met Pro Pro Glu Leu Thr Gln Glu Ser Thr Pro Pro
385                 390                 395                 400
Thr Met Lys Ile Asp Val Trp Asp Met Gly Ile Val Phe Leu Gln Met
                405                 410                 415
Ala Phe Gly Lys Asp Val Leu Gln Arg Tyr Thr Ser Ala Asn Ala Leu
            420                 425                 430
Met Gly Thr Leu Gly Leu Ser Ala Pro Leu Gln Asp Leu Leu His Glu
        435                 440                 445
Phe Phe Arg Pro Asp Pro Lys Lys Arg Pro Thr Ala Phe Gln Leu Gln
    450                 455                 460
Pro Phe Glu Phe Phe Arg Val Asp Thr Pro Leu Ile Ala Arg Thr Ser
465                 470                 475                 480
Thr Ser Asn Ser Val Ser Leu Pro Arg Arg Pro Arg Leu Asp Ser Thr
                485                 490                 495
Gly Gly Leu Pro Ala Phe Ser Arg Tyr Asn Gln Asp Phe Asp Glu Ala
            500                 505                 510
Gly Arg Val Gly Lys Xaa Cys Pro Gln Ala Glu Val Pro Tyr Gly
        515                 520                 525
```

<210> 28739
<211> 92
<212> PRT
<213> A.fumigatus

```
<400> 28739
Ile Trp Val Gln Thr Leu Asn Thr Ala His Arg Pro Gly Met Pro His
1               5                   10                  15
Lys Gln Lys Lys Asn Pro Ser Asn Val His Lys Asn Gly Ser Pro Arg
            20                  25                  30
Ala Glu Arg Lys Gln Ser Thr Ser Asn Thr Ile Pro Leu Ala Gln Pro
        35                  40                  45
Gly Leu Ala Thr Thr Asn Tyr Arg Glu Ile His Gln Asn Glu Ala Glu
    50                  55                  60
Ala Leu Arg Ser Ile Tyr Gly Asp Asp Phe Glu Glu Ile Glu His Arg
65                  70                  75                  80
Pro Ser Ala Trp Gln Val Arg Ala Val Phe Ser Asp
```

85 90

<210> 28740
<211> 569
<212> PRT
<213> A.fumigatus

<400> 28740

```
Thr Glu Glu Glu Lys Ile Ala Pro Gly Thr Glu Glu Gly Arg Lys Arg
1               5                  10                  15
Glu Gly Ala Ser Pro Ala Glu Glu Gly Glu Gly Glu Gly Lys Glu Gly
            20                  25                  30
Ala Ala Arg Lys Gly Gly Lys Leu Leu Thr Arg Pro Arg Lys Glu Ala
        35                  40                  45
Lys Glu Arg Met Lys Phe Gly Leu Lys Gln Met Leu Ala Ala Gly Val
    50                  55                  60
Gly Lys Val Ala Gly Leu Glu Glu Pro Gly Ile Glu Lys Lys Lys Pro
65                  70                  75                  80
Val Tyr Asp Asn Arg Lys Arg Lys Gly Leu Lys Lys Gln Glu Glu Asp
                85                  90                  95
Leu Glu Ala Ala Ala Ala Arg Ala Arg Ala Gln Arg Glu Ala Glu Glu
            100                 105                 110
Glu Arg Arg Arg Lys Glu Glu Glu Glu Lys Lys Ala Lys Ala Glu Ala
        115                 120                 125
Glu Ala Ala Ala Ala Ala Ala Ala Gly Asp Glu Glu Ser Glu Val
    130                 135                 140
Asp Asp Trp Glu Lys Ala Ala Glu Ala Glu Glu Glu Val Lys Asp Ser
145                 150                 155                 160
Trp Asp Ala Pro Ser Glu Asp Glu Gly Glu Lys Pro Ala Thr Asn Gly
                165                 170                 175
Val Ala Lys Pro Ala Ala Ala Pro Gln Gln Lys Ala Glu Val His Glu
            180                 185                 190
Ser Glu Ser Glu Asp Asp Ser Glu Asp Asp Ser Glu Ser Glu Ser Glu
        195                 200                 205
Asp Glu Glu Lys Ser Ala Ala Gln Lys Ala Ile Ala Gln Arg Lys Ala
    210                 215                 220
Glu Ala Ala Glu Arg Arg Lys Lys Gln His Glu Glu Ala Leu Ala Ala
225                 230                 235                 240
Arg Ser Lys Asp Asn Leu Arg Ser Pro Ile Cys Cys Ile Leu Gly His
                245                 250                 255
Val Asp Thr Gly Lys Thr Lys Leu Leu Asp Lys Ile Arg Gln Thr Asn
            260                 265                 270
Val Gln Glu Gly Glu Ala Gly Gly Ile Thr Gln Gln Ile Gly Ala Thr
        275                 280                 285
Tyr Phe Pro Val Asp Ala Leu Arg Gln Lys Thr Ala Val Val Asn Lys
    290                 295                 300
Asp Gly Lys Phe Glu Phe Lys Ile Pro Gly Leu Leu Val Ile Asp Thr
305                 310                 315                 320
Pro Gly His Glu Ser Phe Ser Asn Leu Arg Ser Arg Gly Ser Ser Leu
                325                 330                 335
Cys Asn Ile Ala Ile Leu Val Val Asp Ile Met His Gly Leu Glu Pro
            340                 345                 350
Gln Thr Leu Glu Ser Met Arg Leu Leu Arg Glu Arg Lys Thr Pro Phe
        355                 360                 365
Ile Val Ala Leu Asn Lys Ile Asp Arg Leu Tyr Gly Trp Lys Lys Ile
    370                 375                 380
```

```
Asp Asn Asn Gly Phe Gln Asp Ser Leu Ala Met Gln Ser Lys Gly Val
385                 390                 395                 400
Gln Asn Glu Phe Arg Thr Arg Leu Glu His Thr Lys Leu Leu Phe Ala
                405                 410                 415
Glu Gln Gly Phe Asn Ala Glu Leu Tyr Tyr Glu Asn Lys Ser Met Ala
            420                 425                 430
Arg Asn Val Ser Leu Val Pro Thr Ser Ala His Thr Gly Glu Gly Ile
        435                 440                 445
Pro Asp Met Leu Lys Leu Leu Thr Thr Leu Thr Gln Glu Arg Met Thr
    450                 455                 460
Asn Ser Leu Met Tyr Leu Ser Glu Val Glu Cys Thr Val Leu Glu Val
465                 470                 475                 480
Lys Val Ile Glu Gly Leu Gly Thr Thr Ile Asp Val Val Leu Ser Asn
                485                 490                 495
Gly Ile Leu Arg Glu Gly Asp Arg Ile Val Leu Cys Gly Leu Asn Gly
            500                 505                 510
Pro Ile Ala Thr Asn Ile Arg Ala Leu Leu Thr Pro Ala Pro Leu Lys
        515                 520                 525
Glu Leu Arg Leu Lys Ser Gln Tyr Val His Asn Lys Glu Val Lys Ala
    530                 535                 540
Ala Leu Gly Val Lys Ile Ala Ala Asn Asp Leu Glu His Ala Ile Ala
545                 550                 555                 560
Gly Phe Ala Val Asp Gly Cys Trp Asp
                565
```

<210> 28741
<211> 144
<212> PRT
<213> A.fumigatus

<400> 28741

```
Arg Thr Ala Gly Met Leu Leu Leu Arg Thr Arg Glu Arg Asn Gln Pro
1               5                   10                  15
Gln Thr Ala Trp Pro Ser Pro Gln Leu Arg Pro Asn Arg Arg Pro Arg
            20                  25                  30
Cys Thr Ser Pro Asn Pro Arg Met Thr Gln Arg Thr Ile Arg Asn Pro
        35                  40                  45
Ser Gln Lys Met Arg Arg Ser Leu Pro Arg Arg Arg Leu Ser Leu Lys
    50                  55                  60
Glu Arg Pro Lys Leu Pro Ser Gly Gly Arg Asn Ser Met Arg Lys His
65                  70                  75                  80
Trp Pro Leu Val Arg Arg Thr Ile Cys Val Leu Leu Phe Ala Val Ser
                85                  90                  95
Leu Ala Thr Ser Ile Arg Val Lys Pro Ser Tyr Trp Thr Arg Phe Asp
            100                 105                 110
Arg Pro Thr Cys Lys Arg Ala Lys Leu Val Val Ser Pro Ser Arg Leu
        115                 120                 125
Val Leu His Thr Ser Pro Trp Thr Leu Cys Ala Arg Arg Pro Leu Trp
    130                 135                 140
```

<210> 28742
<211> 123
<212> PRT
<213> A.fumigatus

<400> 28742

```
Arg Ile Cys Leu Arg Gln Asn Gln Ile Thr Arg Ile Asp Phe Pro Ser
1               5                  10                  15
Glu Ile Ala Pro Thr Leu Leu Glu Leu Asp Leu Tyr Asp Asn Leu Ile
            20                  25                  30
Ser His Val Lys Gly Leu Asp Glu Phe Arg Asp Leu Thr Ser Leu Asp
        35                  40                  45
Leu Ser Phe Asn Lys Ile Lys His Ile Lys Asn Ile Ser His Leu Val
    50                  55                  60
Asn Leu Thr Asp Leu Tyr Phe Val Gln Asn Arg Ile Ser Lys Ile Glu
65                  70                  75                  80
Gly Leu Glu Gly Leu Thr Lys Leu Arg Asn Leu Glu Leu Gly Ala Asn
                85                  90                  95
Arg Ile Arg Val Gly Val Phe Gln Ala Asp Leu Lys Lys Asp Trp Ala
            100                 105                 110
Glu Cys Ser Arg Lys Ser Arg Ile Leu Thr Leu
        115                 120
```

<210> 28743
<211> 495
<212> PRT
<213> A.fumigatus

<400> 28743

```
Gly Ile Ala Asp Pro Ala Ser Leu Arg Gly Glu Asp Arg Glu Gly Lys
1               5                  10                  15
Gly Gln Leu Leu Ser Leu Asp Gly Leu Val Asp Val Val Thr Arg Glu
            20                  25                  30
Arg Pro Ala Glu Ala Gly Asp Gly Ala Ser Lys His Thr Leu His Gly
        35                  40                  45
Leu Leu Gly Asp Arg Asp Gly Val Leu Gly Leu Leu Asp Ser His Gly
    50                  55                  60
Ser Gly Thr Arg Asp Ile Thr Asn Asn Asp Gly Arg Ala His Ala Thr
65                  70                  75                  80
Arg Ser Val Thr Leu His Pro Gly Val Gly Gly Glu Asp Val Thr Gly
                85                  90                  95
Glu Thr Leu Thr Glu Val Leu His His Val Val Thr Leu Arg Phe Thr
            100                 105                 110
Val Asp Glu Asp Ile Glu Val Lys Leu Phe Leu Asp Phe Asp Asn Leu
        115                 120                 125
Gly Asn Leu Leu Leu Asp Glu Leu Leu Val Leu Leu Ser Gly Asp Leu
    130                 135                 140
Thr Leu Gly Glu Leu Val Thr Leu Asp Thr Asp Leu Leu Gly Leu Arg
145                 150                 155                 160
Glu Gly Thr Asp Gly Gly Gly Gly Glu Glu Arg Lys Val Asp Gly Leu
                165                 170                 175
Ala Leu Leu Gly Lys Thr Asp Trp Glu Gly Arg Leu Ala Val Val His
            180                 185                 190
Leu Leu Gly Asp Ser Ser Leu Ala Leu Leu Asp Leu Gly Val Val Gly
        195                 200                 205
Ala Ser Arg Arg Gly Thr Ser Leu Asn Gly Leu Gly Val Gly Leu Glu
    210                 215                 220
Leu Val Ala Asp Ser Ser Arg Ala Leu Gly Asp Gly Leu Gly Asp Tyr
225                 230                 235                 240
Asn Asn Leu Val Arg Leu Leu Asp Ser Glu Ala Glu Pro Leu Pro Asp
                245                 250                 255
Leu Gly Ile Glu Val Leu Leu Ala Leu Lys Gly Val Gly Asp Met Glu
```

```
            260                 265                 270
Lys Arg Ala Gly Gly Arg Asp Asn Asn Ser Val Leu Ala Lys Leu Leu
        275                 280                 285
Asp Ser Val Leu Asn Leu Leu Asp Gly Ser Leu Glu Val Gly Leu Pro
    290                 295                 300
Asp Val Ala Thr Ile Asn Asn Thr Ser Arg Glu Asp Leu His Gly Ala
305                 310                 315                 320
Lys Ser Gly Asn Asn Ser Ile Glu Leu Leu Arg Val Ala Asp Lys Val
                325                 330                 335
His Val Asp Thr Met Lys Val Val Gln Ser Arg Glu Asn Ile Asn Val
            340                 345                 350
Val Asp Asn Val Thr Glu Val Gly Gly Lys Asp Asn Ala Arg Ser Leu
        355                 360                 365
Val Thr Glu Ser Thr Asn Leu Leu Ile Asp Arg Leu Glu Gly Ser Leu
    370                 375                 380
Gly Leu Gly Arg Glu Ile Glu Asn Glu Asn Arg Leu Val Asn Leu Asn
385                 390                 395                 400
Val Leu Asp Ala Gly Ser Leu Gln Leu Ser Lys Glu Val Asn Val Asp
                405                 410                 415
Gly Asn Gln Val Val Asp Leu Val Asn Arg Val Asn Phe Leu Thr Thr
            420                 425                 430
Val Gly Leu Gly Glu Gly Gln Glu Gly Asp Gly Thr Gln Asp Asp Gly
        435                 440                 445
Thr Ser Asn Asp Ala Ser Leu Leu Gly Leu Glu Glu Leu Ser Asn Gly
    450                 455                 460
Leu Gly Val Arg Ser Glu Leu Glu Asp Leu Val Leu Leu Glu Gly Arg
465                 470                 475                 480
Leu Asp Val Val Val Val Arg Val Glu Pro Leu Asp His Phe Leu
                485                 490                 495
```

<210> 28744
<211> 556
<212> PRT
<213> A.fumigatus

<400> 28744

```
Val Val Pro Glu Arg Tyr Ser Lys Tyr Asn Leu Asp Pro Leu Asp Glu
1               5                   10                  15
Tyr Phe Ala Met Gly Arg Gly Leu Gln Lys Pro Ala Ser Glu Gly Gln
            20                  25                  30
Pro Ala Ile Asp Val Pro Ser Leu Val Trp Cys Ser Val Pro Ser Thr
        35                  40                  45
Lys Arg Ala Gln Lys Val Pro Ile Leu Ile Arg Tyr Leu Gln Glu Met
    50                  55                  60
Val Lys Trp Phe Asp Ser Asn Tyr His Tyr Val Lys Pro Thr Leu Gln
65                  70                  75                  80
Glu Asn Gln Val Phe Lys Leu Ala Ser Asn Pro Lys Pro Val Ala Gln
                85                  90                  95
Phe Leu Glu Ala Lys Glu Ala Gly Ile Ile Thr Arg Pro Val Ile Leu
            100                 105                 110
Gly Pro Val Ser Phe Leu Thr Leu Ala Lys Ala Asp Arg Gly Gln Lys
        115                 120                 125
Ile Asp Pro Ile Asp Lys Ile Asn Asp Leu Val Pro Val Tyr Val Asp
    130                 135                 140
Leu Leu Ala Gln Leu Lys Ala Ala Gly Val Glu Asp Val Gln Ile Asp
145                 150                 155                 160
```

```
Glu Pro Val Leu Val Phe Asp Leu Pro Ala Lys Ser Lys Ala Ala Phe
                165                 170                 175
Lys Pro Val Tyr Glu Lys Ile Gly Ala Leu Gly Asp Lys Ala Pro Arg
            180                 185                 190
Ile Val Leu Ala Thr Tyr Phe Gly Asp Ile Val His Asn Ile Asp Val
        195                 200                 205
Leu Pro Ala Leu His Asn Leu His Gly Ile His Val Asp Leu Val Arg
    210                 215                 220
Asn Pro Glu Gln Leu Asp Ala Val Ile Ala Ala Leu Gly Pro Met Gln
225                 230                 235                 240
Val Leu Ser Ala Gly Val Val Asp Gly Arg Asn Ile Trp Lys Thr Asn
                245                 250                 255
Phe Lys Ala Ala Ile Glu Lys Val Glu His Ala Ile Gln Lys Leu Gly
            260                 265                 270
Lys Asp Arg Val Ile Val Ser Thr Ser Ser Ser Leu Leu His Val Pro
        275                 280                 285
His Thr Leu Glu Ser Glu Lys Asn Leu Asp Pro Glu Val Arg Glu Trp
    290                 295                 300
Phe Ser Phe Ala Val Glu Lys Thr His Glu Val Val Val Ile Ala Lys
305                 310                 315                 320
Ala Val Thr Glu Gly Pro Ala Ala Val Arg Asp Gln Leu Glu Ala Asn
                325                 330                 335
Ala Lys Ser Val Gln Ala Arg Ala Ser Ser Ala Arg Thr Asn Asp Pro
            340                 345                 350
Lys Val Lys Glu Arg Gln Ala Ala Val Thr Glu Glu Met His Asn Arg
        355                 360                 365
Lys Ser Pro Phe Pro Val Arg Leu Ala Glu Gln Ser Lys Ser Ile Asn
    370                 375                 380
Leu Pro Leu Phe Pro Thr Thr Thr Ile Gly Ser Phe Pro Gln Thr Lys
385                 390                 395                 400
Glu Ile Arg Ile Gln Arg Asn Lys Phe Thr Lys Gly Glu Ile Thr Ala
                405                 410                 415
Glu Glu Tyr Glu Lys Phe Ile Glu Gln Glu Ile Ala Glu Val Val Lys
            420                 425                 430
Ile Gln Glu Glu Leu Asp Leu Asp Val Leu Val His Gly Glu Pro Glu
        435                 440                 445
Arg Asn Asp Met Val Gln Tyr Phe Gly Glu Arg Leu Thr Gly Tyr Val
    450                 455                 460
Phe Thr Thr His Ala Trp Val Gln Ser Tyr Gly Ser Arg Cys Val Arg
465                 470                 475                 480
Pro Pro Ile Ile Val Gly Asp Ile Ser Arg Pro Ala Pro Met Thr Val
                485                 490                 495
Lys Glu Ser Lys Asn Ala Val Ser Ile Ser Lys Lys Pro Met Lys Gly
            500                 505                 510
Met Leu Thr Gly Pro Ile Thr Cys Leu Arg Trp Ser Phe Pro Arg Asp
        515                 520                 525
Asp Val His Gln Ser Val Gln Ala Gln Gln Leu Ala Leu Ala Leu Pro
    530                 535                 540
Val Phe Thr Thr Glu Ala Gly Arg Ile Arg Asp Ala
545                 550                 555
```

<210> 28745
<211> 176
<212> PRT
<213> A.fumigatus

<400> 28745
Ser Pro Arg Pro Ser Pro Arg Ala Leu Leu Leu Ser Ala Thr Ser Ser
1 5 10 15
Arg Pro Thr Pro Ser Pro Phe Arg Leu Val Pro Arg Leu Leu Ala Pro
20 25 30
Thr Thr Pro Arg Ser Arg Ser Ala Arg Leu Leu Ser Pro Arg Arg Cys
35 40 45
Thr Thr Ala Ser Leu Pro Ser Gln Ser Val Leu Pro Ser Arg Ala Ser
50 55 60
Pro Ser Thr Phe Leu Ser Ser Pro Pro Pro Pro Ser Val Pro Ser Leu
65 70 75 80
Arg Pro Arg Arg Ser Val Ser Ser Val Thr Ser Ser Pro Arg Val Arg
85 90 95
Ser Pro Leu Arg Ser Thr Arg Ser Ser Ser Ser Arg Arg Leu Pro Arg
100 105 110
Leu Ser Lys Ser Arg Lys Ser Leu Thr Ser Met Ser Ser Ser Thr Val
115 120 125
Asn Leu Ser Val Thr Thr Trp Cys Ser Thr Ser Val Ser Val Ser Pro
130 135 140
Val Thr Ser Ser Pro Pro Thr Pro Gly Cys Arg Val Thr Asp Leu Val
145 150 155 160
Ala Cys Ala Leu Pro Ser Leu Leu Val Ile Ser Arg Val Pro Leu Pro
165 170 175

<210> 28746
<211> 84
<212> PRT
<213> A.fumigatus

<400> 28746
His Gly Leu Cys Ser Ala Val Leu Gly Phe Pro Arg Met Gly Lys Leu
1 5 10 15
Arg Asp Leu Lys Lys Ala Thr Glu Ala Tyr Trp Gly Gly Lys Ile Ser
20 25 30
Arg Asp Glu Leu Leu Ser Glu Gly Lys Arg Leu Arg Ala Glu His Trp
35 40 45
Lys Ile Gln Lys Asp Ala Gly Val Asp Ile Ile Pro Ser Asn Asp Phe
50 55 60
Ala Phe Tyr Asp Gln Val Leu Asp His Ile Gln Leu Phe Gly Val Ser
65 70 75 80
Cys Pro Asp Cys

<210> 28747
<211> 117
<212> PRT
<213> A.fumigatus

<400> 28747
Tyr Gln Arg Cys Ser Arg Arg Cys Ser Asn Gly Pro Tyr Thr Gln Gly
1 5 10 15
Glu Gly Leu Leu Gly Leu Leu Val Leu Leu Cys Pro Tyr Ser Glu Leu
20 25 30
Phe Ala Pro Gly Ser Cys Glu Leu Leu Gln Phe Asp Pro Val Gln Leu
35 40 45
Leu Pro Tyr Phe Phe Leu Asp Leu Leu Asp Leu Leu Phe Trp Ile Asp

```
    50                  55                  60
Gly Leu Leu Val Cys Glu Phe Gln Tyr Gln Ser Ser Thr Gln Glu Met
65                  70                  75                  80
Arg Ile Leu Glu Arg Val His Gly Ile Phe Arg Phe Ala Ser Ala Tyr
                85                  90                  95
Glu Val Ser Lys Thr Glu Thr Thr Ser Arg Pro Val Lys Leu Leu Arg
            100                 105                 110
Asn Pro His Arg Ala
        115
```

<210> 28748
<211> 146
<212> PRT
<213> A.fumigatus

<400> 28748

```
Glu Ala Met Asp Ala Ala Glu Glu Arg Arg Arg Glu Asp Thr Ala Lys
1               5                  10                  15
Lys Ile Ala Ala Arg Arg Thr Lys Ile Ile Ile Lys Asn Leu Pro Phe
            20                  25                  30
Gln Ala Thr Lys Lys Asp Val Arg Ser Leu Phe Gly Ala Tyr Gly Gln
        35                  40                  45
Leu Arg Ser Val Arg Val Pro Lys Lys Phe Asp Arg Ser Ala Arg Gly
    50                  55                  60
Phe Gly Phe Ala Asp Phe Val Ser Ala Arg Glu Ala Glu Asn Ala Met
65                  70                  75                  80
Asp Ala Leu Lys Asn Thr His Leu Leu Gly Arg Arg Leu Val Leu Glu
                85                  90                  95
Phe Ala Asn Glu Glu Ala Val Asp Pro Glu Gln Glu Ile Glu Gln Ile
            100                 105                 110
Glu Lys Lys Val Gly Glu Gln Leu Asp Arg Val Lys Leu Gln Lys Leu
        115                 120                 125
Thr Gly Thr Gly Arg Lys Lys Phe Thr Val Gly Ala Gln Glu Asp Glu
    130                 135                 140
Glu Ala
145
```

<210> 28749
<211> 190
<212> PRT
<213> A.fumigatus

<400> 28749

```
Ser Leu Leu Gly Asp Cys Cys Val Leu Ser Gln Ala Val Ser Ile Ser
1               5                  10                  15
Arg Ala Ser Ser His Pro Ser Leu Trp Asn Leu Ser Phe Phe Pro Lys
            20                  25                  30
Ser Pro Leu Cys Trp Cys Pro Pro Pro Met Ala Thr Asp Trp Gln Pro
        35                  40                  45
Glu Cys Ile Ala Pro Gln His Gln Ser Gly Leu Glu Asn Ile Gly His
    50                  55                  60
His Thr Asp Arg Ala Leu Gln Asn Thr Ser Gly Asn Val Gln Ser Tyr
65                  70                  75                  80
Ser Asp Ala Ile Leu His Gly Gly Met Ser Gly Arg Asp Asp His Leu
                85                  90                  95
Gln His Leu Ala Tyr Lys Tyr Ser His Ala Pro Val His Pro Gln Pro
```

```
            100                 105                 110
Met Gln Thr Ala Thr Thr Leu His Pro His His Ile Leu Asn Ala Arg
        115                 120                 125
Val Gln Ala Lys Lys Leu Arg Arg Val Gln Ser Leu Gly Pro Asn His
    130                 135                 140
Ala Gly Ala Arg Arg Gly Arg Ser Tyr Leu Lys Ser Gln Lys Tyr Leu
145                 150                 155                 160
Glu Tyr Arg Ala Arg Pro Arg Arg Asp Thr Gly Lys Asp Gly Glu Pro
                165                 170                 175
Val Trp Ser Asp Glu Leu Glu Asp Ala Phe Gln Gln Gly Asn
            180                 185                 190
```

<210> 28750
<211> 189
<212> PRT
<213> A.fumigatus

<400> 28750

```
Ile Thr Leu Ser Ala Gly Pro Phe Ala His Val Val Lys Pro Val Asp
1               5                   10                  15
Ile Ile Asp Arg Gly Leu Val Ser Leu Thr Val Ala Ser Glu Ala Phe
            20                  25                  30
Asn Arg Phe Val Thr His Met Ala Pro Gln Met Pro Phe Val Val Phe
        35                  40                  45
Pro Ala Gly Thr Thr Met Ser Asp Val Arg Lys Ser Lys Pro Ala Leu
    50                  55                  60
Leu His Ala Ile Ile Ala Val Ser Ile Gly Ala Ile Gln Pro Asp Ala
65                  70                  75                  80
Gln Leu Ala Leu Leu Glu Asp Phe Tyr Lys Thr Val Ala Asp Arg Ile
                85                  90                  95
Val Val Arg Gly Glu Lys Ser Phe Asp Leu Val Gln Ala Leu Leu Val
            100                 105                 110
Ser Cys Asn Trp Tyr Thr Pro Pro Asp His Phe Glu Lys Leu Lys Phe
        115                 120                 125
Tyr Gln Leu Thr His Met Ala Val Thr Leu Ala Met Asp Leu Gly Met
    130                 135                 140
Asn Arg Lys Leu Leu Val Arg Asn Lys Pro Leu Pro Met Phe Lys Asp
145                 150                 155                 160
Met Val Met Lys Lys Pro Pro Ser Met Asn Leu Asp Ser Pro Glu Thr
                165                 170                 175
Arg Arg Thr Trp Leu Gly Cys Tyr Phe Met Ala Val Gln
            180                 185
```

<210> 28751
<211> 153
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (90)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28751

```
His Leu Lys Gln Gly Gln Thr Pro Leu His Leu Leu Ser Glu Val Ala
1               5                   10                  15
```

```
Asn Ser Arg Ser Ala Thr Ala His Pro Ser Ser His His Gln Pro Ser
            20                  25                  30
Tyr Ala Ser Gln Ser Ser Ala Glu Pro Ile Thr Gln Thr Pro Ser Ser
        35                  40                  45
Asp Leu Thr Ala Gln Thr Val Pro Ser Ser Thr Ala Thr Asp Ser Asp
    50                  55                  60
Pro Trp Thr Gln Tyr Pro Ser Val Ser Leu Ser Ser Ala Thr Thr Gln
65                  70                  75                  80
Ala Gln Gln Gln Ala Gln Ser Arg Gln Xaa Tyr Ser Pro Phe Asn Ser
                85                  90                  95
Asn Tyr Gln Asp Met Ser Ser Tyr Pro Asp Gly Gly Ile Met Met Met
            100                 105                 110
Ser Pro Met Asn Gln Gly Phe Phe Val Pro Glu Leu Gly Ile Gln Val
        115                 120                 125
Gly Phe Asp Ser Gly Asn Met Phe Ala Leu Glu His Leu Leu Thr Asp
    130                 135                 140
Gly Leu Leu Asn Leu Ser Leu Pro Arg
145                 150
```

<210> 28752
<211> 125
<212> PRT
<213> A.fumigatus

<400> 28752

```
Tyr Glu Phe His Asn Asn Asp Asn Leu Gln Ile Asp Asn His Leu Asn
1               5                   10                  15
Glu Ala Gln Thr Pro Thr Arg Arg Gly Lys Pro His Thr Lys Ser Cys
            20                  25                  30
Ala Asn Leu Thr Asp Asn Lys Val Thr Ser Arg Arg Cys Ser Lys Val
        35                  40                  45
Pro Asp Val Ser Asp Arg Cys Gln Leu Val Cys Thr Glu Tyr Cys Tyr
    50                  55                  60
Ile Arg Pro Val Pro Met Pro Cys Asn Arg Lys Gln His Met Tyr Ala
65                  70                  75                  80
Val Leu Ala Phe Met Thr Thr Gly Val Leu Asn Cys Trp Gln Gly Glu
                85                  90                  95
Arg Val Met Thr Ala Asn Ser Glu Val His Pro Gly Val Asp Val Asp
            100                 105                 110
Pro Tyr Ser Gly Gln Ser Asn Gly Met Leu Ala Asp Gly
        115                 120                 125
```

<210> 28753
<211> 165
<212> PRT
<213> A.fumigatus

<400> 28753

```
Ile His Ala Asp Leu Gln Pro Leu Val Lys Thr Arg Gly Ser Val Glu
1               5                   10                  15
Asn Ile Trp Pro Asn Lys Ile Glu Tyr Ser Ile Ser Thr Pro Thr Lys
            20                  25                  30
Ala Val Ile Phe Gly Thr Ser Ile Arg Val Asp Phe Lys Leu Ile Pro
        35                  40                  45
Leu Leu Lys Gly Leu Lys Ile Gly Gln Ile Val Ser Gln Leu Ile Glu
    50                  55                  60
```

```
Ser His Asp Leu Thr Leu Asn Pro Glu Asp Pro Asp Ser Val Arg Asn
65                  70                  75                  80
Thr Tyr Lys Asn Thr Arg Thr Ile Val Asn Asp Glu His Glu Leu Asp
                85                  90                  95
Glu Glu Gly Asn Leu Glu Ile Ile Asp Glu Ala Ala Glu Gly Tyr Gln
            100                 105                 110
Phe Ser Arg Phe Leu Asp Leu Pro Lys Thr Leu Thr Arg Cys Leu Gln
        115                 120                 125
Asp Thr Asp Thr Arg Gly Ile Lys Ile Arg His Lys Leu Lys Phe Arg
    130                 135                 140
Val Gln Leu Leu Asn Pro Asp Gly His Ile Ser Glu Val Cys Thr Pro
145                 150                 155                 160
Pro Leu Arg Asn Val
                165
```

<210> 28754
<211> 287
<212> PRT
<213> A.fumigatus

<400> 28754

```
His Ser Gln Leu Arg Ala Thr Leu Pro Val Ser Ile Phe Ile Ser Pro
1               5                   10                  15
Asn Leu Ala Ile Asp Asp Asn Asn Asn Leu Val Asp Gln Thr Pro Gln
            20                  25                  30
Ser Ala Gln Arg Ala Val Asn Asp Leu Ala Gln Gln Ala Pro Pro Leu
        35                  40                  45
Tyr Gly Glu His Gln Phe Asp Gln Leu Tyr Ser Glu Val Asp Pro Ser
    50                  55                  60
Gly Tyr Arg Thr Pro Gly Pro Gly Ser Gly Pro Gly Thr Pro Phe Gly
65                  70                  75                  80
Thr Leu Ser Arg Asn Leu Ser Ala Glu Asn Leu Ala Ser Met Asn Ala
                85                  90                  95
Leu Thr Asn Thr Asp Ile Ser Ala Ser Ala Leu His Ser Arg Leu Ser
            100                 105                 110
Asn Leu His Ala Ser Arg Phe Ser Asn Pro Ser Pro Ser Asp Ala Asp
        115                 120                 125
Gly His Thr Asp Val Glu Tyr Arg Arg Leu Gly Val Ser Thr Asp Ser
    130                 135                 140
Phe Gly Pro Ser Cys Gly Ser Asn Ser Gln Ser Pro Ala Ser Pro Glu
145                 150                 155                 160
Leu Ser Arg Arg Pro Ser Asp Glu Gly Tyr His Asp His Asp Tyr Ile
                165                 170                 175
Pro Ser Gly Met Ala Thr Pro Phe His Pro Gln Phe Ala Glu Val Glu
            180                 185                 190
Ser Leu Ser Arg Val Pro Ser Tyr Ser Thr Ala Val Arg Ser Ser Val
        195                 200                 205
Gly Pro Cys Asp Ser Glu Leu Pro Asp Tyr Gln Ala Val Val Ala Glu
    210                 215                 220
Asp Thr Ala Met Pro Thr Leu Gln Ser Pro Gln Gln Ala His Ile Arg
225                 230                 235                 240
Ser Val Gly Arg Gly Val Ser Thr Gly His Thr Gly Ile Asp Val His
                245                 250                 255
His Leu Arg Ser Gly Phe Phe Asn Ser Arg Thr Ser Ala His His Asp
            260                 265                 270
Asp Asp Asp Arg Ile Leu Arg Leu Val Gln Ala Arg Ala Gln Val
```

275 280 285

<210> 28755
<211> 69
<212> PRT
<213> A.fumigatus

<400> 28755
Ser Asn Thr Asn Ala His Ile Ala Arg Gly Ile Gly Ser Gln Thr Pro
1 5 10 15
Gln Ser Ser Ile Asp Ala Leu Val Gln Pro Glu Ser Gly Lys Ala Gln
20 25 30
Thr Leu Ile Ala Tyr Ser Thr Ala Thr Ile Cys Ile Gln Phe Gly Asn
35 40 45
Tyr Leu Ser His Leu Ser His Arg Pro Tyr Gln Leu Phe Leu Gln Leu
50 55 60
Ile Ser Lys Thr Arg
65

<210> 28756
<211> 80
<212> PRT
<213> A.fumigatus

<400> 28756
Glu Ser Pro Arg Phe Arg Asn Asp Gly Thr Asn Gly Leu Gly Tyr Leu
1 5 10 15
Ile Pro Tyr Glu Lys Met His Val Trp Phe Arg Trp Ile Phe Tyr Leu
20 25 30
Asn Pro Gly Ala Tyr Ala Phe Glu Ala Phe Met Ala Asn Glu Phe Val
35 40 45
Gly Lys Ser Leu Gln Cys Val Gln Pro Asp Tyr Ile Pro Tyr Gly Ser
50 55 60
Gly Tyr Ser Gly Ser Glu Ser Pro Asn Arg Gly Val Leu Lys Ser Arg
65 70 75 80

<210> 28757
<211> 503
<212> PRT
<213> A.fumigatus

<400> 28757
Leu Val Ser Tyr Trp Ser Ser Val Gly Pro Asp Gln Gly Val Pro Arg
1 5 10 15
Phe Cys Ala Cys Phe Pro Thr Thr Ala Asn Pro Ser Thr Lys Ser Ser
20 25 30
Ala Lys Pro Asp Thr Ala Val Trp Thr His Val Val Ala Arg Arg Phe
35 40 45
Arg Gln Gln Ile Met Phe Asn Asn Glu Asp Asp Val His Phe Pro Thr
50 55 60
Leu Thr Val Asn Arg Thr Met Lys Phe Ala Leu Arg Asn Lys Val Pro
65 70 75 80
Arg Glu Arg Pro Asp Gly Gln Gly Ser Lys Glu Phe Val Gln Glu Gln
85 90 95
Arg Asp Asn Ile Leu Ser Ala Leu Gly Ile Arg His Thr Thr Lys Thr
100 105 110

```
Leu Val Gly Asn Glu Phe Ile Arg Gly Val Ser Gly Gly Glu Arg Lys
        115                 120                 125
Arg Val Ser Leu Ala Glu Val Ile Ala Gly Gln Ser Pro Ile Gln Val
    130                 135                 140
Trp Asp Asn Pro Thr Arg Gly Leu Asp Ser Lys Thr Ala Val Glu Phe
145                 150                 155                 160
Ala Arg Leu Leu Arg Arg Glu Ala Asp Met Asn Gln Lys Thr Met Val
                165                 170                 175
Ala Thr Met Tyr Gln Ala Gly Asn Gly Ile Tyr Asn Glu Phe Asp Gln
            180                 185                 190
Val Leu Val Leu Ala Asp Gly Arg Val Thr Tyr Tyr Gly Pro Arg Gln
        195                 200                 205
Leu Ala Lys Ser Tyr Phe Glu Asp Met Gly Phe Val Cys Pro Lys Gly
    210                 215                 220
Ala Asn Val Ala Asp Phe Leu Thr Ser Val Thr Val Leu Thr Glu Arg
225                 230                 235                 240
Ile Val Arg Pro Gly Met Glu Asp Lys Val Pro Ser Thr Ala Glu Glu
                245                 250                 255
Phe Glu Ala Arg Tyr Arg Gln Ser Asp Ile His Gln Lys Ala Met Glu
            260                 265                 270
Gly Phe Asp Pro Pro Glu Lys Leu Thr His Glu Val Asp Glu Leu Thr
        275                 280                 285
Ala Ala Val Ala Ser Glu Lys Arg Lys Arg His Leu Pro Arg Ser Pro
    290                 295                 300
Ser Val Tyr Thr Thr Ser Leu Trp Glu Gln Ile Gln Ala Cys Thr Ile
305                 310                 315                 320
Arg Gln Phe Gln Ile Met Ala Gly Asp Arg Leu Ser Leu Val Ile Lys
                325                 330                 335
Val Val Ser Ala Ile Leu Gln Ala Leu Val Cys Gly Ser Leu Phe Tyr
            340                 345                 350
Asn Leu Lys Asp Asp Ser Ser Ser Ile Phe Leu Arg Pro Gly Ala Leu
        355                 360                 365
Phe Phe Pro Val Leu Tyr Phe Leu Leu Glu Ser Met Ser Glu Thr Thr
    370                 375                 380
Ala Ser Phe Met Gly Arg Pro Ile Leu Ser Arg Gln Lys Arg Phe Gly
385                 390                 395                 400
Phe Tyr Arg Pro Thr Ala Phe Cys Ile Ala Asn Ala Ile Thr Asp Ile
                405                 410                 415
Pro Val Val Leu Val Gln Val Ser Cys Phe Cys Ile Ile Leu Tyr Phe
            420                 425                 430
Met Ala Ala Leu Gln Met Asp Ala Gly Arg Phe Phe Thr Tyr Trp Ile
        435                 440                 445
Ile Val Ile Ala Asn Thr Leu Cys Phe Met Gln Met Phe Arg Ala Val
    450                 455                 460
Gly Ala Leu Cys Lys Arg Phe Gly Asn Ala Ser Lys Ile Thr Gly Leu
465                 470                 475                 480
Leu Ser Thr Ile Phe Phe Val Tyr Gly Gly Lys Asn Arg Leu Ala Phe
                485                 490                 495
Val Met Thr Ala Leu Thr Ala
            500
```

<210> 28758
<211> 176
<212> PRT
<213> A.fumigatus

<400> 28758
Arg Arg Leu Trp Pro Ala Arg Asn Ala Ser Gly Ile Cys Leu Ala Ala
1 5 10 15
Gln Val Cys Thr Leu Arg Val Cys Gly Ser Arg Tyr Arg Arg Ala Pro
20 25 30
Ser Ala Ser Ser Arg Ser Trp Leu Gly Ile Asp Cys Leu Ser Ser Leu
35 40 45
Arg Trp Tyr Gln Leu Ser Cys Arg Pro Trp Tyr Ala Glu Val Tyr Ser
50 55 60
Thr Thr Ser Lys Thr Thr Ala Arg Pro Ser Ser Cys Ala Pro Ala Pro
65 70 75 80
Ser Ser Ser Gln Phe Ser Thr Ser Phe Ser Ser Pro Cys Pro Lys Arg
85 90 95
Arg Pro Arg Ser Trp Ala Gly Pro Phe Ser Arg Ala Arg Ser Gly Ser
100 105 110
Asp Ser Thr Gly Gln Arg His Ser Ala Ser Pro Thr Pro Ser Pro Ile
115 120 125
Ser Pro Trp Cys Trp Cys Arg Ser Leu Ala Ser Ala Ser Ser Tyr Thr
130 135 140
Ser Trp Arg Arg Tyr Arg Trp Thr Pro Val Asp Ser Ser Pro Ile Gly
145 150 155 160
Ser Ser Ser Ser Pro Thr Leu Ser Val Ser Cys Arg Cys Ser Ala Arg
165 170 175

<210> 28759
<211> 255
<212> PRT
<213> A.fumigatus

<400> 28759
Arg Leu His Asn Ser Arg His Ser Ser Leu His His Gln Thr Asn Ile
1 5 10 15
Tyr Lys Leu Arg Asp Ala Met Ala Ile Glu Gln His Thr Ser Gly Trp
20 25 30
Asp Asn Phe Val Ala Lys His Gly Asn Val Glu Phe Val Trp Leu Gln
35 40 45
Phe Met Ser Tyr Arg Ser Leu Val Tyr Thr Arg Met Phe Pro Ile Gln
50 55 60
Arg Phe Lys Ala Met Val Gln Lys Gly Lys Phe Ile Thr Ile Pro Glu
65 70 75 80
Val Ala Leu Leu Leu Gly Pro Gly Asp Val Ile Ala Glu Gly Cys Phe
85 90 95
Ala Ser Gly Lys Phe Trp Leu Arg Pro Asp Phe Glu Thr Val Tyr Cys
100 105 110
Gln Pro Gly Ser Asn Gly Thr Arg Ala Val Ile Met Cys Asp Phe Val
115 120 125
Asp Asp Asp Gly Thr His Ser Leu Gln Cys Ala Arg Ser Arg Leu Arg
130 135 140
Tyr Leu Glu Glu Thr Leu Leu Ser Glu Leu Lys Cys Ser Ala Leu Val
145 150 155 160
Gly Phe Glu Ile Glu Val Met Phe Met Gln Ala Glu Lys Ile Asn Gly
165 170 175
Ala Val Arg Phe Ser Met Ala Asn Tyr Glu His Ser Trp Ser Ser Met
180 185 190
Thr Ala Asp Asp Glu Ser Met Leu Glu Met Leu Glu Thr Ile Ala Arg
195 200 205

```
Thr Leu Ala Met Ala Asp Val Pro Leu Glu Gln Phe His Ala Glu Ala
    210                 215                 220
Ala Pro Gly Gln Trp Glu Phe Val Leu Pro Pro Ala Arg Pro Ile Gln
225                 230                 235                 240
Ala Ala Asp Ile Phe Thr Thr Gly Leu Glu Gly Ala Ala Leu Ala
                245                 250                 255

<210> 28760
<211> 74
<212> PRT
<213> A.fumigatus

<400> 28760
Pro Gln Cys Ala Asn Arg Lys Arg Ile Gln Glu Leu Ser Pro Arg Ser
1               5                   10                  15
Ser Thr Asn Glu Phe Arg Lys Phe Ile Arg Lys Leu Leu Lys Asp Leu
            20                  25                  30
Gly Leu Thr Lys Lys Pro Leu Ile Gly Arg Phe Phe Ile His Tyr Val
        35                  40                  45
Pro Cys Arg Gln Arg Asn Ser Ser Asp Met Glu Arg Met Asp Lys Lys
    50                  55                  60
Ser Arg His Ala Gly Met Lys Asp Met Arg
65                  70

<210> 28761
<211> 382
<212> PRT
<213> A.fumigatus

<400> 28761
Ser Leu Trp Val Thr Leu His Leu Asn Glu Gln Thr Asp Ala Lys Ser
1               5                   10                  15
Leu Leu Gly Met Tyr Ser Thr Ser Pro Ala Thr Gly Ser Phe Asp Trp
            20                  25                  30
Gln Pro Gly Val Leu Thr Lys Ala Ala Arg Glu Gly Arg Trp Ile Leu
        35                  40                  45
Ile Glu Asp Ile Asp Arg Ala Pro Ser Glu Val Ile Gly Leu Ile Leu
    50                  55                  60
Pro Ile Ile Glu Lys Gly Glu Leu Thr Ile Ala Ser Arg Lys Glu Arg
65                  70                  75                  80
Ile Lys Cys Ala Glu Gly Phe Lys Ile Ile Ala Thr Met Lys Ser Thr
                85                  90                  95
Tyr Asn Ile Ala Gly Glu Glu Ile Ala Pro Asn Ala Asn Leu Leu Gly
            100                 105                 110
Ser Arg Leu Trp Gln Arg Val Gln Ile Asp Ser Leu Ser Ile Glu Glu
        115                 120                 125
Ile Arg Glu Val Ile Ile Arg Lys Phe Pro Leu Leu Glu Pro Arg Val
    130                 135                 140
Pro Val Ile Met Asp Val Tyr Gln Arg Val Cys Ser Ser Phe His Gly
145                 150                 155                 160
Ser Leu Ala Ile Lys Ser Ser Gln Gly Arg Thr Pro Gly Leu Arg Asp
                165                 170                 175
Leu Ile Lys Leu Cys Thr Arg Leu His Met Arg Leu Gln Arg Leu Gly
            180                 185                 190
Val Lys Thr Gly Tyr Glu Ala Thr Pro Glu Val Val Glu Asp Glu Ile
        195                 200                 205
```

```
Phe Leu Asp Val Val Asp Val Phe Leu Arg Tyr Ile Pro Glu Lys Ala
    210                 215                 220
Leu Ala Asp Ser Leu Ala Leu Val Val Ala Glu Ala Leu Gln Ile Ser
225                 230                 235                 240
Pro Gln Arg Ala Gln Phe Cys Leu His Glu Arg Thr Pro Ala Tyr Ser
                245                 250                 255
Asp His Gly Asn Ser Val Thr Leu Gly Arg Glu Ile Cys Arg Lys Asn
            260                 265                 270
Lys Val Pro Ser Gly Ser Ala Ser Lys Leu Ala Ala Ala Ser Ser Arg
        275                 280                 285
Phe Ala Ser Thr Arg Ala Ala Leu Lys Leu Met Glu Gln Val Ala Ala
    290                 295                 300
Ala Val Gln Met Ala Glu Pro Val Leu Leu Val Gly Glu Thr Gly Ile
305                 310                 315                 320
Gly Lys Thr Thr Val Val Gln Gln Leu Ala Asn Leu Met Arg Gln Lys
                325                 330                 335
Leu Thr Val Val Asn Leu Ser Gln Gln Ser Glu Ser Thr Asp Leu Leu
            340                 345                 350
Gly Gly Phe Lys Pro Val Asn Ile Arg Thr Met Ala Val Pro Met Leu
        355                 360                 365
Asp Glu Phe Asn Thr Leu Phe Glu Leu Thr Leu Arg His Gly
    370                 375                 380

<210> 28762
<211> 203
<212> PRT
<213> A.fumigatus

<400> 28762
Glu Ala Cys Ala Gly Cys Tyr Thr Cys Arg Leu Arg Arg Lys Lys Cys
1               5                   10                  15
Asp Glu Ser His Pro Ala Cys Lys Asn Cys Thr Asn Leu Cys Val Arg
            20                  25                  30
Cys Glu Tyr Lys Arg Pro Asp Trp Trp Ala Ser Ala Glu Gln Arg Arg
        35                  40                  45
Val Gln Lys Glu Arg Ile Lys Ala Arg Ile Arg Gln Thr Lys Val Leu
    50                  55                  60
Glu Lys Gln Asn Asn Leu Gln Gly Gly Cys Ala Pro Val Ser Leu Ser
65                  70                  75                  80
Val His Arg Leu Cys Leu Asn Leu Leu Thr Pro Asp Phe Ile Asp Arg
                85                  90                  95
His Leu Pro Pro Arg Val Thr Val Gly Tyr Asp Phe Ser Gln Pro Val
            100                 105                 110
Leu Val Asp Pro Tyr Gln Ala Tyr Asp Ser Tyr Thr Ser Gln Phe Ser
        115                 120                 125
Ala Ser Asn Leu Met Ser Thr Ala Asn Ala Asn Asp Arg Pro Glu Ala
    130                 135                 140
Ala Phe Ala Thr Glu Asn Lys Asn Ile Leu Asn Gly Val Pro Thr Pro
145                 150                 155                 160
Gly Phe Tyr Gly Met Pro Gln Pro His Glu Ala Leu Phe Asn Ser Pro
                165                 170                 175
Gly Tyr Glu Trp Pro Gln Ile Leu Ala Ser Ile Thr Pro Pro His Tyr
            180                 185                 190
Val Gln Pro Gln Cys Ser Ala Pro Lys Leu Thr
        195                 200
```

<210> 28763
<211> 77
<212> PRT
<213> A.fumigatus

<400> 28763
Pro Thr Tyr Pro Ala Phe Pro Ala Ser Asn Asn Leu Ser Ser Lys His
1 5 10 15
Leu Ile Cys Ile Val Ile Ala Ile Ile Arg Val Pro Thr Arg Leu Pro
20 25 30
Cys Ala Pro Cys Phe Thr Gly Thr Phe Ala Val Ala Glu Ser Val Leu
35 40 45
Asp Lys Pro Phe Ser Ser Asp Pro Ser Ile Asp Gly Met Pro Leu Tyr
50 55 60
Leu His Asn Trp Ser Asn Tyr Phe Pro Arg Ser Lys Met
65 70 75

<210> 28764
<211> 85
<212> PRT
<213> A.fumigatus

<400> 28764
Leu Gly Glu Tyr Gln Ala Gly Met Cys Phe Val Asp Leu Val Pro Asp
1 5 10 15
Ala Phe Asn Ser Ala Tyr Ala Phe Ser Pro Leu Ser His Arg Leu Thr
20 25 30
Leu Asn Leu Arg Gln Leu Cys Gln Gly Thr Gly Phe Met Thr Asp Cys
35 40 45
Leu Arg Gly Glu Trp Lys Arg Leu Ser Ser Pro Ile Tyr Arg Gln Gln
50 55 60
Gln Ile Ser Trp Asp Lys Trp Thr Cys Met Leu Leu Ser Arg Met Asp
65 70 75 80
Leu Cys Arg Arg Arg
85

<210> 28765
<211> 61
<212> PRT
<213> A.fumigatus

<400> 28765
Glu Lys Arg Asp Val Leu Val Arg Met Arg Val Tyr Lys Gly Ser Gly
1 5 10 15
Ile Leu Leu Phe Gln Tyr Pro Phe Gln Glu Ile Gln Tyr Leu Thr Ser
20 25 30
Val Lys Asn Leu Pro Leu Leu Ser Ser Ile Ser Arg His Gln Tyr Val
35 40 45
Asp Gln Arg His Pro His Cys Asp Ser Pro Ser Val Phe
50 55 60

<210> 28766
<211> 87
<212> PRT
<213> A.fumigatus

<400> 28766
Arg Arg Glu Ala His Gly Tyr Gly Thr Ser Ile Ser Asn Ala Gly Tyr
1 5 10 15
Thr Gln Pro Ala Ile Asn Ala Leu Glu Pro Gln Phe Ala Glu Leu Ala
20 25 30
Asp Ser Met Ala Asp Leu Glu Ala Asn Phe Met His Leu Gln Leu Met
35 40 45
His Glu Ser Leu Thr Arg Phe Ser Glu Ser Phe Ala Ser Phe Leu Tyr
50 55 60
Gly Leu Asn Met Asn Ala Phe Cys Val Asp Phe Pro Glu Val Cys Ser
65 70 75 80
Ile Ile Ser Leu Leu Leu Asn
85

<210> 28767
<211> 63
<212> PRT
<213> A.fumigatus

<400> 28767
Leu Tyr Ile Leu Lys Leu Ser Leu Pro Glu Phe Gln Asp Phe Phe Asp
1 5 10 15
Ser Ser Asn Thr Leu Ser Ile Phe Leu Ile Phe Leu Tyr Asn Ile Arg
20 25 30
Gly Thr Ala Ser Ser Arg Ala Val Thr Phe Gly Ile Met Ala Ser Ile
35 40 45
Thr Ser Ala Ser Val Phe Thr Ser Arg Ala Gly Lys Thr Ser Ala
50 55 60

<210> 28768
<211> 137
<212> PRT
<213> A.fumigatus

<400> 28768
Trp Leu Asp Ala Gly Glu Val Ala Ala Lys Leu Asn Glu Leu Gly Ile
1 5 10 15
Pro Pro Thr Ala Tyr Gly Thr Arg Trp Tyr Leu Thr Leu Phe Asn Tyr
20 25 30
Ser Ile Pro Phe Pro Ala Gln Leu Arg Val Trp Asp Val Phe Met Leu
35 40 45
Leu Gly Asp Ala Glu Glu Pro Pro Gly Lys Gly Thr Asn Gln Ser Glu
50 55 60
Pro Pro Val Thr Ser Ala Phe Gly Arg Gly Leu Asp Val Leu His Ala
65 70 75 80
Thr Ser Ala Ala Leu Ile Asp Gly Met Arg Glu Ile Ile Leu Glu Ser
85 90 95
Asp Phe Glu Asn Ala Met Lys Val Leu Thr Ile Trp Val Pro Ile Gln
100 105 110
Asp Val Glu Leu Phe Met Arg Val Ala Lys Ala Glu Trp Lys Val His
115 120 125
Arg Arg Lys Lys Gly Gly Met Lys Ala
130 135

<210> 28769
<211> 247

<212> PRT
<213> A.fumigatus

<400> 28769
Arg Leu Lys Gln Arg Arg Ile Arg Arg Leu Gln Glu Glu Glu Lys Thr
1 5 10 15
Arg Gln Glu Ser Leu Arg Leu Glu Gln Arg Lys Ile Glu Gln Ser Met
20 25 30
Leu Arg Asp Ser Leu Gln Ser Gly Val Pro Pro Gln Met Ile Pro Leu
35 40 45
Ile Phe Ala Gly Ile Thr Gly Gly Ser Leu Pro Gln Ser Ala Ile Glu
50 55 60
Leu Ile Gln Gln Tyr Ala Ser Gln Asn Pro Gly Thr His Ser Asn Ala
65 70 75 80
Pro Pro Pro Pro Ser Arg Pro Ser Ala Pro Leu His Gln Gln Gln Gln
85 90 95
Ser Thr Leu Asp Ile Leu Pro Pro Pro Pro Thr Leu Ser Gln Arg His
100 105 110
Pro Ser Leu Ala Ile Pro Ala Asp Ile Arg Arg Asp Ser Arg Gly His
115 120 125
Pro Ser Thr Thr Tyr Ala Thr Leu Pro Pro His Gln Gln Pro Ile Pro
130 135 140
Gly Pro Ala Leu Ser Gln Pro Leu Thr Thr His Gly Arg Ser Pro Thr
145 150 155 160
Ile Gln Ser Leu Gly Arg Pro Pro Leu Pro Ser Gly Ala Gly Lys Ala
165 170 175
Thr Ala Ser Ser Leu Ser Arg Ile Asn Gly Asp Thr Pro Ser Gln His
180 185 190
Val Pro Leu Thr Leu Ser Asp Ser Lys Tyr Ala Thr Gly Ser Ser Leu
195 200 205
Pro Pro Ser Gln Pro Val Gly Val Lys Gln Glu Gln Thr Pro Arg His
210 215 220
Ser Pro Pro Ser Leu Tyr Phe Ser Pro Met Gly Ser Thr Gly Pro Ala
225 230 235 240
Pro Pro Ser Lys Glu Pro Thr
245

<210> 28770
<211> 104
<212> PRT
<213> A.fumigatus

<400> 28770
Ser Gly Arg Thr Ser Ser Arg Glu Thr Gly Arg Phe Trp Tyr Asn Leu
1 5 10 15
Ala Arg Arg Asp Ile Lys Gly Ser Arg Tyr Glu Trp Gly Pro Gln Gly
20 25 30
Pro Arg Tyr Gln Gly Ala Val Glu Gly Ser Cys Thr Tyr Phe Pro Asp
35 40 45
Leu Asp Gly Asp Gly Arg Ala Asp Met His Ser Ile Trp Asp Ser Ile
50 55 60
Asn Asn Thr Ala Gln Thr Trp Tyr Asn Gln Cys Ala Ile Lys Asp His
65 70 75 80
Thr Gly Asp Asp Gly Pro Ile Thr Asp Pro Asn Leu Pro Val Ser Pro
85 90 95
Ala Ser Ile Asp Val Val Pro His

100

<210> 28771
<211> 436
<212> PRT
<213> A.fumigatus

<400> 28771

```
Cys Lys Arg Asn Lys Gln Ala Tyr Gln Arg Ser Ile Asn Gln Ser Ile
1               5                  10                  15
Asn Ser Asp Glu Leu Leu Ser Arg Gly Ser Glu Ile Leu Asn Leu Leu
            20                  25                  30
Ile Arg Ser Phe Pro Ser Ile Ser Ser Thr Lys Met Pro Pro Thr Leu
        35                  40                  45
Cys Phe Asn Cys Lys Glu Ala Arg Ala Val Ile Ile Arg Pro Lys Asn
    50                  55                  60
Arg His Lys Leu Cys Arg Ala Cys Phe Leu Glu Val Phe Glu Thr Glu
65                  70                  75                  80
Val His Glu Thr Ile Thr Ser Ser Ser Leu Phe Tyr Pro Gly Glu Arg
                85                  90                  95
Val Ala Ile Gly Ala Ser Gly Gly Lys Asp Ser Thr Val Leu Ala Ser
            100                 105                 110
Val Leu Lys Thr Leu Asn Glu Arg Tyr Asn Tyr Gly Leu Glu Leu Cys
        115                 120                 125
Leu Leu Ser Ile Asp Glu Gly Ile Lys Gly Tyr Arg Asp Asp Ser Leu
    130                 135                 140
Glu Thr Val Lys Arg Asn Ala Val Gln Tyr Asp Met Pro Leu Glu Ile
145                 150                 155                 160
Val Gly Tyr Ser Glu Leu Tyr Gly Trp Thr Met Asp Gln Val Val Glu
                165                 170                 175
Gln Val Gly Lys Lys Gly Asn Cys Thr Tyr Cys Gly Val Phe Arg Arg
            180                 185                 190
Gln Ala Leu Asp Arg Gly Ala Ala Arg Leu Gly Ile Lys His Val Val
        195                 200                 205
Thr Gly His Asn Ala Asp Asp Val Ala Glu Thr Val Met Met Asn Leu
    210                 215                 220
Leu Arg Gly Asp Leu Pro Arg Leu Ser Arg Gly Thr Ser Ile Val Thr
225                 230                 235                 240
Asp Ser Ala Ala Ser Asp Ile Lys Arg Ser Lys Pro Leu Lys Tyr Ala
                245                 250                 255
Tyr Glu Lys Glu Ile Val Leu Tyr Ala His His Lys Lys Leu Asp Tyr
            260                 265                 270
Phe Ser Thr Glu Cys Ile Tyr Ser Pro Glu Ala Phe Arg Gly Ser Ala
        275                 280                 285
Arg Thr Leu Ile Lys Asp Leu Glu Lys Ile Arg Pro Ser Ser Ile Leu
    290                 295                 300
Asp Ile Val Lys Ser Gly Glu Asp Met Ala Ala Leu Val Pro Phe Glu
305                 310                 315                 320
Val Ser Ser Ser Gly Lys Lys Cys Gly Gly Thr Asn Val Ala Thr Ala
                325                 330                 335
Thr Ala Glu Asp Asp Glu Ser Ala Gly Gly Cys Gly Asn Gln Asn Gly
            340                 345                 350
Arg Ser Ser Gly Gly Glu Ile Thr Glu Met Glu Lys Lys Leu Ala Glu
        355                 360                 365
Asp Asp Ala Ala Gln Leu Arg Glu Thr Glu Ile Lys Leu Pro Val Ala
    370                 375                 380
```

```
Pro Arg Arg Lys Ser Gly Lys Val Asn Asn Pro Arg Ala Ile Lys Asn
385                 390                 395                 400
Pro Pro Met Gly Gln Leu Arg Ala Leu Arg Ile His Leu Lys Pro Glu
                405                 410                 415
Asp Leu Gln Ser Val Tyr Ala Pro Gly Arg Val Glu Gln Glu Pro Ala
            420                 425                 430
Gln Glu Arg Asp
        435
```

<210> 28772
<211> 71
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (51)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28772

```
Ile Thr Arg Glu Arg Ser Arg Ile His Gln Trp Gly Asn Cys Glu Arg
1               5                   10                  15
Cys Gly Tyr Ile Ser Ser Gln Lys Ile Cys Lys Ala Cys Met Leu Leu
            20                  25                  30
Asp Gly Leu Asn Lys Asn Arg Pro Lys Asn Ala Ile Glu Val Ala Val
        35                  40                  45
Gly Ile Xaa Glu Glu Glu Ser Ser Ser Thr Leu Met Arg Gln Met Glu
    50                  55                  60
Arg Val Gln Leu Asn Thr Gly
65                  70
```

<210> 28773
<211> 396
<212> PRT
<213> A.fumigatus

<400> 28773

```
Arg Gln Ile Ile Phe Val Ile Asp Arg Ser Gly Ser Met Met Asp Lys
1               5                   10                  15
Ile Asp Thr Leu Lys Ser Ala Leu Arg Val Phe Leu Lys Ser Leu Pro
            20                  25                  30
Val Gly Val Cys Phe Asn Ile Cys Ser Phe Gly Ser Arg His Ser Phe
        35                  40                  45
Leu Trp Lys Gln Ser Leu Phe Tyr Thr Ala Glu Ser Leu Gln Glu Ala
    50                  55                  60
Leu Ser Phe Val Asp Gly Val Arg Ala Asn Met Gly Gly Thr Glu Met
65                  70                  75                  80
Gln Glu Ala Val Glu Ala Thr Val Arg Ser Arg Met Lys Asp Lys Glu
                85                  90                  95
Leu Glu Val Leu Ile Leu Thr Asp Gly Gln Ile Trp Asn Gln Gln Thr
            100                 105                 110
Leu Phe Gly Phe Ile Arg Glu Thr Ala Ala Asp Asn Gly Ala Arg Phe
        115                 120                 125
Phe Ser Leu Gly Ile Gly Asn Gly Ala Ser His Ser Leu Val Glu Gly
    130                 135                 140
Ile Ala Arg Ala Gly Asn Gly Phe Ser Gln Met Val Val Asn Tyr Glu
```

```
145                 150                 155                 160
Glu Leu Asp Arg Lys Val Val Arg Met Leu Lys Gly Ala Leu Thr Pro
                165                 170                 175
His Ile Phe Asp Tyr Lys Leu Glu Ile Glu His Asp Asp Pro Val Glu
            180                 185                 190
Glu Phe Glu Val Val Leu Pro Glu Arg Pro Arg Ala Met Pro Val Asp
        195                 200                 205
Glu Ala Glu Met Lys Gln Gln Pro Ile Ser Leu Phe Asp Ala Asp Tyr
    210                 215                 220
Lys Glu Asp Glu Gln Lys Thr Asp Glu Glu Ala Leu Pro Val Leu Thr
225                 230                 235                 240
Pro Pro Gln Thr Leu Gln Ala Pro Tyr Lys Ile Pro Pro Leu Tyr Pro
                245                 250                 255
Phe Ile Arg Thr Thr Ala Tyr Leu Leu Gly Ser Ala Asn Met Gln Asn
            260                 265                 270
Pro Lys Ala Leu Ile Phe Arg Ala Thr Ser Lys Gln Gly Pro Leu Val
        275                 280                 285
Leu Arg Ile Pro Ile Asn Asp Ile Gly Thr Gly Glu Thr Ile His Gln
    290                 295                 300
Leu Ala Val Arg Arg Ala Met Ile Glu Leu Glu Glu Gly His Gly Trp
305                 310                 315                 320
Leu Ala Ala Ala Thr Ser Asn Gly Asn Ser Phe Asp Asn Leu His Pro
                325                 330                 335
Thr Ser Lys Glu Arg Ile Ile Ala Arg Glu Cys Glu Lys Leu Gly Thr
            340                 345                 350
Gln Phe Gln Val Thr Gly Lys Arg Cys Ser Phe Ile Ala Leu Glu Lys
        355                 360                 365
Asp Ser Thr Ser Asp Gln Glu Lys Glu Thr Asp Ile Gly Leu Leu His
    370                 375                 380
Gly Gly Gly Arg Ile Ser Gly Ser Gly Tyr Thr Ile
385                 390                 395
```

<210> 28774
<211> 424
<212> PRT
<213> A.fumigatus

<400> 28774

```
Thr Thr Pro Ala Ile Asp Ser Leu Ser Thr Met Glu Leu Phe Arg Leu
1               5                   10                  15
Leu Leu Ser His Pro Val Ser Ser Ala Val Ala Leu Gly Ala Val Tyr
            20                  25                  30
Leu Leu Trp Val Val Leu Asp Arg Leu Tyr Leu Ser Pro Ile Ala Gly
        35                  40                  45
Phe Pro Gly Pro Lys Leu Ala Ala Leu Thr His Leu Tyr Glu Phe Tyr
    50                  55                  60
Trp Asp Thr Ile Cys Cys Gly Gln Phe Thr Phe Gln Ile Gly Arg Leu
65                  70                  75                  80
His Glu Lys Tyr Gly Lys Arg Asn Pro Leu Thr Cys Arg Leu Arg Ser
                85                  90                  95
Glu Cys Thr Pro Ser Ser Ser Ile Asp His Phe Leu Ala Phe Ile Leu
            100                 105                 110
Val Arg Tyr Asp Ile Ser Thr Val His Leu Tyr Ser Cys His Thr Gly
        115                 120                 125
Pro Ile Val Arg Ile Ser Pro Thr Glu Leu His Ile Asn Asp Pro Asp
    130                 135                 140
```

```
Tyr Tyr Glu Val Leu Tyr Ser Arg Asp Ser Pro Arg Asn Lys Tyr Glu
145                 150                 155                 160
Tyr Tyr Gln Lys Thr Leu Asn Ala Pro Leu Ala Leu Leu Asn Thr Ile
                165                 170                 175
Asp His His Leu His Arg Gln Leu Arg Ala Gln Leu Asn Pro Phe Phe
            180                 185                 190
Ser Ser Thr Arg Ile Arg Arg Gln Glu Pro Ala Ile Lys Ala Leu Val
        195                 200                 205
Asn Lys Leu Cys Arg Arg Leu Asp Glu Leu Lys Asn Thr Gly Gln Pro
    210                 215                 220
Leu Asn Ile Glu His Ala Leu Thr Cys Tyr Thr Thr Asp Val Ile Thr
225                 230                 235                 240
Asp Tyr Ser Met Gly Asp Gly Tyr His Tyr Leu Asp Ala Pro Asp Phe
                245                 250                 255
Ile Pro Gln Trp His Gly Thr Leu Asn Gly Thr Ala Lys Thr Met Val
            260                 265                 270
Phe Ile Arg Pro Val Ala Trp Ala Leu Pro Leu Leu Leu Ala Leu Pro
        275                 280                 285
Glu Ala Val Thr Ala Trp Leu Asn Pro Gly Met Glu Leu Phe Phe Asp
    290                 295                 300
Phe Gln Arg Arg Cys Arg Lys Met Ile Lys Arg Ile Val Ala Ala His
305                 310                 315                 320
Asn Glu Lys Gly Asn Gln Gly Val Gln Asn Glu Gly Phe Val Asn Ile
                325                 330                 335
Phe Asp Asp Ile Leu Arg Ser Asn Leu Pro Ala Lys Asn Lys Ser Glu
            340                 345                 350
Thr Arg Leu Ala Gln Glu Met Gln Val Leu Val Ser Ala Gly Ala Glu
        355                 360                 365
Thr Thr Ala Lys Ala Ile Thr Tyr Ile Leu Phe Tyr Leu Leu Asn Asp
    370                 375                 380
Pro Glu Thr Met Ala Lys Leu Lys Ala Glu Leu Glu Thr Val Gly Glu
385                 390                 395                 400
Asp Pro Ala Leu Val Gln Leu Glu Gln Leu Pro Tyr Leu Val Ser His
                405                 410                 415
Leu Ala Thr Trp Pro Arg Pro Gly
            420
```

<210> 28775
<211> 157
<212> PRT
<213> A.fumigatus

<400> 28775

```
Asp Leu Leu Arg Val Tyr Met Arg Cys Thr Leu Val Thr His Val Met
1               5                   10                  15
Phe Ile Arg His Ser Asp Thr Leu Lys Ser Ala Ala Lys Met Val Ala
            20                  25                  30
Ala Pro Met Met Glu Phe Tyr Asn Lys Asn Gln Thr Glu Gly Ile Pro
        35                  40                  45
Gly Lys Leu Thr Asp Thr Trp Tyr Val Ala Gly Ala Met Phe Met Ile
    50                  55                  60
Leu Ile Gln Tyr Trp Tyr Ala Ser Ser Asp Asp Thr Tyr Asn Thr Val
65                  70                  75                  80
Val Ser His Asp Leu Met Phe Gln Ser Gly Glu Asn Tyr Asp Phe Phe
                85                  90                  95
Ser Lys Asn Tyr Ser His Trp Leu Val Gly Arg Gln Ile Cys Pro His
```

```
            100                 105                 110
Ile Leu Ser Met Leu Thr Ser Phe Arg Val Met Thr Ile Arg Cys Ser
        115                 120                 125
Gly Asp Leu Pro Pro Ser Leu Leu Gln Arg Leu Gly Ser Gln Arg Ser
    130                 135                 140
Gln Thr Asn Pro Pro Gly Pro Pro Trp Arg Gly Gln Ser
145                 150                 155
```

<210> 28776
<211> 64
<212> PRT
<213> A.fumigatus

<400> 28776

```
Tyr Leu Val Leu Val Thr Ala Ile Leu Lys Tyr Lys Pro Val Thr Ala
1               5                   10                  15
Leu Ile Asn Glu Thr Asn Ala Met Ile Gly Ser Thr Arg Leu Leu Asp
            20                  25                  30
Leu Pro Arg Tyr Gln Thr Ala Arg Leu Thr Val Thr Leu Gln Asp Glu
        35                  40                  45
Lys Lys Val Asp Gln Pro Leu Cys Leu Pro Gln Lys Glu Asn Lys Cys
    50                  55                  60
```

<210> 28777
<211> 420
<212> PRT
<213> A.fumigatus

<400> 28777

```
Gly Arg Arg Arg Ser Ala Ser Leu Thr Pro Pro Ser Ser Ser Gly Trp
1               5                   10                  15
Met Pro Pro Ala Leu Lys Gly Arg Arg Tyr Ser Ser Leu Pro Leu Arg
            20                  25                  30
Ala Asp Gly Leu His Ala Glu Thr Gln Lys Ser Phe Leu Asp Ser Tyr
        35                  40                  45
Val Asp Glu Pro Glu Glu Ala Ile Val Asn Ser Arg Leu Lys Ser Asp
    50                  55                  60
His Arg Ile Tyr Leu Asp Glu Gln Thr Asp Asp Gly Pro Gln His His
65                  70                  75                  80
Asp Glu Ile Lys Asn Leu Val Leu Asn Phe Leu Arg Ala Ile Arg Arg
                85                  90                  95
Gln His Thr Met Lys Leu Thr Val Phe Arg Asn Phe Ala Thr Asp Ile
            100                 105                 110
Val Gly Arg Met Phe Val Gly Asp Leu Gly Asp Asp Arg Ala Ala Pro
        115                 120                 125
Ile Gly Thr Arg Ser Asn His Ile Asp Arg Cys Arg Phe Thr Thr Ser
    130                 135                 140
Leu Asp His Ile Met Phe Lys Ser Pro Val Ala Lys Leu Lys Arg Lys
145                 150                 155                 160
Arg Asn Lys Gly Leu Arg Trp Ile Ser Cys Ala Gly Thr Tyr Ser Arg
                165                 170                 175
Trp Asn Asp Ala Ser Ile Val Asp Val Leu Pro Glu Thr Gly Arg Lys
            180                 185                 190
Thr Ile Leu Gln Ala Glu Thr Arg Glu Tyr Asp Gly Pro Tyr Asp Ser
        195                 200                 205
Leu Ile Val Asn Gly Ala Asp Cys Met Ala Ala Ala Phe Val Ser Met
```

```
    210                 215                 220
Phe Arg His Leu Phe Lys Cys Pro Thr Ala Met Phe Gln Leu Gln Asp
225                 230                 235                 240
Glu Val Asp Asn Ala Phe Arg Asn Leu Thr Ile Ser Asp Val Leu His
                245                 250                 255
Gln Glu Thr Glu Leu His Ala Leu Pro Phe Leu Asp Ala Val Met Lys
            260                 265                 270
Glu Ser Met Arg Leu Ala Met Lys Phe Asp Tyr Arg Arg Ala Val Pro
        275                 280                 285
Ala Gly Gly Leu Ala Val Leu Gly His Tyr Val Pro Glu Arg Thr Val
    290                 295                 300
Ala Gln Phe His Ser Glu Ala Leu Arg Asn Asn Arg Thr Thr Phe Gly
305                 310                 315                 320
Glu Asp Val Ser Asp Phe Arg Pro Gln Arg Trp Leu Gln Ala Asp Leu
                325                 330                 335
Asp Gln Trp Gln Arg Thr Arg Met Glu Glu Ala Leu Leu Phe Leu Arg
            340                 345                 350
Pro Asn Ile Pro Asn Ser Ala Glu Ala Arg Ala Ala Trp Leu Glu Leu
        355                 360                 365
Lys Arg Ala Ala Ala Leu Ile Ile Trp Lys Phe Asp Val Ser Thr Val
    370                 375                 380
Gly Ser Pro Ala Glu Val Lys Leu Ile Tyr Phe Ser Cys Ile Leu Ser
385                 390                 395                 400
Thr Met Arg Lys Cys Ser Ser Lys Met Leu Ser Leu Gln Ser Lys Asn
                405                 410                 415
Thr Arg Ser Trp
            420
```

<210> 28778
<211> 828
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (12),(66)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28778

```
Leu Gly Thr Trp Leu Pro Gln Gly Gly Leu Pro Xaa Tyr Gly Lys Gly
1               5                   10                  15
Arg Pro Val Asp Ser Gln Lys Ser Val Ser Phe Leu Asn Arg Tyr Thr
            20                  25                  30
Phe Ser Trp Ala Tyr Arg Thr Leu Ser Ile Ala Ala Gln Asn Gln Arg
        35                  40                  45
Leu Asn Ile Asp Asp Leu Pro Val Thr Gly Asp Glu Val Arg Ala Gln
    50                  55                  60
Thr Xaa Ser Ser Ser Phe Tyr Ala Val Ser Ala Ala Ser Ala Gln Trp
65                  70                  75                  80
Arg Arg Trp Leu Lys Leu Tyr Arg Ala Glu Ile Thr Tyr Gln Val Ile
                85                  90                  95
Leu Gln Leu Val Ala Asn Ala Val Asn Phe Leu Pro Gln Phe Leu Leu
            100                 105                 110
Leu Thr Ile Phe Arg Ile Ile Glu Asp Arg Asp Ala Gly Ala Ser Asn
        115                 120                 125
Gln Leu Gln Val Trp Leu Ala Ala Ile Gly Leu Gly Leu Ser Met Val
```

```
    130                 135                 140
Val Thr Ser Trp Ser Ile Ser Leu Arg Asp Phe Val Ala Asp Met Lys
145                 150                 155                 160
Leu Ser Leu Pro Ile Asn Glu Gln Leu Leu Ala Val Ile Ser Lys Lys
                165                 170                 175
Ala Met Ser Leu Lys Asp Val Val Ile Ser Ala Asp Asp Ser Glu Asn
            180                 185                 190
Glu Asp Ala Ala Ser Asp Lys Asp Asp Asp Asp Ala Asp Asp Asp Ala
        195                 200                 205
Pro Pro Arg Thr Lys His Ser Val Leu Asn Leu Leu Gly Val Asp Val
    210                 215                 220
Glu Arg Val Ser Glu Phe Val Ala Tyr Ser His Leu Leu Leu Asp Cys
225                 230                 235                 240
Val Leu Glu Leu Ser Ile Ala Ile Val Phe Leu Val Tyr Leu Met Gly
                245                 250                 255
Trp Lys Pro Ile Ala Ala Gly Cys Ala Ile Pro Val Leu Leu Ile Pro
            260                 265                 270
Phe Tyr Tyr His Leu Thr Asn Arg Tyr Ser Glu Gln Glu Gln Ala Leu
        275                 280                 285
Met Asp Arg Arg Asp Asp Lys Ser Ser Asn Leu Thr Val Met Met Arg
    290                 295                 300
Gly Ile Arg Gln Ile Lys Phe Ser Ala Leu Glu Thr Gln Trp Tyr Asp
305                 310                 315                 320
Lys Ile Leu Gly Leu Arg Glu Lys Glu Leu Arg Asn Gln Tyr Thr Val
                325                 330                 335
Phe Gln Leu Asp Val Phe Leu Thr Ala Ile Trp Thr Leu Gly Pro Leu
            340                 345                 350
Cys Ile Ser Cys Leu Ser Phe Ala Thr His Ile Tyr Leu Asn Gly Ser
        355                 360                 365
Ile Ala Val Ser Val Ala Phe Thr Ala Leu Ser Leu Phe Glu Asn Leu
    370                 375                 380
Gln Ser Val Leu Ser Met Phe Pro Glu Met Phe Thr Glu Leu Leu Asp
385                 390                 395                 400
Ala Arg Val Ser Leu Arg Arg Ile Glu Gly Phe Leu Asp Leu Glu Glu
                405                 410                 415
His Glu Asp Lys Arg Val Arg Gly Asp Ala Met Ser Phe Arg Asp Ala
            420                 425                 430
Thr Ile Ala Trp Pro Ser Ala Gly Ser Glu Asp Ala Thr Gly Gln Phe
        435                 440                 445
Gln Leu Thr Gly Leu Asn Leu Asp Leu Pro Pro Arg Glu Leu Thr Val
    450                 455                 460
Ile Ser Gly Arg Ser Gly Val Gly Lys Ser Leu Leu Leu Gln Ala Leu
465                 470                 475                 480
Ile Gly Glu Ala Asp Ile Val Lys Gly Thr Ala Ile Val Pro His Ser
                485                 490                 495
Ser Ala Thr Asn Arg Pro Ala Gly Glu Glu Asn Trp Ile Val Asp Gly
            500                 505                 510
Leu Val Ala Tyr Val Ser Gln Asp Pro Trp Ile Glu Asn Ala Thr Ile
        515                 520                 525
Arg Asp Ala Ile Leu Phe Gly Leu Pro Phe Asn Pro Glu Arg Tyr Asp
    530                 535                 540
Lys Val Ile His Ala Cys Ala Leu Ser His Asp Leu Gln Ser Phe Pro
545                 550                 555                 560
Asp Gly Asp Arg Thr Asp Ile Gly Ala Asn Gly Ile Asn Leu Ser Gly
                565                 570                 575
Gly Gln Lys Trp Arg Leu Ala Leu Ala Arg Ala Leu Tyr Ser Arg Ala
```

```
            580                 585                 590
Ser Ile Leu Val Leu Asp Asp Ile Phe Ser Ala Val Asp Ser Asn Val
        595                 600                 605
Gly Arg His Leu Tyr Asp His Ala Leu Thr Gly Ser Leu Ala Lys Glu
    610                 615                 620
Arg Thr Arg Val Leu Ala Thr His His Val Arg Leu Cys Leu Gly Gly
625                 630                 635                 640
Ala Ala Tyr Leu Val Arg Leu Glu Asn Gly Arg Val Val Gln Ala Gly
                645                 650                 655
His Pro Ser Ser Leu Leu Gln Asp Glu Thr Pro Asp Gln Arg Leu Asp
            660                 665                 670
Asp Ser Thr Ser Asp Pro Ser Asp Ser Thr Pro Thr Thr Leu Lys Pro
        675                 680                 685
Val Gln Arg Thr Asn Ala Thr Pro Arg Ser Asp Gly Gln Pro Lys Lys
    690                 695                 700
Tyr Tyr Glu Glu Glu Lys Arg Glu Arg Gly Val Val Arg Ala Glu Val
705                 710                 715                 720
Tyr Lys Ala Tyr Met Lys Ala Ser Gly Gly Tyr Ser Arg Trp Ile Leu
                725                 730                 735
Val Ala Val Leu Cys Ile Leu Thr Leu Ile Leu Asn Leu Ala Ala Pro
            740                 745                 750
Tyr Trp Val Ser Ile Trp Thr Arg Ala Tyr Asn Glu Ser Pro Pro Arg
        755                 760                 765
Ser Ile Leu Thr Gln Ser Gly Asp His Pro Asp Phe Arg Thr Gly Gly
    770                 775                 780
Leu His Leu Asp His Arg Leu Val Tyr Tyr Ser Ser Ile Tyr Phe Ala
785                 790                 795                 800
Leu Ala Phe Ala Ser Trp Ile Leu Asp Ile Ile Arg Ile Gln His Asp
                805                 810                 815
Pro Arg Val Tyr Lys Gln Arg Glu Gly Met Arg Arg
            820                 825
```

<210> 28779
<211> 94
<212> PRT
<213> A.fumigatus

```
<400> 28779
Pro Ala Pro Pro Ile Thr Leu Ser Ala Gly Pro Gly Ser Arg Val Ser
1               5                   10                  15
Glu His Glu Pro Arg Tyr Asp Arg Ile Met Gln Asp Tyr Asp Asn Ile
            20                  25                  30
Lys Arg Gly His Val Glu Asp Ser Val Asn Glu Asp Lys Ser Thr Ala
        35                  40                  45
Ala Lys Ile Leu Gln Asp Ile Tyr Ala Gln Val Leu Asn Leu Pro Ser
    50                  55                  60
Asn Lys Val Asp Pro Lys Arg Ser Phe Val Ser Leu Gly Lys Trp Ile
65                  70                  75                  80
Ile Val Arg Leu Met Lys Lys Arg Gly Lys Glu Ala Asp Trp
                85                  90
```

<210> 28780
<211> 225
<212> PRT
<213> A.fumigatus

<400> 28780
Ser Asp Thr Leu Ile Leu Gly Ser Asp Phe Val Asp Thr Thr Lys Arg
1 5 10 15
Val Lys Asp Leu Arg Arg Lys Ile Lys Asp Asn Gly Arg Ser Tyr Phe
20 25 30
Ala Arg Ser Leu Leu Gln Ala Asn Asn Thr Glu Pro Ser Asp Phe Pro
35 40 45
Val Pro Leu Glu Ile Val Phe Asn Tyr Leu Gly Arg Leu Gln Gln Leu
50 55 60
Glu Arg Asp Asp Ser Leu Phe Lys His Tyr Gly Glu Ala Phe Asp Glu
65 70 75 80
Glu Lys Phe Arg Leu Ala Gly Asp Met Gly Ser Asp Thr Pro Arg Phe
85 90 95
Ala Leu Leu Glu Ile Ser Ala Leu Val Val Asn Asp Lys Leu Gln Val
100 105 110
Ser Phe Thr Tyr Asn Arg Gln Met Gln Arg Glu Ser Gln Ile Phe Gln
115 120 125
Trp Ile Ser Glu Cys Arg Arg Val Leu Glu Ile Asp Val Leu Arg Phe
130 135 140
Lys Asp Thr Val Pro Glu Pro Thr Leu Ser Asp Phe Pro Leu Leu Pro
145 150 155 160
Ile Thr Tyr Asp Gly Leu Lys Lys Leu Thr Ser Thr Thr Leu Pro Arg
165 170 175
Ala Gly Val Lys Thr Phe Ser Gln Val Glu Asp Ile Tyr Pro Cys Ser
180 185 190
Ser Val Gln Glu Gly Ile Leu Leu Ser Gln Leu Arg Asp Pro Ser Ala
195 200 205
Tyr Met Phe His Val Cys Arg Leu His Ala Glu Ala Gly Arg Thr Arg
210 215 220
Ala
225

<210> 28781
<211> 144
<212> PRT
<213> A.fumigatus

<400> 28781
Leu Val Asn Thr Gly Gly Asp Ser Ile Thr Gly Met Ala Val Ile Ser
1 5 10 15
Arg Ala Arg Lys Gln Gly Leu Asn Leu Thr Leu His Lys Ile Leu Gln
20 25 30
Ser Lys Ser Ile Val Glu Leu Ile Gln Ala Ala Glu Val Glu Thr Ser
35 40 45
Ser Ile Gln Val Glu Glu Lys Ala Asn Lys Tyr Phe Ser Leu Ser Pro
50 55 60
Ile Gln Asn Leu Tyr Phe Lys Ser Ala Arg Thr Phe Lys Glu Thr Gly
65 70 75 80
Arg Phe Asn Gln Gly Met Thr Val Arg Val Thr Arg Lys Val Glu Pro
85 90 95
Asn Val Val Lys Asp Ala Leu Lys Ala Val Ala Ser Gln His Ser Met
100 105 110
Leu Arg Ala Arg Phe Ser Arg Ser Ala Asn Gly Lys Trp Gln Gln Arg
115 120 125
Ile Thr Asn Val Arg Ala Asn Gln Leu Thr Asp Val Val Leu Arg Ser
130 135 140

<210> 28782
<211> 235
<212> PRT
<213> A.fumigatus

<400> 28782
Pro Ile Thr Gln Asp Ile Glu Ser Ser Val Arg Val Gly Ile His Ser
1 5 10 15
Val Met Ser Ser His Glu Met Leu Gly Lys Ile Ala Asn Thr Gln Ser
20 25 30
Ser Leu Asp Ile Glu Asn Gly Pro Ile Ile Ala Ala Asp Leu Phe Thr
35 40 45
Val Asn Gly Glu Gln Val Leu Phe Leu Val Ala Asn His Leu Cys Val
50 55 60
Asp Met Val Ser Trp Arg Ile Ile Leu Gln Asp Ile Gln Glu Val Ile
65 70 75 80
Glu Ala Gly Ser Leu Ser Ser Glu Lys Pro Phe Ser Phe Gln Ser Trp
85 90 95
Cys Glu Leu Gln Leu Glu Asn Ser Arg Ser Glu Ala Asp Lys Ala Lys
100 105 110
Leu Pro Phe Ala Ile Glu Pro Pro Asn Leu Ser Tyr Trp Gly Met Glu
115 120 125
Ser Val Pro Asn His Tyr Gly Gln Ile Arg Met Glu Ser Phe Val Val
130 135 140
Gly Glu Asp Thr Thr Ser Phe Ile Leu Gly Asp Cys His Glu Met Leu
145 150 155 160
Arg Thr Glu Thr Ile Asp Ile Leu Leu Ala Ala Val Ala Gln Ser Phe
165 170 175
Arg Arg Val Phe Thr Asp Arg Arg Met Pro Thr Ile Tyr Asn Glu Gly
180 185 190
His Gly Arg Glu Ser Trp Asp Ser Asn Leu Asp Leu Ser Arg Thr Val
195 200 205
Gly Trp Phe Thr Thr Leu Cys Pro Leu Gln Val Asp Glu Cys Ser Gly
210 215 220
Lys Tyr Leu Leu Glu Asn Ser Arg Ala Thr Arg
225 230 235

<210> 28783
<211> 274
<212> PRT
<213> A.fumigatus

<400> 28783
Gly Val Thr Ala Asn Gln Val Ala Gly Lys Tyr Gln Ala Ile Phe Phe
1 5 10 15
Tyr Gln Leu Tyr Arg Leu Glu Val Asp Ala His Gly Phe Ala Asn Ser
20 25 30
Arg Met Ala Pro Gly Cys Ala Gln Ala Gly Val Val Cys Asp Met Glu
35 40 45
Ala Phe Ile Arg Glu Val Cys Arg Val Lys Lys Glu Pro Glu Arg Asp
50 55 60
Glu Asn Gly Lys Ile Ile Lys Pro Pro Lys Gly Gln Lys Pro Lys Leu
65 70 75 80
Val Asp Val Pro Asp Phe Asp Lys Val Asp Trp Ala His Ile Gly Glu
85 90 95

```
Gly Ala Asp Leu Lys Val Phe Ser Thr Glu Phe Asp Lys Ser Gly Phe
            100                 105                 110
Lys Gly Asp Phe Leu Asn Asp Lys Ile Phe Lys Gly Trp Glu Gln Pro
        115                 120                 125
Asp Thr Phe Lys Thr Val Met Ser Glu Ala Glu Asp Ile Gly Thr Lys
    130                 135                 140
Ala Ile Ala Lys Leu His Ala Asp Gly Lys Thr Pro Ala Asp Asp Arg
145                 150                 155                 160
Ile Asn Lys Met Ile Ala Ala Leu Arg Ala His Ala Asp Ala Arg Arg
                165                 170                 175
Tyr Asp Gln Ala Gln Lys Ile Thr Lys Ala Phe Ala Glu Phe Met Glu
            180                 185                 190
Lys Lys Gly Phe Thr Val Ala Tyr Thr Asp Pro Ile Glu Arg Pro Pro
        195                 200                 205
Val Pro Gly Tyr Arg Lys Ile Asp Ala Asp Lys Thr Ile Ser Asp Asn
    210                 215                 220
Gln Gly Lys Gln Gly Phe Asp Lys Val Glu Gln Glu Val Lys Asp Tyr
225                 230                 235                 240
Val Ser Lys Phe Asn Thr Ala Gly Gln Ser Leu Ser His Val Glu Ala
                245                 250                 255
Ile Thr Lys Thr Gln Gly Met His Asp His Leu Ala Glu Ala Cys Lys
            260                 265                 270
Ala Ala
```

<210> 28784
<211> 187
<212> PRT
<213> A.fumigatus

<400> 28784

```
Ile Arg Leu Gln Trp Leu Gln Lys Val Phe Ile Pro Ala Thr Thr Ser
1               5                   10                  15
Arg Thr Thr Gly Arg Tyr Gln Leu Leu Ile Leu Asp Gly His Gly Ser
            20                  25                  30
His Leu Thr Pro Gln Phe Asp Gln Ile Cys Thr Glu Asn Asp Ile Ile
        35                  40                  45
Pro Ile Cys Met Pro Ala Tyr Ser Ser His Leu Leu Gln Pro Leu Asp
    50                  55                  60
Ile Ser Tyr Phe Ser Pro Leu Lys Arg Ala Tyr Ser Arg Leu Ile Glu
65                  70                  75                  80
Asp Lys Ile Gln Leu Ser Phe Asn Tyr Ile Asp Lys Phe Asp Phe Leu
                85                  90                  95
Glu Ala Tyr Pro Gln Ala His Thr Ala Ile Phe Ser Ala Asp Asn Ile
            100                 105                 110
Lys Ser Gly Phe Ser Ala Thr Gly Leu Ile Pro Leu Asn Pro Asp Gln
        115                 120                 125
Val Leu Ser Gln Leu Asn Ile Gln Leu Arg Thr Pro Thr Pro Pro Gly
    130                 135                 140
Ser Arg Ser Thr Asn Ser Ile Pro Lys Thr Pro Tyr Asn Leu Lys Gln
145                 150                 155                 160
Leu Lys Lys Gln Gly Asn Tyr Thr Leu Arg Ser Tyr Leu Gly Ser Val
                165                 170                 175
His Thr Ala Leu Leu Pro Leu Gln Arg Leu Cys
            180                 185
```

<210> 28785
<211> 147
<212> PRT
<213> A.fumigatus

<400> 28785
Phe Tyr Pro Lys Asn Thr Leu Gln Ser Gln Ala Ala Glu Glu Ala Gly
1 5 10 15
Lys Leu His Phe Lys Lys Leu Leu Arg Glu Arg Thr Tyr Ser Pro Pro
20 25 30
Thr Pro Thr Lys Ala Val Leu Gly Gln Ile Ile Lys Gly Cys Glu Met
35 40 45
Ala Met Asn Asn Ala Ala Leu Leu Ala Lys Glu Asn Tyr Asp Leu Arg
50 55 60
Ala Ala His Glu Lys His Leu Gln Lys Gln Lys Arg Ser Arg Arg Gln
65 70 75 80
Ile Glu Thr Ala Val Gly Leu Ser Ile Gln Glu Gly Gln Glu Ile Ile
85 90 95
Gln Arg Arg Asp Gln Ala Ala Glu Ala Ile Pro Thr Ile Pro Pro Glu
100 105 110
Gln Val Val Asp Thr Glu Gln Arg Pro Gln Arg Ala Pro Pro Arg Cys
115 120 125
Ser Asp Cys His Ile Leu Gly His Arg Arg Leu Gln Cys Pro Gln Arg
130 135 140
Lys Asn Asn
145

<210> 28786
<211> 445
<212> PRT
<213> A.fumigatus

<400> 28786
Ser Ala Arg Leu Arg Asp Pro Leu Ala Tyr Arg Leu Arg Tyr Leu Leu
1 5 10 15
Pro Gln Leu Ser His Ser Glu Ala Gly Ile Arg His Ala Ala Ile Ala
20 25 30
Leu Gly Ala Leu His Gln His Leu His Arg Val Leu Ser Lys Gly Lys
35 40 45
Cys Asp Pro Ala Ala Ser Lys Ile Thr Pro Gln Asn Glu Tyr Phe Ile
50 55 60
Ile Gln Gln Tyr Asn Ser Ala Ile Arg His Leu Val Ala Gln Leu Ser
65 70 75 80
Ser Thr Thr Ser His His Val Pro His Leu Thr Leu Ile Ser Cys Cys
85 90 95
Leu Phe Val Ser Leu Glu Ile Leu Ser Gly His Val Gly Lys Ala Leu
100 105 110
Asp His Ile Glu Ala Gly Leu Lys Ile Leu Gln Arg Trp Glu His Arg
115 120 125
Thr Asp Gly Lys Leu Pro Ser Glu Ala Ile Thr Arg Glu Leu Ala Tyr
130 135 140
Phe Leu Leu Arg Trp Asn Thr Gln Leu Ser Thr Gln Gly Arg Lys Met
145 150 155 160
Ile Pro Leu Asn Leu Ser Gln Leu Asp Thr Ala Glu Ser Gly Gly Asn
165 170 175
Gln Glu Ser Trp Ser Glu Ile Ser Glu Ala Arg Glu Ala Leu Val Leu

```
            180                 185                 190
Leu Ser Asn Arg Thr Met Ser Phe Val Glu Ala Val Gly Thr Asp Arg
        195                 200                 205
Lys Thr Arg Gly Ser Pro Gly Gln Val Arg Gln Gln Gln Ala Leu Leu
    210                 215                 220
Gln Ala Leu Ala Ala Trp Leu Arg Ala Phe Glu Cys Leu Met Lys Arg
225                 230                 235                 240
Cys Ser Arg Arg Leu Lys Lys Thr Asp Pro Arg Gly Pro Val Leu Leu
                245                 250                 255
Arg Ile Gln His Arg Thr Asn Gln Ile Leu Ala Ser Val Ala Leu Ser
            260                 265                 270
Arg Asp Glu Leu Ile Tyr Asp Gln Leu Asp Glu Asp Phe Arg Ala Ile
        275                 280                 285
Val Ser Tyr Ala Glu Asp Leu Ile Glu Leu Asn Ala Ser Leu Asp Lys
    290                 295                 300
Asp Ser Val Leu Ser Val Phe Ser Leu Glu Ser Gly Leu Val Ser Ser
305                 310                 315                 320
Leu Gly Tyr Thr Ala Arg Lys Cys Arg Asn Pro Val Leu Arg Arg Lys
                325                 330                 335
Ala Ile Arg Leu Leu Tyr Arg Cys Pro Arg Lys Glu Gly Leu Trp Gly
            340                 345                 350
Val Gln Gln Tyr Ala Val Ile Ala Arg Ile Ile Val Gln Ala Glu Glu
        355                 360                 365
Ala Ala Val Ala His Leu Pro Leu Ala Gln Arg Ile Pro Glu Asp Arg
    370                 375                 380
His Arg Val Tyr Thr Val His Ile Gln Asn Arg Asn Cys Ser Ser Cys
385                 390                 395                 400
Arg Leu Val Leu Met Tyr Leu Pro Glu Asn Gly Asp Gly Glu Trp His
                405                 410                 415
Cys Arg Val Arg Glu Val Glu Phe Ala Ala Glu Val His Ala His Asp
            420                 425                 430
Pro Asn Phe Phe Ala Glu Ser Gly Ile Asn Leu Glu Ala
        435                 440                 445
```

<210> 28787
<211> 188
<212> PRT
<213> A.fumigatus

```
<400> 28787
Arg Arg Gly Val Phe His Phe Ser Gly Gly Leu Gly Leu Pro Ser Ser
1                   5                   10                  15
Arg Val Gly Leu Ala Thr Ala Ile Ile Gly Val Ile Gly Leu Pro Leu
            20                  25                  30
Gln Ile Phe Val Tyr Pro His Val Gln Ser Arg Leu Gly Thr Leu Ser
        35                  40                  45
Ser Phe Arg Thr Phe Leu Pro Phe Ser Pro Val Ala Tyr Thr Leu Met
    50                  55                  60
Pro Phe Leu Val Ile Ile Pro Arg Tyr Pro Trp Leu Val Trp Ser Ala
65                  70                  75                  80
Phe Thr Ala Val Val Gly Leu Gln Val Ile Ser Arg Thr Phe Ala Leu
                85                  90                  95
Pro Ala Ala Ile Ile Leu Val Asn Asn Cys Val Thr Asp Pro Ser Ile
            100                 105                 110
Leu Gly Thr Val His Gly Val Ala Gln Ser Ile Ala Ser Ala Ala Arg
        115                 120                 125
```

```
Thr Leu Gly Pro Phe Ile Gly Gly Trp Gly Leu Gly Leu Gly Leu Lys
    130                 135                 140
Asn Asn Leu Val Gly Gly Ile Trp Trp Ala Leu Ala Leu Glu Ala Leu
145                 150                 155                 160
Val Gly Trp Leu Leu Leu Trp Thr Ile His Glu Gly Lys Gly Ile Glu
                165                 170                 175
Arg Arg Lys Asp Ala Arg Arg Gly Thr Gln Glu Ser
            180                 185
```

<210> 28788
<211> 62
<212> PRT
<213> A.fumigatus

<400> 28788

```
Pro Pro Thr Thr Asp Glu Gly Ala Gln Cys Thr Arg Cys Thr Arg Tyr
1               5                   10                  15
Thr Leu Ser Asp Thr Met His Arg Pro Lys Asp Arg Arg Ile Ser Asp
            20                  25                  30
Thr Ile Ile His Lys Asn Asp Ser Ser Arg Lys Ser Lys Arg Pro Arg
        35                  40                  45
Asn Asn Leu Lys Ser Asn His Ser Arg Glu Gly Arg Pro Asp
    50                  55                  60
```

<210> 28789
<211> 101
<212> PRT
<213> A.fumigatus

<400> 28789

```
Ala Ala Ile Val Leu Leu Pro Tyr Cys Pro Ala Gly His Met Thr Leu
1               5                   10                  15
Met His Phe Leu Val Leu Val Cys Tyr Phe Glu Thr Leu Phe Phe Phe
            20                  25                  30
Leu Asp Asn Lys Ala Met Glu Ala Tyr Ser Phe Cys Ala Leu Pro Leu
        35                  40                  45
Glu Leu Ile Val Met Val Ala Asp Tyr Leu Gly Pro Leu Asp Leu Leu
    50                  55                  60
Asn Leu Ile Gln Gly Leu Pro His Ile Ala Pro Leu Leu Asn Ser Trp
65                  70                  75                  80
His Ile Gln Ala His Asp Glu Asn Gly His Thr Ile Leu His His Ile
                85                  90                  95
Val Glu Gln Arg Ala
            100
```

<210> 28790
<211> 307
<212> PRT
<213> A.fumigatus

<400> 28790

```
Tyr Leu Ile Lys Pro Leu Ala Lys Trp Ile Pro Ala Ser Ser Ile Ala
1               5                   10                  15
Asp Asn Glu Gly Trp Thr Pro Leu Phe Gln Ala Val Arg Asn Ser Asp
            20                  25                  30
Glu Ser Met Thr Lys Ala Leu Val Tyr Ala Gly Ala Asp Val Ser Ala
```

```
        35                  40                  45
Lys Asp His Thr Gly Lys Thr Ala Leu His Leu Ala Cys Tyr Glu Asp
    50                  55                  60
Ala Val Gly Ile Val Gln Ile Leu Leu Asp His Gly Ala Asn Pro Ser
65                  70                  75                  80
Ala Ala Asp Cys Asn Gly Arg Thr Pro Leu His Asp Ala Phe Gly Arg
                85                  90                  95
Asn Thr Val Ile Leu Gln Lys Leu Ile Lys Ala Gly Ala Asp Leu Asn
            100                 105                 110
Pro Arg Arg Met Pro Arg Gly Leu Ala Pro Leu Tyr Leu Glu Ala Trp
        115                 120                 125
Leu Gly Arg Glu Asp Ala Val Arg Ile Leu Leu Glu Ala Gly Ala Asp
    130                 135                 140
Pro Ser Ile Gln Thr Glu Thr Gly Glu Thr Ile Leu Gln Lys Ala Ile
145                 150                 155                 160
Glu Gly Ser His Thr Lys Val Val Gln Leu Leu Leu Asp Ala Gly Val
                165                 170                 175
Asp Ile Asn Val Arg Glu Phe His His Gly Val Asn Ala Ile Leu Thr
            180                 185                 190
Ala Ala Tyr Trp Gly Ala Asp Asp Cys Ile Arg Leu Leu Gln Arg Ala
        195                 200                 205
Gly Ala Asp Val Phe Ser Val Asp Tyr Arg Gly Cys Asn Ala Leu His
    210                 215                 220
Arg Ala Ala Leu Gly Gly Arg Leu Ser Thr Val Lys Leu Leu Leu Lys
225                 230                 235                 240
Glu Gly Val Asp Ser Ser Ala Glu Asp Asn Arg Gly Tyr Thr Pro Gln
                245                 250                 255
Arg Tyr Ala Val Glu Gly Val Tyr Thr His Gly Gly Ser Ser Asp Ile
            260                 265                 270
Asp Trp Glu Glu Leu Ile Arg Ile Leu Glu Asp Val His Thr Lys Ser
        275                 280                 285
Pro Phe Leu Arg Phe Leu Asn Trp Met Arg Ala Lys Cys Cys Phe Thr
    290                 295                 300
Lys Lys Ser
305
```

<210> 28791
<211> 60
<212> PRT
<213> A.fumigatus

<400> 28791

```
Ser Met Gly Lys His Val Leu Leu Arg Ser Ile Ser Gln Trp His His
1               5                   10                  15
Cys Asp Asn Tyr Arg Leu Phe Leu Gly His Ser Asn Pro Leu Val Lys
            20                  25                  30
Gln Arg Leu Asp Glu Pro Leu Ala His Gln Leu Asp Ser Gly Ala Thr
        35                  40                  45
Ser Ala Asn Thr Ala Trp Gly His Phe Leu Leu Leu
    50                  55                  60
```

<210> 28792
<211> 112
<212> PRT
<213> A.fumigatus

<400> 28792
Thr Asn Leu Trp Ala Asn Thr Ser Tyr Cys Val Ala Leu Val Ser Gly
1 5 10 15
Thr Thr Val Thr Thr Thr Ala Ser Ser Ser Ala Thr Pro Thr Arg Ser
20 25 30
Ser Ser Ser Gly Ser Thr Ser Pro Ser Pro Thr Ser Ser Thr Val Ala
35 40 45
Pro Pro Ala Pro Thr Gln Pro Gly Ala Thr Ser Ser Cys Tyr Glu Trp
50 55 60
Tyr Val Ala Val Pro Gly Asp Asp Cys Ser Lys Ile Asp Thr Gln Tyr
65 70 75 80
Gly Ile Thr Phe Ala Gln Leu Arg Ala Trp Asn Pro Tyr Leu Asp Ser
85 90 95
Thr Cys Ser Asn Leu Trp Ser Asp Tyr Ala Tyr Cys Val Lys Gly Ala
100 105 110

<210> 28793
<211> 188
<212> PRT
<213> A.fumigatus

<400> 28793
Ala Ile Ser Ser Arg Pro Val Phe Ala Pro Ala Ile Ser Asn Phe His
1 5 10 15
His Asn Thr Thr Leu Leu Thr Leu Met Ile Met Gly Thr Val Arg Glu
20 25 30
Lys His Lys Cys Ile Ile Asn Gly Phe Ser His Leu Phe Thr Leu Phe
35 40 45
Ile Lys Ala His Tyr Ile Ala Pro Thr Asp Val Leu Tyr Pro Pro His
50 55 60
Asp Ala Asp Val Gly Arg Leu Gln Arg Leu Gly Phe Glu Pro Glu Val
65 70 75 80
Ile Asp Leu Val Gln Leu Leu Pro Ala Ile Arg Asn Glu Ala Val Trp
85 90 95
Ser Tyr Asn Asp Glu Gly Ile Glu Met Ile Pro Arg Ala Lys Leu Val
100 105 110
Asn Tyr Leu Lys Gln Ser Glu Thr Ser Asn Ala Asn Asp Met Leu Glu
115 120 125
Thr Leu Arg Trp Val Asp His Thr Asp Lys Asp Ala Gln Gly Leu Phe
130 135 140
Pro Pro Ser Ile Leu Arg Leu Thr Phe Pro Ala Phe Tyr Gly Val Asn
145 150 155 160
Val Leu Tyr Asp Val His Asp Arg Lys Leu Phe Leu Cys Leu Asn Val
165 170 175
Tyr Phe Ile Phe His Gln Pro Lys Lys Pro Lys Leu
180 185

<210> 28794
<211> 152
<212> PRT
<213> A.fumigatus

<400> 28794
Ile Cys Glu Leu Lys Ser Ile Gly Trp Ser Tyr Ser Lys Ile Arg Ala
1 5 10 15
Lys His Pro Glu Val Pro Leu Ser Thr Ile Lys Ser Thr Val Leu Asn

```
            20                  25                  30
Glu Arg Lys Arg Val Asp Asn Gln Ser Lys Pro Arg Ser Gly Arg Pro
        35                  40                  45
Arg Gln Val Thr Glu Val Gln Arg Asp His Leu Tyr Asp Leu Ser Gln
    50                  55                  60
Ser Ser Pro His Leu Lys Met Leu Asp Leu Leu Thr Glu Val Tyr Gly
65                  70                  75                  80
Ala Val Lys Lys Arg Ala Leu Gln Tyr Leu Leu Arg Glu Leu Gly Leu
                85                  90                  95
Arg Lys Trp Arg Gln Leu His Arg Pro Ala Leu Thr Gly Glu Gln Ala
            100                 105                 110
Leu Ala Arg Leu Asn Trp Ala Asn Gln Tyr Gln His Phe Thr Leu Glu
        115                 120                 125
Asp Trp Ala Arg Val Lys Trp Ser Asp Glu Cys Leu Val Glu Arg Gly
    130                 135                 140
Val Gly Ile Arg Trp Thr Phe Cys
145                 150
```

<210> 28795
<211> 180
<212> PRT
<213> A.fumigatus

<400> 28795

```
Pro Arg Asp Gln Leu Arg Glu His Asp Val Cys Thr Arg Arg Thr Gly
1               5                   10                  15
Lys Gly Val Arg Gln Met Phe Trp Ala Gly Phe Gly Glu Glu Ile Arg
            20                  25                  30
Thr Gly Leu Val Pro Leu Tyr Gly Asp Pro Glu Ala Pro Arg Gly Gly
        35                  40                  45
Val Ser Gly Arg Val Ile Arg Asp Leu His Gln Ala Gln Leu Pro Glu
    50                  55                  60
Leu Thr Glu Pro Gly Asp Ile Phe Met Gln Asp Asn Ala Arg Val His
65                  70                  75                  80
Thr Ala Arg Ile Val Arg Glu Val Leu Asn Ser Leu Gln Ile Glu Val
                85                  90                  95
Met Ile Trp Pro Pro Tyr Ser Pro Asp Leu Asn Pro Val Glu Asn Leu
            100                 105                 110
Trp Ser Leu Met Lys Glu Lys Ile Tyr Met Leu Tyr Pro Glu Leu Glu
        115                 120                 125
Asp Ala Pro Asp Thr Glu Asp Thr Arg Gln Leu Leu Ile Leu Ala Ala
    130                 135                 140
Lys Glu Ala Trp Gln Ala Ile Asp Thr Ser Ile Leu Gln Lys Leu Ser
145                 150                 155                 160
Arg Thr Met Pro Asn Arg Val Lys Ala Val Ile Glu Ala Asn Gly Trp
                165                 170                 175
Tyr Thr Lys Tyr
            180
```

<210> 28796
<211> 105
<212> PRT
<213> A.fumigatus

<400> 28796

```
Thr Asp Val Cys Ser Ile Arg Tyr Ala Ser Pro Pro Val Gly Gln Leu
```

```
1               5                   10                  15
Arg Trp Gln Pro Pro Arg Pro Pro Val Lys Asn Asn Ser His Ile Ile
            20                  25                  30
Pro Ala Val Asp Pro Pro Pro Met Cys Pro Gln Ser Gly Ala Ala Gly
        35                  40                  45
Thr Pro Ala Ile Tyr Gly Phe Asn Ser Gly Pro Gly Asp Glu Asp Cys
    50                  55                  60
Leu Phe Leu Asn Val Tyr Ala Pro Pro Gly Ala Ser Asn Leu Pro Val
65                  70                  75                  80
Phe Val Trp Ile Arg Glu Leu Leu Leu Ser Ser Thr Trp Pro Ala Cys
                85                  90                  95
Arg Cys Ser Ser Ala Asp Ser Gly Asp
            100                 105
```

<210> 28797
<211> 157
<212> PRT
<213> A.fumigatus

<400> 28797

```
Gly Asn Thr Phe Leu Ser Ser Ser Glu Leu Tyr Pro Ala Leu Asn Pro
1               5                   10                  15
Gln Ser Pro Lys Pro Pro Ile Phe Leu Thr Gln Gly Arg Gln Gly Ile
            20                  25                  30
Phe Asp Pro Cys Pro Cys Phe Pro Thr Pro Phe Leu Arg Leu Ser Asp
        35                  40                  45
Phe Ser Ser Ser Val Ser Ala Gln Glu Gly Asn Pro Met Lys Thr Asp
    50                  55                  60
Val Cys Leu Leu Leu Ala Ala Thr Leu Ala Pro Ile Val Gly Gly Ser
65                  70                  75                  80
Ser Ser Gly Leu Ile Val His Leu Asp Tyr Ser Ser Tyr Gln Gly Tyr
                85                  90                  95
His Glu Ala Ser Thr Gly Leu Asn Ile Trp Lys Gly Tyr Ala Val Thr
            100                 105                 110
Pro Gln Pro Ala Trp Asn Ala Ala Asn Ala Lys Leu Thr Ser Ala Ala
        115                 120                 125
Phe Gly Met His Arg Leu Leu Ser Gly Ser Cys Asp Gly Ser Leu His
    130                 135                 140
Gly Leu Gln Ser Arg Ile Thr Val Ile Ser Ser Leu Pro
145                 150                 155
```

<210> 28798
<211> 250
<212> PRT
<213> A.fumigatus

<400> 28798

```
Ile Val Ser Gln Arg Cys Lys Thr Arg Lys Pro Gln Ile Ser Leu Asn
1               5                   10                  15
Asn Ala Asn Asn Ser Ile Ser Leu Val Asp Glu Ile Ala Asn Lys Ile
            20                  25                  30
Val Thr Asp Glu Gly Leu Thr Pro Thr Pro Asn Val Ile Leu Gly Pro
        35                  40                  45
Phe Trp Ser Pro Asn Ala Pro Phe Arg Asn Leu Gly Asp Ser Ile Ile
    50                  55                  60
Gln Asp Pro Asn Pro Asn Gly Lys Val Thr Phe Met His Gly Val Leu
```

65 70 75 80
Thr Asp Met Glu Thr Gly Lys Pro Ile Ala Gly Ala Val Leu Asp Ile
85 90 95
Trp Gln Ala Ser Ala Asn Gly Gln Tyr Asp Phe Gln Asp Pro Asn Gln
100 105 110
Ser Glu Asn Asn Leu Arg Gly Lys Phe Arg Ser Asn Glu Lys Gly Glu
115 120 125
Phe Tyr Trp Tyr Cys Tyr His Pro Thr Pro Tyr Ser Leu Pro Thr Asp
130 135 140
Gly Pro Ala Gly Val Leu Leu Asn Leu Met Asp Arg Ser Pro Met Arg
145 150 155 160
Pro Ala His Ile His Leu Met Ile Thr His Pro Asp Tyr Ala Thr Ile
165 170 175
Ile Asn Gln Ile Tyr Pro Ser Asp Asp Pro His Leu Asn Ile Asp Ser
180 185 190
Val Phe Ala Val Lys Asp Asp Leu Val Val Asp Phe Lys Pro Lys Thr
195 200 205
Asp Asp Pro Lys Ala Glu Leu Asp Leu Glu Tyr Asn Val Lys Met Ala
210 215 220
Leu Lys Lys His His Pro Asn Pro Asn Ser Ala Pro Pro Val Ser Ser
225 230 235 240
Phe Glu Arg Tyr Asn Lys Gly Gln Lys Leu
245 250

<210> 28799
<211> 127
<212> PRT
<213> A.fumigatus

<400> 28799
Asn Asp Tyr Lys Ser Ser Asp Val Ser Leu Ser Phe Leu Cys Gln Ser
1 5 10 15
Ser Ser Val Asp Asn Leu Leu Leu Pro Arg Asn Ser Ser Ser Arg Ala
20 25 30
Ile Ser Thr His Leu His Pro His Gln Tyr Thr Met Ser Pro Lys Arg
35 40 45
Gln Phe Asp Pro Asn Phe Thr Pro Tyr Val Ile Asn Ser Met Gly Pro
50 55 60
Lys Thr Pro Glu Arg Ala Arg Val Val Leu Gly Ser Leu Ile Lys His
65 70 75 80
Ile His Asp Phe Ala Arg Glu Val Glu Leu Thr Pro Ala Glu Trp Met
85 90 95
Leu Gly Val Glu Phe Ile Asn Ser Ile Gly Lys Ile Ser Thr Pro Val
100 105 110
Arg Asn Glu Cys His Arg Ile Cys Asp Val Ile Gly Leu Glu Ser
115 120 125

<210> 28800
<211> 237
<212> PRT
<213> A.fumigatus

<400> 28800
Ile Asn Tyr Ser Asn Ala Pro Ser Gln Leu Leu Ala Leu Val Val Ala
1 5 10 15
Leu Glu Gly Arg His Arg Gly Arg Arg Val Gly Ile Gly Val Val Leu

```
            20                  25                  30
Leu Gln Ser His Phe Asn Val Val Leu Glu Val Glu Leu Ser Leu Gly
        35                  40                  45
Val Val Gly Leu Gly Phe Glu Ile Asn Asp Lys Val Ile Leu Asp Gly
    50                  55                  60
Glu Asp Arg Val Asp Val Glu Val Trp Val Val Thr Gly Val Asp Leu
65                  70                  75                  80
Val Asp Asp Gly Gly Val Val Gly Val Gly Asp His Glu Val Asn Val
                85                  90                  95
Gly Gly Pro His Gly Arg Ala Ile His Glu Ile Glu Lys His Thr Gly
            100                 105                 110
Arg Thr Val Gly Gly Gln Arg Val Arg Gly Arg Val Val Ala Val Pro
        115                 120                 125
Val Glu Leu Ala Leu Leu Val Arg Ser Glu Leu Ala Ala Glu Val Val
    130                 135                 140
Leu Thr Leu Val Gly Val Leu Glu Val Ile Leu Ala Val Gly Gly Gly
145                 150                 155                 160
Leu Pro Asp Val Lys Asp Arg Ala Gly Asp Gly Leu Ala Gly Leu His
                165                 170                 175
Val Cys Gln Asp Thr Val His Glu Gly Asp Leu Ala Val Gly Val Gly
            180                 185                 190
Val Leu Asp Asp Ala Val Ala Glu Ile Ala Glu Gly Ser Val Gly Arg
        195                 200                 205
Pro Glu Gly Ala Lys Asn Asp Ile Gly Arg Gly Gly Gln Ala Leu Val
    210                 215                 220
Ser Asp Asp Leu Val Gly Asp Leu Ile Asp Lys Thr Asn
225                 230                 235

<210> 28801
<211> 86
<212> PRT
<213> A.fumigatus

<400> 28801
Asn Ser Ser Ser Ala Ala Gly Glu His Ala Gly Asn Gln Ala Arg Phe
1               5                   10                  15
Lys Thr Ala Val Leu Glu Ser Asp Ser Pro Leu Arg Leu Asn Gly Ala
            20                  25                  30
Asp Thr Lys Met Thr Asp Thr Ala Glu Asn Pro Gly Ala Arg Val Arg
        35                  40                  45
Leu Leu Ser Ile Pro Lys Phe Lys Asp Thr Gly Glu Leu Ile Leu Val
    50                  55                  60
Asp Ser Glu Thr Leu Glu Val Glu Leu Val Lys Phe Gly Thr Phe Ala
65                  70                  75                  80
Gly Lys Gln Glu Asn Gln
                85

<210> 28802
<211> 133
<212> PRT
<213> A.fumigatus

<400> 28802
Lys Val Ser Pro Ser Arg Leu Gly Leu Leu Arg Lys Ser Thr Val Arg
1               5                   10                  15
Gln Lys Lys Arg Arg Gly Gly Gly Asn Lys Glu Lys Asn Ala Arg Pro
```

```
            20                  25                  30
His Asn Asn Tyr Asn Gly Leu Pro Arg Leu Arg Gln Asn His Pro Pro
        35                  40                  45
Ala Gln Ser His Pro Pro Thr Pro Pro Asn Leu Pro Ala Arg Thr Pro
    50                  55                  60
Gln Lys Arg Ile Arg Arg Arg Ser His Arg Leu Ala Ala Arg Leu Asp
65                  70                  75                  80
Thr Val His Leu Arg Arg Ala Arg Ala Thr Glu Arg Met His Leu Leu
                85                  90                  95
Gln Ser Arg Gly Pro Ala Gln Arg Arg Ala Glu Pro Ala Ala Arg Gly
            100                 105                 110
Gly Ser Ala Arg Pro His Arg His Arg Asp Glu Arg Glu Arg Val Pro
        115                 120                 125
Arg Asp Ala Gly Glu
    130
```

<210> 28803
<211> 213
<212> PRT
<213> A.fumigatus

<400> 28803

```
Ile Arg Ala Ser Lys Ser Gly Leu Ala Pro Leu Pro Leu Arg Cys Lys
1               5                   10                  15
Lys Tyr His His Arg Asp Ser Val Tyr Ser Glu Ser Arg Gln Ser Gly
            20                  25                  30
Arg Arg Lys Glu Gly Gly Gly Glu Thr Lys Arg Lys Met Pro Val Pro
        35                  40                  45
Ile Thr Ile Ile Thr Gly Phe Leu Gly Ser Gly Lys Thr Thr Leu Leu
    50                  55                  60
Leu Asn Leu Ile Pro Gln Leu Pro Pro Thr Tyr Arg Leu Ala Leu Leu
65                  70                  75                  80
Lys Asn Glu Phe Gly Asp Val Ala Ile Asp Ser Gln Leu Ala Ser Thr
                85                  90                  95
Gln Ser Ile Ser Gly Val Arg Glu Leu Leu Asn Gly Cys Ile Cys Cys
            100                 105                 110
Asn Leu Val Gly Gln Leu Ser Asp Ala Leu Asn Gln Leu Arg Glu Glu
        115                 120                 125
Val Gln Pro Asp Arg Ile Val Ile Glu Thr Ser Gly Ser Ala Phe Pro
    130                 135                 140
Ala Thr Leu Ala Asn Glu Val Lys Pro Leu Pro Arg Gln His Pro Gly
145                 150                 155                 160
Asn Phe Val Leu His Gly Val Ile Ser Val Ile Asp Val Glu Asn Gly
                165                 170                 175
Lys Gly Tyr Glu Tyr Thr Ser Tyr Arg Glu Asn Leu Gln Ala Met Tyr
            180                 185                 190
Pro Asp Gln Thr Phe Gln Asn Asn Gly Lys Ala Val Pro Glu Gln Ala
        195                 200                 205
Phe Gln Thr Trp Ala
    210
```

<210> 28804
<211> 136
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (120)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28804
Ile Ser Pro Arg Glu Asp Cys Asp Pro Tyr Arg Ala Phe Leu Glu Ser
1 5 10 15
Lys Leu Gly Gln Phe Gln Pro Val Ile Gln Ser Val Gln Ile Thr Met
20 25 30
Arg Glu Asn Ile Tyr Gly Phe Gln Gly Asn Gln Lys Ser Tyr Tyr Leu
35 40 45
Lys Ile Thr Val Thr Glu Pro Lys Phe Ile Ser Lys Val Arg Ser Ala
50 55 60
Leu Glu Asn Asn Ala Gln Ser Leu Asn Tyr Lys Gly Leu Trp Asn Asn
65 70 75 80
Pro Asp Gly Gly Ile Leu Thr Phe Asp Asn Ile Gln Tyr Leu Leu Lys
85 90 95
Phe Met Ile Asp Thr Asp Ile Ala Gly Met Phe Trp Val Glu Pro Lys
100 105 110
Ala Gly Lys Tyr His Trp Pro Xaa Pro Pro Glu Ile Tyr Gln Leu Ala
115 120 125
Arg Leu Lys Arg Phe Ser Ile Ile
130 135

<210> 28805
<211> 246
<212> PRT
<213> A.fumigatus

<400> 28805
Leu Arg Leu Tyr Leu His Ile Cys Arg Val Lys Val Ser Phe His Ile
1 5 10 15
Val Gln Ala Asp Val Lys Glu Ile Ile Gln Glu Asp Gly Ser Val Asn
20 25 30
Gly Val Arg Thr Thr Ser Gly Leu Val Lys Ala Glu Lys Val Val Ile
35 40 45
Ala Thr Gly Ile Trp Ser Glu Asp Leu Cys Asp Phe Gly Val Pro Ile
50 55 60
Pro Val Ile Pro Val Ala His Pro Tyr Met Tyr Gly Glu Gln Cys Gln
65 70 75 80
Pro Lys Pro Arg Lys Ser Pro Phe Val Arg Trp Pro Glu Phe His Val
85 90 95
Tyr Ala Arg Asp His Gly Thr Ala Tyr Gly Leu Gly Ala Tyr Asp His
100 105 110
Lys Pro Leu Tyr His Lys Pro Asn Glu Thr Ala Ile Gly Asp Trp Val
115 120 125
Asp Ala Phe Asp Ala Thr Leu Glu Arg Ala Arg Ser Leu Ile Pro Ala
130 135 140
Glu Thr Asn Leu Thr Ile Lys Glu Lys Phe Asn Gly Ile Phe Ser Met
145 150 155 160
Thr Pro Asp Asn Leu Pro Leu Val Gly Arg Ile Ser Ser Ile Lys Gly
165 170 175
Leu Tyr Met Ala Thr Ala Val Trp Val Thr His Ala Ala Gly Ser Ala
180 185 190
Lys Phe Leu Thr Lys Leu Ile Gln Gly Glu Glu Val Asp Glu Ser Leu

```
        195                 200                 205
Lys Lys Ala Leu Asp Pro Asn Arg Phe Gln Gly Lys Glu Met Gln Ala
    210                 215                 220
Leu Lys Glu Glu Ser Leu Ala Gly Tyr Asn Ser Ile Tyr Ser Thr Asn
225                 230                 235                 240
Glu Asn Arg Arg Ser Arg
                245
```

<210> 28806
<211> 193
<212> PRT
<213> A.fumigatus

<400> 28806

```
Ser Ala Thr Met Pro Glu Ala Val Ala Met Pro Gln Lys Arg Val Leu
1               5                  10                  15
Gly Asp Ala Thr Asn Asn Pro Arg Ser Ile Leu Asn Thr Pro Gly Thr
            20                  25                  30
Val Lys Lys Arg Lys Leu Asp Ala Gly Pro Ser Ala Thr Val Asn Ser
        35                  40                  45
Leu Ser Gln Asn Gly Leu Arg Lys Ser Phe Gly Ser Ser Gln Pro Gln
    50                  55                  60
Lys Ser Gln Phe Glu Glu Glu Val Leu Glu Lys Leu Thr Gln Asp Ile
65                  70                  75                  80
Asn Gly Leu Lys Asp Ser Asn Ser Glu Lys Asp Gln Gln Trp Glu Arg
                85                  90                  95
Pro Pro Leu Gly Asp Phe Asp Glu Thr Lys Asp Asn Ile Cys Phe Gln
            100                 105                 110
Gln Ile Asp Ala Glu Glu Gly Thr Ile Thr Gly Gly Lys Thr Ala Val
        115                 120                 125
Arg Leu Phe Gly Val Thr Glu Val Asp Leu Ser Pro His Cys Gln Ser
    130                 135                 140
Val Trp Phe Ala Asn Gly Phe Asn Ala Gly Arg Ala Ile Ser Phe Ala
145                 150                 155                 160
Pro Cys His Arg Val Ser Ala Leu Pro Leu Tyr Arg Gly Ala Gly Glu
                165                 170                 175
Phe His Gln Gly Lys Ile Ala Thr Pro Thr Val Pro Phe Ser Arg Val
            180                 185                 190
Asn
```

<210> 28807
<211> 63
<212> PRT
<213> A.fumigatus

<400> 28807

```
Ser Gln Ala Leu Asp Arg Ser Leu Thr Leu Pro Ala Gly Gln Val Gly
1               5                  10                  15
Lys Met Leu Gly Glu Arg Trp Lys Ala Leu Ser Asp Ser Glu Arg Arg
            20                  25                  30
Pro Tyr Glu Glu Lys Ala Ala Ala Asp Lys Lys Arg Tyr Glu Asp Glu
        35                  40                  45
Lys Ala Ser Tyr Asn Val Cys Gly Tyr Thr Tyr Cys Ala Leu Lys
    50                  55                  60
```

<210> 28808
<211> 133
<212> PRT
<213> A.fumigatus

<400> 28808
Thr Ser Arg Ile Ser Thr Pro Arg Thr Thr Met Gln Arg Leu Phe Ser
1 5 10 15
Asp Gly Asp Asp Asp Leu Val Thr Ala Asp Thr Leu Thr Thr Trp Tyr
20 25 30
Val His Val Pro Leu Ser Ser Gly Tyr Ala His Asp Lys Val Ile Leu
35 40 45
Phe Asp Ala Ile Cys Ser Ala Ile Gln Ala Gly Arg Cys Glu Ile Tyr
50 55 60
Ser Ser Arg Asn Leu Glu Asn Asn Ile Ser Gly Phe Met Ile Glu Val
65 70 75 80
Gln Ala Arg Phe Ser Asp Leu Gly Thr Val Arg Arg Ala Ala Tyr His
85 90 95
Ile Ala Gln Arg His Leu Asp Phe His Arg Met Glu Met Gln Ser Arg
100 105 110
Thr Gln Thr Arg Leu Ala Glu Lys Cys Leu Ala Ser Leu Ser Leu Glu
115 120 125
Asp Ala Arg Gly Lys
130

<210> 28809
<211> 154
<212> PRT
<213> A.fumigatus

<400> 28809
His Gln Gln Tyr Ile Ala Ser His Gln Pro Ser Thr Asn Pro Leu Lys
1 5 10 15
Pro Asn Tyr Thr Glu Pro Ser Gly Ala Thr Ser Lys Met Gly Leu Leu
20 25 30
Glu Leu Ile Gln His Leu Arg Gly Glu Glu Pro Thr Gly Tyr Thr Trp
35 40 45
Tyr Val His Phe Pro Leu His Gly Asp Pro Leu Thr Gln Ser Glu Ile
50 55 60
Leu His Thr Ala Val Gln Glu Leu Arg Gln Lys Lys Ile Thr Leu Trp
65 70 75 80
Gln Ser Arg Gly Ala Ala Pro Asp Lys Gly Met Leu Met Lys Val Ile
85 90 95
Val Ala Asp Asn Lys Ala Ala Glu Val Leu Lys Ala Ala Gly Thr Val
100 105 110
Leu Glu Arg Arg Leu Gln Asp Ala Lys Leu Ser Leu Glu Arg Ile Leu
115 120 125
Gln Lys Asp Asn Asp Lys Arg Ala Asp Asn Tyr Val Thr Lys Leu Lys
130 135 140
Ser Asp Leu Ala Ala Leu Ser Met Asp Gly
145 150

<210> 28810
<211> 675
<212> PRT
<213> A.fumigatus

<400> 28810
Leu Thr Val Lys Phe Leu Asp Gln Leu Ser Pro Asp Glu Ile Arg Ala
1 5 10 15
Thr Thr Gln Leu Ile Arg Glu Ile Ser Thr Gly Gln Tyr Ile Lys Phe
20 25 30
Asn Cys Leu Thr Leu Arg Glu Pro Leu Lys Ala Glu Tyr Leu Ala Phe
35 40 45
Arg Gln Gly Lys Gly Pro Arg Pro Asp Arg Arg Ala Phe Ala Ile Leu
50 55 60
Ile Asp Arg His Ser Pro Gly Gly Val Ile Glu Ala Val Ile Asn Leu
65 70 75 80
Thr Ser Gly Val Ile Glu Glu Trp Lys Arg Val Glu Asp Val Met Pro
85 90 95
Ile Leu Thr Pro Thr Asp Leu Gly Phe Ile Glu Arg Val Ala Arg Ser
100 105 110
Asp Pro Arg Val Ile Gln Ala Cys Gln Asp Ile Gly Ile Tyr Asp Met
115 120 125
Ser Gln Val Tyr Phe Asp Ala Trp Ala Ile Gly Ile Asp Glu Arg Trp
130 135 140
Gly Arg Asp Arg Lys Leu Gln Gln Gly Leu Pro Tyr Tyr Arg His Glu
145 150 155 160
Pro Glu Asp Asn Gln Tyr Ala His Pro Leu Asp Phe Ile Val Ile Ala
165 170 175
Asp Thr Asp Thr Glu Glu Ile Leu Ser Val Asp Val Arg Thr Val Asp
180 185 190
Gly Glu Arg Thr Arg Pro Pro Leu Lys Gln Gln Asn Tyr Leu Pro Thr
195 200 205
Ser Leu Gln His Gly Tyr Pro Tyr Asp Thr Leu Lys Pro Ile His Ile
210 215 220
Thr Gln Pro Asp Gly Val Ser Phe Gln Leu His Gly Asn Met Leu His
225 230 235 240
Trp Ala Gly Tyr Lys Met His Ile Cys Phe Asn Tyr Arg Glu Gly Ile
245 250 255
Val Leu Ser Asp Ile Ser Ile Tyr Asp Pro Val Glu Lys Arg Gln Arg
260 265 270
Pro Leu Phe Tyr Arg Ile Ser Val Ala Glu Met Val Val Pro Tyr Gly
275 280 285
Cys Pro Glu Pro Pro His His Arg Lys Gln Ala Phe Asp Val Gly Glu
290 295 300
Tyr Gly Met Gly Leu Met Thr Asn Ser Leu Arg Leu Gly Cys Asp Cys
305 310 315 320
Lys Gly Val Ile Gln Tyr Leu Asp Gly Val Ile Ser Asp Gln Gln Gly
325 330 335
Ile Pro Val Val Val Lys Asn Ala Ile Cys Ile His Glu Glu Asp Asn
340 345 350
Gly Leu Leu Val Lys His Thr Asp Phe Arg Asp Ala Arg Ser Ile Ser
355 360 365
Ala Arg Asp Arg Lys Leu Ile Ile Ser Gln Ile Ile Thr Ala Ala Asn
370 375 380
Tyr Asp Tyr Gly Phe Tyr His Thr Phe Thr Leu Asp Gly Thr Tyr Lys
385 390 395 400
Leu Glu Val Arg Leu Thr Gly Ile Leu Asn Thr Tyr Cys Leu His Pro
405 410 415
Ser Glu Thr Ala Asn Pro Tyr Gly Thr Glu Val Ala Arg Gly Val Thr
420 425 430

```
Ala His Asn His Gln His Ile Phe Ser Leu Arg Ile Asp Pro Glu Ile
        435                 440                 445
Asp Gly Val Glu Asn Glu Val Arg Glu Cys Asp Ala Val Pro Phe Gln
    450                 455                 460
Tyr Thr Asp Asp Ser Lys Ala Asn Pro Tyr Gly Asn Gly Phe Phe Cys
465                 470                 475                 480
Arg Gln Arg Ala Val Glu Gly Ala Ser Leu Ala Ser Leu Gly Arg Ser
                485                 490                 495
Trp Asp Ile Val Asn Pro Thr Lys Val Asn Pro Val Cys Lys Lys Pro
            500                 505                 510
Val Gly Tyr Lys Ile Leu Asn Ser Gln Tyr Pro Gly Leu Leu Ala Gln
        515                 520                 525
Glu Gly Ser Ile Val Arg Gln Arg Ala Ala Phe Ala Thr Lys Pro Leu
    530                 535                 540
Trp Val Val Pro Phe Lys Asp Phe Arg Leu Tyr Pro Ala Gly Asn Tyr
545                 550                 555                 560
Val Cys Gln Ser Thr Gly Glu Ala His Gln Ser Gly Asn Glu Thr Leu
                565                 570                 575
Glu Gly Trp Val Ser Asp Ala Lys His Ala Asp Ile Val Cys Tyr Val
            580                 585                 590
Gln Phe Gly Leu Thr His Ile Pro Arg Thr Glu Asp Phe Pro Ile Met
        595                 600                 605
Pro Ala Glu Pro Val Ser Val Thr Leu Arg Ala Ala Asn Phe Phe Gln
    610                 615                 620
Ser Ser Pro Ala Leu Pro Phe Leu Thr Leu Pro Gln Asn Arg Asp Thr
625                 630                 635                 640
Asn Ser Gln Leu Ala Gly Leu Gly Gln Ser Ala Cys Val Ser His Thr
                645                 650                 655
Val Thr Val Arg Gln Gly Ser His Asp Asn Pro Arg Leu Gln Lys Lys
            660                 665                 670
Leu Ser Leu
        675

<210> 28811
<211> 104
<212> PRT
<213> A.fumigatus

<400> 28811
Gly Arg Ser Lys Arg Gln Leu Pro Ala Pro Ser Arg Asp Gly Asp Asp
1                   5                   10                  15
Arg Asp Gly Thr Val Arg Asp Asn Val Leu Pro Ala Gln Asn Pro Glu
            20                  25                  30
Ala Leu Arg Lys Ala Thr Ala Glu Val Arg Ser Ala Tyr Asn Ser Glu
        35                  40                  45
Asp Glu Ile Thr Phe Ala Thr Thr Ala Glu Arg Leu Pro Tyr Met Gln
    50                  55                  60
Ala Cys Leu Thr Glu Gly Leu Arg Ile Tyr Pro Ser Gly Pro Ile Ala
65                  70                  75                  80
Ala Pro Arg Arg Thr Pro Arg Gly Thr Val Thr Trp Ile Ala Gly His
                85                  90                  95
Pro Val Pro Gly Gly Gly Gly Gly
            100

<210> 28812
<211> 177
```

<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (152),(168)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28812
Arg Ile Gly Phe Thr Glu Val Thr Val Cys Ser Ile Leu Tyr Gln Ser
1 5 10 15
Trp Phe Ser Cys Phe Tyr Cys Val Cys Val Val Leu Ser Val Thr Trp
20 25 30
Ser Pro Pro Leu Phe Pro Gly Asn Met Ala Ser Asn Gly Cys Leu Thr
35 40 45
Pro Ser Glu Leu Asn Gly Gln Ser Asn Gly His Ile Asn Gly Ala Thr
50 55 60
Asn Gly Tyr Ser Asn Gly His Ile Ser Gly Leu Thr Asn Gly Tyr Thr
65 70 75 80
Asp Gly His Val Asp Asp Arg His Gly His Ala Asn Gly Tyr Thr Asp
85 90 95
Gly His Ile Glu Asp Tyr Thr Arg His Glu Asp His Arg Pro Ser Ala
100 105 110
Pro Val Ala Ile Cys Gly Met Gly Met Arg Leu Pro Arg Gly Ile Arg
115 120 125
Asp Glu Gln Ser Phe Tyr Glu Phe Leu Ile Asn Lys Gly Asp Ala Arg
130 135 140
Ser Ser Thr Arg Asn Asp Arg Xaa Asn Val Asp Ala Tyr Tyr Arg Pro
145 150 155 160
Ser Trp Glu Ala Arg His Lys Xaa Ser Pro Thr Met Val Thr Phe Leu
165 170 175
Lys

<210> 28813
<211> 130
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (35)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28813
Arg Gly Leu Gln Ala Ile Arg Cys Gln Gly Gly Gly Gly Val Ser Val
1 5 10 15
Gly Val His Ala Trp Thr Ala Ser Asn Ser Pro Leu Asn Phe His Arg
20 25 30
Gln Ala Xaa Phe Ile Pro Glu Arg Trp Leu Ser Pro Ser Thr Met Asp
35 40 45
Pro Ala Ser Pro Phe Gln Arg Asp Asn Arg Ala Ala Ser Gln Pro Phe
50 55 60
Ser Val Gly Pro Arg Asn Cys Leu Gly Lys Ala Phe Ala Leu Asn Glu
65 70 75 80
Met Arg Val Ile Leu Ala Arg Met Leu Trp Asn Phe Asp Met Lys Leu

```
                85                  90                  95
Leu Pro Gln Ser Asp Gly Trp Glu Arg Gln Arg Ile Phe Thr Leu Trp
            100                 105                 110
Asp Lys Gly Pro Leu Met Val Glu Leu Asn Glu Val Arg Ser Ser Leu
        115                 120                 125
His Asn
    130

<210> 28814
<211> 202
<212> PRT
<213> A.fumigatus

<400> 28814
Ser Ala Trp Asp Asn Thr Arg Leu Pro Phe Leu Arg Pro Leu Val Tyr
1               5                   10                  15
Arg Leu Thr Pro Asp Val Gln Arg Val Tyr Gln His Asn Ala Arg Ala
            20                  25                  30
Arg Glu Leu Val Gly Ser Ile Val Lys Gln Arg Glu Lys Asp Glu Ala
        35                  40                  45
Thr Ile Pro Gly Cys Thr Lys Pro Asn Asp Ala Ile Glu Trp Ile Trp
    50                  55                  60
Asp Leu Val Pro Asn Glu Asp Lys Lys Asn His Gly Tyr Gln Gly Ile
65                  70                  75                  80
Ala Gln Leu Ala Ile Ala Ala Val Ser Val Pro Thr Thr Ser Gln Leu
                85                  90                  95
Leu Thr Asn Ile Val Leu Asn Leu Ile Ala Tyr Pro Glu Tyr Val Pro
            100                 105                 110
Ile Leu Lys Glu Glu Ile Glu Asn Val Leu Ala Ser Cys Asp Gly Gln
        115                 120                 125
Trp Thr Leu Asp Ser Met Ser Lys Leu Glu Lys Leu Asp Ser Phe Met
    130                 135                 140
Lys Glu Ser Leu Arg Phe Asp Thr Pro Leu Thr Gly His Pro Pro Ser
145                 150                 155                 160
Leu Leu Gln Asp Leu Tyr Arg Glu Ser Pro Arg Thr Gln Trp Leu Thr
                165                 170                 175
Leu Thr Gln Leu Arg Phe Asn Ala Arg Pro Cys Asn Ala Ser Pro Ser
            180                 185                 190
Ala Met Ala Gln Phe Cys Asn Leu Gly Leu
        195                 200

<210> 28815
<211> 118
<212> PRT
<213> A.fumigatus

<400> 28815
Arg Val Ser Glu Asp Thr Val Ala Asp Ser Asp Thr Ala Thr Phe Gln
1               5                   10                  15
Arg Lys Ala Val Gln Arg Ile Thr Leu Ser Asp Gly Thr Val Leu Gln
            20                  25                  30
Pro Gly Thr Leu Ala Leu Ala Pro Ser Asn Ala Ile Ala Phe Asp Pro
        35                  40                  45
Asn Ile Tyr Pro Asn Pro Glu Gln Phe Asp Gly Arg Arg Phe Tyr Lys
    50                  55                  60
Leu Arg His Gln Asn Asn Ser Lys Ala Lys Asn Ile Ile Tyr Gln Phe
```

65 70 75 80
Thr Ala Ala Ser Lys Thr Gln Val Arg Phe Gly Gly Glu Arg His Ala
85 90 95
Cys Pro Gly Arg Trp Phe Ala Ala His Leu Ile Lys Met Val Val Ala
100 105 110
Gly Asp Ser Leu Gln Val
115

<210> 28816
<211> 355
<212> PRT
<213> A.fumigatus

<400> 28816
His Pro Ala Met Arg Gly Ser Phe Gly Pro Cys Gly Glu Glu Leu Phe
1 5 10 15
Ala Glu Ala Gly Glu Ala Trp Val Val Met Ile Ala Arg Leu Pro Ser
20 25 30
Glu Phe Arg Gly Leu Val Glu Ala Val Leu Glu Cys Cys Ala Arg Asp
35 40 45
Trp Glu His Asp Ala Val Ser Leu Thr Phe Val Phe Trp Tyr Glu Leu
50 55 60
Lys Gln Tyr Val Thr Leu Glu Arg Tyr Gly Asp Ala Arg Val Ala Phe
65 70 75 80
Thr Asp Val Phe Ser Lys Leu Val Asp Ile Met Val Lys His Leu Glu
85 90 95
Tyr Pro Arg Pro Glu Glu Gly Glu Thr Asp Leu Phe Gly Gly Asp Arg
100 105 110
Glu Gln Glu Glu Lys Phe Arg His Tyr Arg His Ser Met Gly Asp Val
115 120 125
Leu Lys Asp Cys Cys Ala Val Ile Gly Val Thr Glu Cys Leu Ser Asn
130 135 140
Ala Asn Ala Leu Ile Gln Gln Trp Val Ser Lys Tyr Ala Ser Gln Ala
145 150 155 160
Ser Asp Gln His Val Pro His Trp Gln Glu Leu Glu Ala Pro Leu Phe
165 170 175
Ser Leu Arg Ala Met Gly Arg Met Val Asp Pro Glu Glu Asn Thr Val
180 185 190
Leu Ser Gln Ile Ile Pro Leu Ile Val Gln Ile Pro Asn Gln Glu Lys
195 200 205
Val Arg Phe Gln Ala Ile Met Ala Leu Ala Arg Tyr Thr Glu Trp Thr
210 215 220
Ala Gln His Pro Glu Thr Leu Glu Ala Gln Leu Asn Tyr Val Ile Ser
225 230 235 240
Gly Phe Gln His Asn Ser Pro Glu Val Val Gln Ala Ala Ala Leu Ala
245 250 255
Phe Lys Phe Leu Gly Thr Asp Cys Gln Lys Leu Leu Gly Gly His Ile
260 265 270
Pro Gln Leu His Ser Phe Tyr Glu Ser Val Ile Asp Lys Leu Lys Pro
275 280 285
Ala Ser Gln Glu Glu Val Thr Glu Gly Val Ala Ala Val Val Ala Val
290 295 300
Gln Pro Leu Asp Lys Ile Tyr Glu Thr Met Lys Leu Phe Cys Asp Pro
305 310 315 320
Ile Met Ala Arg Ile Met Asn Leu Ala Asn Asn Ala Ser Asp Glu Gln
325 330 335

```
Gly Gln Arg Ala Val Ala Gly Met Phe Asn Val His Phe Phe His Leu
            340                 345                 350
Tyr Trp Ser
        355

<210> 28817
<211> 389
<212> PRT
<213> A.fumigatus

<400> 28817
Arg Ala Phe Phe Ser Pro Ile Leu Glu Leu Thr Asp Ser Tyr Thr Asp
1               5                  10                  15
His Leu Gln Leu Ile Thr Ile Phe Val Gln Val Val Asn Pro Tyr Val
            20                  25                  30
Gly Pro Asn Glu Asp Asn Pro Ala Val Lys Tyr Cys Gly Glu Ile Leu
        35                  40                  45
Pro Ile Met Thr Thr Ile Val Met Asn Phe Thr Ser Ser Thr Pro Ile
    50                  55                  60
Leu Glu Arg Val Cys Arg Cys Trp Arg Tyr Met Ile Ile Ser Tyr Arg
65                  70                  75                  80
Thr Ala Met Ile Pro Leu Leu Pro Thr Leu Ala Gln Ser Ile Ala Asn
                85                  90                  95
Gly Phe Glu Thr Ser Arg Glu Gly Cys Phe Leu Trp Ala Thr Asp Ala
            100                 105                 110
Val Val Arg Glu Phe Ala Glu Gly Ala Glu Phe Val Asp Arg Ser Thr
        115                 120                 125
Ser Asn Ala Val Phe Gln Phe Tyr Glu Gln Gln Ala Val Ala Phe Leu
    130                 135                 140
Arg Ile Leu Asn Glu Leu His Pro Glu Asn Leu Pro Asp Gly Lys Leu
145                 150                 155                 160
Tyr Ser Ser Cys Lys Thr Met Leu Trp Tyr Ala Asn Ser Asp Ala Val
                165                 170                 175
Ile Glu Asp Phe Tyr Arg Leu Ser Ser Asp Ala Val Arg Phe Tyr Pro
            180                 185                 190
Lys Glu Cys Ile Ser Ser Ser Leu Ala Val Pro Ile Phe Thr Ala Ala
        195                 200                 205
Leu Ser Ala Leu Thr Leu Gln Gln Ile Asp Pro Leu Ile Ala Thr Leu
    210                 215                 220
His Tyr Tyr His Asp Leu Phe Ser Phe Ala Phe Glu Lys Pro Ala Val
225                 230                 235                 240
Ser Glu Phe Thr Ser Ser Asp Gly Asp Ser Tyr Thr Asn Pro Pro Glu
                245                 250                 255
Val Arg Glu Ala Val Lys Gln Leu Ile Leu Ala Gln Gly Gln Val Leu
            260                 265                 270
Thr Gln Arg Ile Leu Thr Gly Met Met Phe Thr Phe Pro Gly Asp Cys
        275                 280                 285
Phe Ala Asp Ala Ser Gly Val Met Met Thr Leu Phe Asp Leu Val Pro
    290                 295                 300
Gln Glu Ala Gly Ala Trp Val Gln Ser Thr Leu Gln Met Leu Pro Ala
305                 310                 315                 320
Gly Thr Met Lys Pro Gly Glu Ala Glu Arg Leu Leu Lys Gly Ile Ala
                325                 330                 335
Asp Lys Val Gln Thr Arg Glu Ile Arg Lys Ile Arg Ser Leu Leu Gln
            340                 345                 350
Gly Gly Thr Gly Pro Gln Asp Ser Thr Val Ser Ile Met Thr Asn Ser
```

```
        355                 360                 365
Ile Leu Gln Thr Leu Pro Thr His Ile Ala Val Phe Thr Thr Gly Leu
    370                 375                 380
Glu Gly Ser Glu Leu
385

<210> 28818
<211> 60
<212> PRT
<213> A.fumigatus

<400> 28818
Val Glu Glu Thr Phe Gly Glu Asp Pro Tyr Leu Ser Gly Glu Met Gly
1               5                   10                  15
Tyr Ser Tyr Val Lys Gly Leu Gln Ser Leu Asn Val Ser Ser Met Val
            20                  25                  30
Lys His Phe Ile Gly Phe Ser Gln Pro Glu Gln Gly Ile Asn Thr Ala
        35                  40                  45
Pro Val His Gly Gly Glu Arg Tyr Leu Arg Thr Thr
    50                  55                  60

<210> 28819
<211> 80
<212> PRT
<213> A.fumigatus

<400> 28819
Glu Ala Ala Asp Asn Leu Phe Arg Tyr Asp Gly Ile Pro Ala Val Ser
1               5                   10                  15
Asp Tyr His Thr Leu Thr Glu Ile Leu Arg Gly Glu Trp Gly Tyr Asp
            20                  25                  30
Tyr Phe Val Met Ser Asp Ala Gly Gly Thr Asp Arg Leu Cys Ser Ala
        35                  40                  45
Phe Lys Leu Cys Arg Ser Asn Pro Ile Asp Met Glu Ala Val Thr Leu
    50                  55                  60
Gln Val Leu Pro Ala Gly Asn Asp Val Glu Met Gly Gly Gly Ser Leu
65                  70                  75                  80

<210> 28820
<211> 108
<212> PRT
<213> A.fumigatus

<400> 28820
Arg Met Gln Ser Asn Phe Gln Lys Ile Pro Glu Leu Val Lys Ala Gly
1               5                   10                  15
Lys Leu Asp Ile Lys Thr Val Asp Thr Ala Val Ser Arg Val Leu Arg
            20                  25                  30
Ala Lys Phe Glu Met Gly Leu Phe Glu Asn Pro Tyr Pro Ala Ala Pro
        35                  40                  45
Lys Ser Gln Trp Asn Asn Leu Ile His Ser Lys Glu Ala Val Lys Leu
    50                  55                  60
Ala Arg Gln Leu Asp Asn Glu Ser Ile Val Leu Leu Glu Asn Pro Tyr
65                  70                  75                  80
His Thr Leu Pro Leu Lys Lys Lys Gly Asp Ile Ala Val Ile Gly Pro
                85                  90                  95
```

Met Ala His Gly Phe Met Asn Val Arg Ala Thr Ala
100 105

<210> 28821
<211> 68
<212> PRT
<213> A.fumigatus

<400> 28821
Asp Gly Pro Ile Asn Ala Gly Ser Val Ser Asp Ser Ile Pro Phe Gly
1 5 10 15
Phe Gln Arg Ser Ile Ser Leu Thr Lys Leu Ile Glu Ser Ala Thr Gly
20 25 30
Asp Ile Thr Asn Trp Met Asn Ser Thr Ser Gly Ala Phe Asn Tyr Thr
35 40 45
Gly Leu Val Glu Asn Met Lys Met Lys Ala Gly Ser Phe Tyr Gly Arg
50 55 60
Gln Thr Gly Pro
65

<210> 28822
<211> 60
<212> PRT
<213> A.fumigatus

<400> 28822
Ser Phe Cys Arg Thr Leu Thr Ser Thr Leu Gln Ile Lys Tyr Trp Ala
1 5 10 15
Leu Gly Asn Glu Val Trp Gly Pro Trp Gln Val Ala Gln Met Thr Lys
20 25 30
Glu Glu Tyr Ala His Lys Ala Tyr Gln Trp Ala Lys Gly Glu Asn Ser
35 40 45
Phe Ala Ala Thr Pro Lys Gly Thr Asn Gln Ser Ile
50 55 60

<210> 28823
<211> 84
<212> PRT
<213> A.fumigatus

<400> 28823
Cys Leu Arg His Cys Asn Ser Arg Tyr Ser Glu Cys Arg Ala Asn Leu
1 5 10 15
Asp Leu Arg His Met Gly Arg Cys Ile Tyr Gly Gly Ile Tyr Asp Pro
20 25 30
Gly Asn Pro Leu Ser Asp Glu Asn Gly Phe Arg Lys Asp Val Leu Glu
35 40 45
Ala Leu Lys Glu Leu Asn Ile Pro Val Ile Arg Tyr Pro Gly Gly Asn
50 55 60
Phe Thr Ala Thr Tyr His Trp Ile Asp Gly Val Cys Pro Lys Asp Gln
65 70 75 80
Arg Pro Ala Arg

<210> 28824
<211> 318

<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (51)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28824

```
Glu Phe Ile Arg Cys Asp Ser Glu Arg Asp Gln Pro Val Asn Leu Ile
1               5                  10                  15
Tyr Phe Leu Ala Leu Lys Leu Leu Asp Pro Ser Leu Lys Leu Ile Leu
            20                  25                  30
Cys Gly Gln Asp Gly Thr Ala Ser Trp Asp Tyr Tyr Thr Leu Lys Gln
        35                  40                  45
Cys Leu Xaa Pro Ala His Ser Pro Leu Ser Thr Ser Thr Val Pro Leu
    50                  55                  60
Ile Asp Met His Ser Ile His Met Tyr Thr Cys Gly Ser Thr His Leu
65                  70                  75                  80
Pro Asn Val Thr Ala Pro Leu Ala Ala Glu Arg Ala Ile Glu Ile Thr
                85                  90                  95
Ser Ser Leu Ile Asp Leu Ala Met Ile Glu Asn Gly Ile Pro Pro Asp
            100                 105                 110
Gln Pro Arg Pro Thr Ile Cys Phe Asp Glu Trp Asn Val Trp Asp Pro
        115                 120                 125
Leu Arg Ala Glu Gly Ser Lys Gly Ala Glu Glu Ser Tyr Thr Leu Ser
    130                 135                 140
Asp Ala Leu Ala Val Ala Ile Trp Leu Asn Val Phe Val Arg Lys Ser
145                 150                 155                 160
Lys Asp Val Gly Met Ala Cys Ile Ala Gln Ser Val Asn Val Ile Ser
                165                 170                 175
Pro Leu Met Thr Thr Lys Asp Gly Ile Ile Lys Gln Thr Ile Trp Trp
            180                 185                 190
Pro Leu Tyr Leu Phe Ser Lys Tyr Met Arg Gly Trp Thr Ile Asn Ala
        195                 200                 205
His Val Ser Cys Gly Ala Tyr Glu Gly Glu Thr Ser Pro Lys Trp Ile
    210                 215                 220
Arg Ala Val Lys Asp Thr Pro Trp Leu Asp Val Ser Ala Thr Leu Gly
225                 230                 235                 240
Glu Asp Gly Tyr Ala Asn Val Ala Val Val Asn Ile Ser Asp Glu Lys
                245                 250                 255
Asp Met Glu Cys Lys Phe Glu Gly Ala Ser Gly Asp Val Thr Val Phe
            260                 265                 270
Thr Val Thr Gly Asp Ser Val Ser Ala Cys Asn Met Lys Gly Lys Glu
        275                 280                 285
Glu Val Gly Leu Thr Glu Ser Thr Trp Asp Gly Lys Gly Ala Tyr Lys
    290                 295                 300
Phe Pro Arg His Ser Leu Thr Leu Leu Arg Trp Lys Ala Glu
305                 310                 315
```

<210> 28825
<211> 310
<212> PRT
<213> A.fumigatus

<400> 28825

```
Phe His Val Gln Gly Tyr His Asn Arg Asn Ala Ser Lys Ala Ser Leu
1               5                  10                  15
Pro Gln His Leu Ser Gln Pro Pro Met Pro Asn His His Gln Gln Pro
            20                  25                  30
Leu Val Ala Pro Val Ala Ala Ser Ile Pro Arg Tyr Cys Phe Asp Asn
        35                  40                  45
Asp Lys Tyr Trp Tyr Ile Ile Glu Ala Lys Met Glu Asp Gly Arg Cys
    50                  55                  60
Trp Glu Leu Ser Arg Tyr Tyr His Asp Phe Tyr Asp Phe Gln Ile Ala
65                  70                  75                  80
Leu Leu Thr Gln Phe Glu Glu Glu Ala Gly Asn Arg Gly Lys Pro Arg
                85                  90                  95
Thr Leu Pro Phe Met Pro Gly Pro Val Thr His Val Thr Asp Ala Ile
            100                 105                 110
Ser Asn Gly Arg Arg Gln Asn Leu Asp Glu Tyr Ile Lys Lys Leu Leu
        115                 120                 125
Ala Met Pro Pro His Ile Ser Arg Cys Gln Leu Val Arg Gln Leu Phe
    130                 135                 140
Ala Pro Arg Pro Gly Asp Phe Glu Ile Asp Pro Ser Ala Phe Gly Glu
145                 150                 155                 160
Asp Ala Arg Tyr Ser Gly Gly Ser His His Ser Ser Thr Gln Glu Thr
                165                 170                 175
Ser Arg Thr Ala Ser Arg Gln Ser Ser Gln Ala Gln Met Ser Ser His
            180                 185                 190
Pro Asp Arg Ala Ser His Gln Arg Asn Gln Pro Ser Val Ser His Ala
        195                 200                 205
Ala Asp Arg Pro Ala Pro Met Asn Arg Gln Ala Ser Ser Leu Thr Gln
    210                 215                 220
Val Ser Thr Thr Ser Ser Gly Gly Ala Met Lys Val Lys Val Phe Phe
225                 230                 235                 240
Gln Asp Asp Leu Ile Ala Ile Arg Val Pro Ser Asp Ile Ser Phe Gln
                245                 250                 255
Gln Leu Arg Glu Lys Leu Leu Asp Arg Leu Lys Leu Asn Glu Glu Ile
            260                 265                 270
Val Val Gln Tyr Lys Asp Glu Pro Ser Gly Ala Tyr Met Asp Leu Asn
        275                 280                 285
Asn Asp Ser Asp Leu Asp Thr Ala Met Gln Arg Asn Ser Lys Leu Thr
    290                 295                 300
Leu His Val Gly Leu Ala
305                 310
```

<210> 28826
<211> 265
<212> PRT
<213> A.fumigatus

<400> 28826

```
Asn Tyr Pro Gln Phe Ser Asp Ser Tyr Leu Tyr Glu Pro Pro Phe Ile
1               5                  10                  15
Leu Ser Lys Val Asn Glu Glu Val Gly His Thr Val Val His Phe Leu
            20                  25                  30
Cys Thr Gly Asn Tyr Glu Thr Leu Arg Thr Ala Phe Glu Pro Gly Ala
        35                  40                  45
Ser Lys Ile Gly Ile Glu Phe Arg Arg Ser Met Leu Val Tyr Gln Ala
    50                  55                  60
Ala Lys Glu Tyr Asp Leu Tyr Asp Leu Glu Thr Tyr Ala Lys Lys Tyr
```

65 70 75 80
Ile Glu Val Phe Gly Glu Ser Met Ser Ile Phe Asp Ile Met Glu Ala
85 90 95
Ala Arg Glu Ile Tyr Ser Lys Leu Pro Lys Asp Glu Ile Trp Leu Thr
100 105 110
Gly Tyr Ile Tyr Lys Gln Leu Gln Ile Ala Phe Ser Leu Asp Arg Asn
115 120 125
Ile Phe Gln Arg Val Asp Leu Tyr Asp Gly Val Gly Lys Asp Pro Asn
130 135 140
Phe Asp Lys Asp Val Met Arg Met Val Val Asn Ile Tyr Ser Glu Val
145 150 155 160
Leu Ser Arg Gln Val Asn Glu Thr Ala Leu Glu Gly Ser Ile Ala Glu
165 170 175
Glu Gly Ala Ala Glu Asp Cys Ala Ala Glu Asp Gly Ala Val Glu Glu
180 185 190
Gly Ala Val Glu Asp Gly Val Val Glu Glu Gly Ala Val Glu Glu Gly
195 200 205
Ala Val Glu Asp Gly Ala Val Glu Asp Gly Ala Val Glu Asp Gly Ala
210 215 220
Val Glu Asp Gly Ala Val Glu Asp Gly Ala Val Glu Asn Gly Val Ala
225 230 235 240
Asp Asp Ser Ala Leu Lys Glu Ala Val Asn Leu Gly Ile Pro Leu Gln
245 250 255
Ala Ser Gly Thr Ala Leu Cys Phe Glu
260 265

<210> 28827
<211> 119
<212> PRT
<213> A.fumigatus

<400> 28827
Gly Asn Thr Glu Val Asn Ser Leu Phe Lys Gly Ala Val Ile Cys Asn
1 5 10 15
Thr Ile Leu Tyr Ser Thr Ile Leu His Ser Thr Ile Leu His Ser Thr
20 25 30
Ile Leu His Ser Thr Ile Leu His Ser Thr Ile Leu His Ser Thr Leu
35 40 45
Phe His Ser Thr Leu Phe His His Thr Ile Phe His Ser Thr Leu Phe
50 55 60
His Ser Thr Val Leu Arg Ser Thr Ile Leu Arg Ser Ala Leu Phe Ser
65 70 75 80
Asn Ala Pro Leu Lys Gly Ser Leu Ile Asp Leu Ser Arg Gln Tyr Leu
85 90 95
Arg Val Asp Val His Asn His Ser His His Val Phe Val Lys Ile Arg
100 105 110
Val Phe Pro Asn Thr Val Ile
115

<210> 28828
<211> 605
<212> PRT
<213> A.fumigatus

<400> 28828
Leu Ala His Glu Leu Ile Leu Lys Arg Lys Leu Thr Ala Arg Lys Arg

```
1               5                   10                  15
Gly Ala Leu Tyr Gln His Ile Ile Arg Leu Cys Pro Thr Arg Ala Tyr
            20                  25                  30
Asn Leu Thr Ala His Thr Thr Ala Arg Leu Thr Thr Met Thr Arg Thr
        35                  40                  45
Thr Ser Asp Leu Leu Asp Asp Arg Leu Ser Thr Leu Trp Gln Ser Ala
    50                  55                  60
Cys Asp Asp Tyr Ala Lys Glu Thr Gly Ile Ala Leu Thr Asp Gly Asp
65                  70                  75                  80
Phe Pro Lys Ile His Gly Pro Glu Asp Leu Ser Arg His Leu Asp Ala
                85                  90                  95
Glu Arg Asp His Phe Glu Asp Phe Arg Met Lys Lys Arg Pro Leu Leu
            100                 105                 110
His Ala Met Gln Ile Ile Leu Ala Pro Phe Glu His Trp Gly Asp Leu
        115                 120                 125
Leu Ala Gly Val Ala Ser Ala Ala Phe Pro Pro Ala Ser Ser Ile Met
    130                 135                 140
Gly Ala Met Met Leu Leu Val Arg Gly Ala Arg Arg Val Ser Glu Ser
145                 150                 155                 160
Phe Asp Met Leu Met Asp Leu Phe His Lys Leu Gly His Phe Ala Leu
                165                 170                 175
Arg Leu Asp Ser Tyr Lys Gly Val Ser Leu Ser Glu Gly Met Lys Thr
            180                 185                 190
Ile Ile Val Gln Val Leu Val Asn Phe Leu Arg Val Cys Ala Ala Ser
        195                 200                 205
Gln Lys Leu Leu Arg Arg Gly Ser Leu Arg Ala Arg Leu Thr Lys Trp
    210                 215                 220
Thr Lys Asn Val Leu Val Glu Asp Thr Ser Ile Arg Ser Leu Leu Asp
225                 230                 235                 240
Glu Leu Glu Glu Leu Thr Ser Gln Glu His Lys Met Val Ser Ala His
                245                 250                 255
Ala Leu Asp Leu Thr His Gln Ala Leu Arg Ser Thr Ala Glu Leu Leu
            260                 265                 270
Glu Arg Asp Asp Asn Arg Asn Glu Arg Asp Arg Leu Asp Lys Val Lys
        275                 280                 285
Lys Ala Leu Asp Pro Val Ser Ala Ser Gly Arg Val Phe Ser Ser Leu
    290                 295                 300
Asn Glu Asn Arg Ile Pro Gly Ser Gly Ser Trp Ile Glu Asp Arg Ile
305                 310                 315                 320
Arg Ser Trp Trp Gln Ser Pro Asp Pro Leu Leu Trp Ile His Gly Gly
                325                 330                 335
Ser Gly Val Gly Lys Ser Tyr Leu Ala Ser Lys Ile Ile Ser Asp Leu
            340                 345                 350
Ala Thr Ala Asp Ser Ser Ala Pro Ser Thr Pro Pro Ile Val Ala Ser
        355                 360                 365
Phe Phe Phe Lys Asn Asn Asp Val Asp Leu Arg Ser Phe Asn Lys Ala
    370                 375                 380
Leu Arg Thr Leu Ala Trp Gln Val Val Val Gln Arg Ser Arg Phe Ala
385                 390                 395                 400
Ala His Ala Glu Asp Phe Cys Leu Lys Glu Asp Pro Ala Asn Ser Tyr
                405                 410                 415
Val Val Trp Arg Lys Leu Leu Leu Asp Phe Phe Val Lys Ser Pro Pro
            420                 425                 430
Asp Ala Gly Thr Cys Phe Val Ile Asp Gly Ile Asp Glu Ala Asp Pro
        435                 440                 445
Glu Glu Gln Glu Ile Leu Phe Arg Leu Leu Glu Ser Thr Tyr Ala Thr
```

```
    450                 455                 460
Glu Asp Gln Thr Gly Pro Ser Ala Pro Ile Arg Val Val Leu Leu Gly
465                 470                 475                 480
Arg Asp Ser Val Arg Gly Ile Leu Glu Glu His Ser Leu Gly Gly Ile
                485                 490                 495
Pro Glu Ile Glu Ile Thr Asn Asn Gln Asn Gln Asp Asp Leu His Arg
            500                 505                 510
Tyr Val Ser Gln Lys Leu Gln Lys Thr Lys Leu Phe Arg Gly Tyr Pro
        515                 520                 525
Asp Phe Leu Asp Glu Val Val Gln Asp Ile Cys Gly Gln Ala Glu Gly
    530                 535                 540
Leu Trp Glu Trp Ala Asn Leu Val Ile Lys Ser Val Leu Arg Cys Arg
545                 550                 555                 560
Ser Lys Glu Gln Ile Arg Arg Val Val Arg Thr Met Pro Arg Gly Ile
                565                 570                 575
Ser Ala Met Leu His Ala Glu Leu Gln Arg Leu Ala Arg Glu Leu Ser
            580                 585                 590
Ala Ser Asp Ala Met Ser Pro Glu Leu Ser Asp Gly Glu
        595                 600                 605
```

<210> 28829
<211> 84
<212> PRT
<213> A.fumigatus

<400> 28829

```
Gln Ala Ala Val His Lys Arg Leu Tyr Trp Pro Thr Val Thr Ala Leu
1               5                   10                  15
Pro Ile Pro Tyr Ser Leu Asn Ala Thr Pro Pro Ser Lys Val Gln Ser
            20                  25                  30
Ala Asp Asp Ile Gly Gln Pro Val Ser Leu Ser Ala Ala Ser Lys Pro
        35                  40                  45
Pro Ser Leu Val Leu Gln Thr Leu Ile Phe Cys His Asn Asp Lys Ala
    50                  55                  60
Asn Gly Asp Pro Lys Ala Pro His Glu Ser Met Thr Phe Arg Asn Met
65                  70                  75                  80
Gly Glu Gly Asp
```

<210> 28830
<211> 273
<212> PRT
<213> A.fumigatus

<400> 28830

```
Asp Asp Phe Glu Trp Val His Pro Ala Asn Thr Tyr Gly Asp Asp Gln
1               5                   10                  15
Leu Pro Gln Pro Pro Gly Arg Phe Lys Ser Arg Glu Gln Ala Glu Lys
            20                  25                  30
Asp Arg Ile Phe Gly Tyr Pro Pro Arg Leu Gly Glu Arg Asn Leu Pro
        35                  40                  45
Arg Gln Thr Asn Leu Pro Phe Arg Leu Glu Asp Val Asp Glu Glu Lys
    50                  55                  60
Ala Lys Val Lys Ala Arg Glu Ala Ala Arg Leu Arg Gly Ile Pro Val
65                  70                  75                  80
Asp Arg Thr Met Ser Ala Ala Asp Ile Glu Ala Leu Ile Ala Gln His
```

```
                85                  90                  95
Asp Asn Ala Gly Gln Ser Glu Pro Ala Lys Glu Glu Lys Pro Ala Ser
            100                 105                 110
Gly Ser Arg Lys Arg Arg Arg Thr Glu Pro Val Asn Ala Thr Pro Glu
        115                 120                 125
Ser Thr Val Gly Thr Lys Arg Arg Arg Gln Asn Pro Ser Ala Pro Ser
    130                 135                 140
Pro Ala Ala Ala Ala Ala Gly Ala Thr Ala Glu Lys Ser Ser Leu Met
145                 150                 155                 160
Val Lys Phe Lys Phe Ser Asn Pro Glu Lys Ala Ala Ala Val Ala Gly
                165                 170                 175
Phe Phe Gly Ala Met Pro Ser Ser Pro Ser Lys Lys Arg Leu Leu Ala
            180                 185                 190
Asp Val Glu Asn Glu Asp Glu Gly Ser Pro Pro Lys Arg Gly Lys Pro
        195                 200                 205
Ser Pro Glu Thr Ala Ser Pro Ala Asp Gln Asn Gln Thr Pro Asn Gly
    210                 215                 220
Arg Pro Arg Arg Arg Ala Ala Thr Ala Leu Met Ala Asp Phe Gln Ser
225                 230                 235                 240
His Ala Glu Glu Arg Ala Arg Arg Ala Ala Arg Lys Lys Ala Ala Thr
                245                 250                 255
Pro Ser Lys Gln Gly Gly Gly Ser Ala Glu Gly Val Pro Ile Lys Ser
            260                 265                 270
Ala
```

<210> 28831
<211> 93
<212> PRT
<213> A.fumigatus

```
<400> 28831
Ser Cys Arg Ser Asn Leu Thr Asn Ser Arg Gln Leu Thr Ile Cys Ser
1               5                   10                  15
Ala Asn Gln Arg Pro Glu Met His Leu Ser Met Leu Ala Val Thr Leu
            20                  25                  30
Gln Asn Gln Asn Thr Arg Thr His Asn Ser Thr Asp Tyr Pro Ala Val
        35                  40                  45
Pro Asn Ser Thr Glu His Gly Thr Pro Thr Cys Val Leu Glu Cys Cys
    50                  55                  60
Asp Pro Gln Asp Lys Lys Asp Leu Asn Met Thr Asn Thr Asp Ala Ser
65                  70                  75                  80
Ala Ala Tyr Leu Pro Asp Ser Met Leu Val Thr Leu Ser
                85                  90
```

<210> 28832
<211> 81
<212> PRT
<213> A.fumigatus

```
<400> 28832
Thr His Ser Cys Ala Ala Ala Cys Thr Ala Gln Phe Phe Lys Asp Ala
1               5                   10                  15
Ala Ala Ala Arg Thr Cys Ser Lys Ala Asn Asp Ser Pro Val Ala Tyr
            20                  25                  30
Ala Gly Lys His Arg Cys Gly Lys Tyr Ser Thr Thr Leu Thr Met Gly
```

```
        35                  40                  45
Ala Asp Gly Ile Lys Ser Thr Asp Leu Ser Gln Ala Ser Ser Asp Gly
    50                  55                  60
Phe His Val Gln Arg Leu Leu Gly Trp Arg Pro Ser Val Pro Phe Thr
65                  70                  75                  80
Leu
```

<210> 28833
<211> 321
<212> PRT
<213> A.fumigatus

<400> 28833

```
Ile Asn Thr Phe Gly Gly Phe Phe Val Ser Ser Leu Gln Pro Val Phe
1               5                  10                  15
Asp Lys Arg Ala Gln Glu Val Gly Ser Thr Leu Glu Trp Asn Phe Tyr
            20                  25                  30
Asn Ala Ser His Ala Phe Ile Thr Ala Leu Leu Pro Met Leu Arg Gln
        35                  40                  45
Lys Leu Ser Thr Val Leu Pro Ser Ile Ser Gly His Pro Gln Leu Leu
    50                  55                  60
Ser His Leu Ile His Glu Leu Met Asn Phe Asp Asn Glu Ile Arg Glu
65                  70                  75                  80
Ala Trp Asn Tyr Leu Pro Asp Pro Tyr Ser Lys Glu Asn Trp Lys Gly
                85                  90                  95
Ile Thr Trp Glu Val Leu Thr Lys Glu Gly Trp Phe Asp Arg Trp Leu
            100                 105                 110
Gln Val Glu Lys Asp Phe Ala Leu Ala Arg Tyr Lys Glu Ile Ile Asp
        115                 120                 125
Ala Thr Asp Ser Gly Glu Ile Asp Tyr Glu Gly Val Glu Phe Ser Ala
    130                 135                 140
Thr Lys Pro Thr Lys Ala Ala Ile Arg Val Asn Asp Leu Leu Glu Thr
145                 150                 155                 160
Ile Thr Glu Leu Tyr Arg Pro Leu Ser Ser Phe Gly Gln Lys Leu Arg
                165                 170                 175
Phe Leu Ile Asp Ile Gln Ile Thr Ile Phe Asp Gln Phe His Glu Arg
            180                 185                 190
Leu His Ser Ala Leu Glu Ala Tyr Leu Ala Met Thr Ser Thr Ile Gly
        195                 200                 205
Arg Thr Val Gln Gly Ala Asp Gly Gln Ala Ser Val Glu Gly Val Ala
    210                 215                 220
Gly Leu Glu Arg Leu Cys Arg Val Phe Gly Ser Ser Glu Tyr Leu Glu
225                 230                 235                 240
Lys Lys Met Glu Asp Trp Ser Asn Asp Val Phe Phe Val Glu Leu Trp
                245                 250                 255
Ser Glu Leu Gln Glu Arg Val Arg Gln Asn Lys Asn Ser Gly Arg Asn
            260                 265                 270
Val Ala Ala Pro Met Ser Val Ala Asp Val Ala Ser Arg Thr Ser Gln
        275                 280                 285
Met Val Ala Asn Gly His His Ser Ser Gly Gln Ala Ser Ser Asp Gly
    290                 295                 300
Ala Leu Phe Asp Glu Thr Ala Ser Gly Leu Pro Ser Ser Gln Ala Thr
305                 310                 315                 320
Phe
```

<210> 28834
<211> 77
<212> PRT
<213> A.fumigatus

<400> 28834
Lys Thr Leu Val Glu Leu Arg Lys Asn Ser Ser Arg Ala Ser Phe Gln
1 5 10 15
Thr Ser Arg Ser Gln Ser Asp Ile Asp Asn Ile Ala Glu Val Val Asn
20 25 30
Ile Ala Gly Lys Leu Arg Arg Ser Gly Ser Gly Lys Gly Met Pro His
35 40 45
Glu Asp Val Thr Pro Lys Ile Ser Leu Asn Gly Glu Glu Tyr Leu Ala
50 55 60
Asn Asp Ser Thr Gln Arg Cys Tyr Ala Gln Cys Ala Gly
65 70 75

<210> 28835
<211> 378
<212> PRT
<213> A.fumigatus

<400> 28835
Ile Ile Val Asn Asp Met Gly Asp Val Trp Asn Ile Lys Thr Thr Ser
1 5 10 15
Ser Asp Ser Ser Ser Asn Gln Asn Arg Ala Thr Ser Gly Ala Glu His
20 25 30
Leu Gln Ser Thr Phe Thr Leu Thr Leu Gly Ala Ile Thr Val Asn Ser
35 40 45
Ser Cys Arg Glu Ala Leu Val Gln Gln Glu Val Gly Lys Ser Ile Arg
50 55 60
His Thr Leu Gly Leu His Glu Asp Glu Ser Lys Thr Ala Arg Ala Met
65 70 75 80
Gly Val Glu Asp Ile Lys Lys Asp Gly Thr Leu Val Val Ile Leu Asp
85 90 95
Ile Leu Asp Leu Leu Ser Asn Val Leu Arg Gly Gly Ala Asn Thr Thr
100 105 110
Asp Gly Glu Glu His Val Ile Leu Gln Glu Val Pro Gly Lys His Leu
115 120 125
Asn Ile Thr Arg Glu Ser Gly Arg Glu His Gln Ser Leu Ala Leu Ile
130 135 140
Asp Val Arg His Val Phe Thr Leu Tyr Asp Ala Ala Asn Leu Arg Leu
145 150 155 160
Glu Thr His Val Gln His Thr Ile Ser Leu Val Glu Asn Gln Val Leu
165 170 175
Asp Val Asn Gln Arg Asp Ala Ala Thr Leu Asp Gln Val Asn Gln Thr
180 185 190
Thr Arg Gly Ser Asp Gln Glu Ile Thr Ala Thr Leu Asp Leu Thr Glu
195 200 205
Leu Arg Ala Asn Ile Gly Thr Thr Val Asp Asp Thr Gly Ala Asn Pro
210 215 220
Arg Ala Val Ser Glu Leu Ala Gly Phe Val Lys Asp Leu Arg Asn Glu
225 230 235 240
Leu Thr Ser Gly Gly Glu Asp Gln Gly Ser Arg Val Arg Leu Ala Leu
245 250 255

```
Thr Thr Ile Ala Glu Leu Ala Gly Gly Leu Ser Arg His Arg Gly Arg
            260                 265                 270
Ala Cys Leu Glu Gly Leu Arg Glu Asn Gly Lys Gln Glu Thr Thr Ser
        275                 280                 285
Leu Ser Gly Thr Ser Leu Ser Thr Arg His Glu Ile Ala Thr Val His
    290                 295                 300
His Asn Gly Asn Gly Val Leu Leu Asp Gly Ser Arg Gly Leu Ile Ala
305                 310                 315                 320
Ser Glu Leu Asp Val Arg Asn Gln Val Val Ile Gln Arg Gly Val Arg
                325                 330                 335
Glu Gly Ile Asp Arg Leu Gly Asn Val Val Thr Gly Cys Phe Asp Gly
            340                 345                 350
Asp Ile Val Val Val Gly Glu Val Asp Thr Ser Ala Leu Leu Gly Gly
        355                 360                 365
Ile Val Gly Asn Thr Glu Lys Leu Thr Leu
    370                 375
```

<210> 28836
<211> 565
<212> PRT
<213> A.fumigatus

<400> 28836

```
Pro Trp Arg Thr Ser Cys Arg Asn Ala Pro Arg Gly Gly Asn Trp Ala
1               5                   10                  15
Asn Ala Asn Ala Ser Asp Phe Ser Pro Arg Gly Pro Asn Val Pro Asn
            20                  25                  30
Gly Asn Ile Ser Trp Thr Pro Thr Glu Thr Gln Arg Arg Pro Phe Asn
        35                  40                  45
Pro His Ala Tyr Gly His Pro Gly His Gly Gly Ser Tyr Gly Gly Ser
    50                  55                  60
His Gly Ser Ala Lys Gly Ser Gly Asp Gly Gln Trp Arg Asp Gly Lys
65                  70                  75                  80
His Ile Pro Gly Pro Ala Asn Ala Arg Leu Glu Arg Glu Leu Phe Gly
                85                  90                  95
Val Pro Asn Asp Pro Thr Lys Gln Ser Thr Gly Ile Asn Phe Ala Asn
            100                 105                 110
Tyr Asp Asp Ile Pro Val Glu Ala Ser Gly His Asp Val Pro Glu Pro
        115                 120                 125
Val Asn Ala Phe Thr Asn Pro Pro Leu Asp Asp His Leu Ile Ser Asn
    130                 135                 140
Ile Lys Leu Ala Arg Tyr Gln Thr Pro Thr Pro Val Gln Lys Tyr Ser
145                 150                 155                 160
Ile Pro Ile Val Met Asn Gly Arg Asp Leu Met Ala Cys Ala Gln Thr
                165                 170                 175
Gly Ser Gly Lys Thr Gly Gly Phe Leu Phe Pro Ile Leu Ser Gln Ala
            180                 185                 190
Phe Gln Thr Gly Pro Ser Pro Val Pro Ala Gln Ala Ser Gly Gln Phe
        195                 200                 205
Gly Tyr Gly Arg Gln Arg Lys Ala Tyr Pro Thr Ser Leu Ile Leu Ala
    210                 215                 220
Pro Thr Arg Glu Leu Val Ser Gln Ile Phe Asp Glu Ala Arg Lys Phe
225                 230                 235                 240
Ala Tyr Arg Ser Trp Val Arg Pro Cys Val Val Tyr Gly Gly Ala Asp
                245                 250                 255
Ile Gly Ser Gln Leu Arg Gln Ile Glu Arg Gly Cys Asp Leu Leu Val
```

```
            260                 265                 270
Ala Thr Pro Gly Arg Leu Val Asp Leu Ile Glu Arg Gly Arg Ile Ser
        275                 280                 285
Leu Val Asn Ile Lys Tyr Leu Val Leu Asp Glu Ala Asp Arg Met Leu
    290                 295                 300
Asp Met Gly Phe Glu Pro Gln Ile Arg Arg Ile Val Glu Gly Glu Asp
305                 310                 315                 320
Met Pro Asn Val Asn Glu Arg Gln Thr Leu Met Phe Ser Ala Thr Phe
                325                 330                 335
Pro Arg Asp Ile Gln Met Leu Ala Arg Asp Phe Leu Lys Asp Tyr Val
            340                 345                 350
Phe Leu Ser Val Gly Arg Val Gly Ser Thr Ser Glu Asn Ile Thr Gln
        355                 360                 365
Lys Val Glu Tyr Val Glu Asp His Asp Lys Arg Ser Val Leu Leu Asp
    370                 375                 380
Ile Leu His Thr His Gly Thr Ser Gly Leu Thr Leu Ile Phe Val Glu
385                 390                 395                 400
Thr Lys Arg Met Ala Asp Ala Leu Ser Asp Phe Leu Leu Asn Gln Arg
                405                 410                 415
Phe Pro Ala Thr Ala Ile His Gly Asp Arg Thr Gln Arg Glu Arg Glu
            420                 425                 430
Arg Ala Leu Glu Met Phe Arg Ser Gly Arg Cys Pro Ile Leu Val Ala
        435                 440                 445
Thr Ala Val Ala Ala Arg Gly Leu Asp Ile Pro Asn Val Thr His Val
    450                 455                 460
Ile Asn Tyr Asp Leu Pro Thr Asp Ile Asp Asp Tyr Val His Arg Ile
465                 470                 475                 480
Gly Arg Thr Gly Arg Ala Gly Asn Thr Gly Ile Ala Thr Ala Phe Phe
                485                 490                 495
Asn Arg Gly Asn Arg Gly Val Val Arg Glu Leu Ile Asp Leu Leu Lys
            500                 505                 510
Glu Ala His Gln Glu Val Pro Ser Phe Leu Glu Ser Ile Ala Arg Glu
        515                 520                 525
Gly Ser Gly Tyr Gly Gly Arg Gly Gly Arg Gly Gly Arg Gly Arg Gly
    530                 535                 540
Gly Asn Ser Thr Arg Asp Leu Arg Leu His Ser Arg Glu Ser Asn Met
545                 550                 555                 560
Pro His Pro Lys Asn
                565
```

<210> 28837
<211> 417
<212> PRT
<213> A.fumigatus

<400> 28837

```
Trp Arg Leu Ser Leu Ser Ser Arg Glu Ala Asn Lys Thr Arg Ser Ile
1               5                   10                  15
Ile Tyr Ile Ser Pro Thr Ala Val Cys Leu Ile Gly Arg Lys Ile Gln
            20                  25                  30
Tyr Ser Ser Leu Met Phe Lys His Leu Asn Met Val Thr Ser Glu Asn
        35                  40                  45
Asp Leu Ile Ser Ala Val Leu Ser Ile Ala Phe Gln Ile Tyr Leu Thr
    50                  55                  60
Cys Ser Leu Ile Thr Trp Phe Ser Leu Arg Glu Phe Thr Thr Ser Glu
65                  70                  75                  80
```

```
Cys Pro Gly Ser Thr Asn Asn Phe Asn Val Ala Ile Ile Ser Ala Ser
                85                  90                  95
Gln Gln Glu Leu Thr Ala Val Lys Ala Leu Phe Asp Glu Asp Tyr Gly
            100                 105                 110
Ile Val Gly Asp Ile Ser Gly Val His Pro Leu Asp Thr Asn Ala Tyr
        115                 120                 125
Val Ala Gly Arg Ile Gly Asn His Lys Val Ile Leu Thr Gln Ile Ser
    130                 135                 140
Lys Tyr Gly Lys Val Phe Ala Ala Lys Thr Ser Phe Trp Leu Ser Ile
145                 150                 155                 160
Ser Phe Pro Gln Ile Arg Ile Cys Leu Val Val Ser Thr Gly Ala Gly
                165                 170                 175
Val Pro Cys Thr Lys Asp Gly Gln Glu Ile Arg Leu Gly Asp Val Leu
            180                 185                 190
Val Ser Glu Gly Ile Ile Glu Tyr Asp Leu Gly Lys Leu Leu Pro Gly
        195                 200                 205
Gly Val Phe Leu Arg Lys Thr Gly Pro Leu Tyr Asp Phe Pro Pro Pro
    210                 215                 220
Thr Gly His Ile Ala Arg Leu Leu Asn Ser Val Arg Arg Arg Gln Ala
225                 230                 235                 240
Arg Asp Met Leu Lys Glu Arg Met Ser Gln His Leu Asn Tyr Leu Gln
                245                 250                 255
Ala Thr Ile Ser Asp Leu Lys Ala Thr Asn Tyr Pro Ser Gly Glu Gly
            260                 265                 270
Asn Lys Leu Leu Pro Gln Leu Ser Leu Pro Cys Phe Pro Gly Ser Asn
        275                 280                 285
Ser Cys Val Phe Asn Leu Glu Ala Thr Asn Lys Asn Ala Leu Phe Val
    290                 295                 300
Ala Lys Cys Ala Ser Leu Asp Ser Glu Pro Arg Val Gly Ala Trp Ala
305                 310                 315                 320
Trp Leu Asp Ile Pro Ala Ile Glu Tyr Phe Arg Pro Asn Ile His Leu
                325                 330                 335
Gly Trp Leu Ala Ser Gly Asp Arg Ile Met Arg Ser Ala Glu Ser Arg
            340                 345                 350
Asp Gln Ile Ala Thr Gln Glu Gly Val Ile Gly Phe Glu Trp Ala Gly
        355                 360                 365
Val Gly Ala Trp Arg Gln Leu Pro Thr Val Val Ile Thr Gly Val Gly
    370                 375                 380
Asn Tyr Gly Asp Gly Tyr Gly Thr Asp Pro Trp Pro Ala Tyr Ala Ser
385                 390                 395                 400
Ala Ser Ala Ala Ser Cys Ala Lys Ala Met Leu Glu Val Tyr Asn Thr
                405                 410                 415
Leu
```

<210> 28838
<211> 67
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (9),(26),(28)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28838

Leu Thr Ser Ser Ala Tyr Tyr Asp Xaa Glu His Asn Asp Phe Ser Thr
1 5 10 15
Ser His Lys Ala Phe Lys Arg Met Met Xaa Thr Xaa Ala Trp Glu Val
20 25 30
Leu Glu Val Tyr Ser Gly Pro Pro Val Val Ile Phe Lys Trp Arg His
35 40 45
Trp Gly Tyr Met Lys Asn Asp Tyr Val Gly Tyr Asn Lys Tyr Gly Cys
50 55 60
Val Pro Gly
65

<210> 28839
<211> 103
<212> PRT
<213> A.fumigatus

<400> 28839
Arg Met Ile Met Ser Gly Ile Thr Ser Met Ala Ala Phe Leu Asp Lys
1 5 10 15
Glu Arg Trp Ile Leu Asn Gln Cys Ser Ser Arg Gly Glu Lys Val Thr
20 25 30
Val Lys Ala His Gly Gly Leu Ile Asp Ile Gln Gly Ile Val Ile Ala
35 40 45
Lys Val Asn Ser Ser Leu Gln Leu Glu Lys Ile Asp Val Trp Phe Asp
50 55 60
Pro Met Asp Met Phe Arg Gln Ile Ala Arg Glu Glu Lys Ile Glu Cys
65 70 75 80
Glu Asn Lys Glu Gly Val Asp Ala Ala Gly Ala Ala Ala Gly Cys Pro
85 90 95
Val Met Gly His Arg Ser Ala
100

<210> 28840
<211> 85
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (37)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28840
His Pro Val Arg Arg Ser Gly Leu Arg Gln His Arg Ile Val Lys Val
1 5 10 15
Ile Gly Gly Ile Cys Ala Phe Ser Phe Leu Leu Ile Glu Ile Leu Phe
20 25 30
Phe Ala Val Trp Xaa Pro Pro Phe Ser Ala Tyr Trp Ser Val Pro Pro
35 40 45
Lys Ser Ala Gln Cys Ser Val Tyr Thr Asn His Val Ile Ile Thr Leu
50 55 60
Val Phe Asn Val Ala Thr Asp Val Leu Ile Met Ala Ile Pro Leu Pro
65 70 75 80
Leu Leu Ile Arg Ala
85

<210> 28841
<211> 114
<212> PRT
<213> A.fumigatus

<400> 28841
Val Phe Leu Leu Pro Ala Gln Met Ala Gln Arg Ser Arg Ala His Lys
1 5 10 15
Ser Lys Gln Asp Cys Ala Ser Leu Tyr Trp Ser Ser Asn Leu Thr Thr
20 25 30
His Leu Phe Thr Gly Ile Leu Pro Asp Gly His Pro Asn Leu Val Gln
35 40 45
Thr Asn Arg Ile Tyr Ser Asp Gln Leu Arg Gln Asn Val Leu Val Lys
50 55 60
Gln Tyr Phe Cys Asp Ile Asp Ile Ala His Leu Ile Ser Tyr Asn Glu
65 70 75 80
Glu Leu Ala His Lys Leu Thr Thr Glu Pro Ala Asp Ile Ile Pro Leu
85 90 95
Val Ser Ile Val Phe Arg Leu Ala Val Ala Asp Ser Asn Asp Arg Thr
100 105 110
Pro Leu

<210> 28842
<211> 329
<212> PRT
<213> A.fumigatus

<400> 28842
Phe Glu Ala Ala Leu Gln Gln Cys Thr Gln Arg Ile Val Tyr Pro Ser
1 5 10 15
Gln Arg Asp Ile Val Leu Pro Ser His Gln Leu Leu Leu His Ser Ser
20 25 30
Ala Ser His Ile Ser Ile Arg Asp Leu Asn Ala Thr Asn Ile Ser His
35 40 45
Leu Val Arg Ile Pro Gly Ile Val Ile Gly Ala Phe Thr Ile Ser Ser
50 55 60
Lys Ala Thr Val Val His Ile Arg Cys Lys Gly Cys Asp His Ser Glu
65 70 75 80
Asn Ile Arg Val Glu Gly Gly Phe Ser Gly Leu Thr Leu Pro Arg Arg
85 90 95
Cys Gly Arg Gln Lys Leu Pro Gly Glu Glu Pro Gly Glu Gln Cys Pro
100 105 110
Leu Asp Pro Tyr Val Ile Ala His Glu Lys Cys Gln Phe Val Asp Gln
115 120 125
Gln Val Leu Lys Leu Gln Glu Ala Pro Asp Gln Val Pro Val Gly Glu
130 135 140
Leu Pro Arg His Val Leu Ile Ser Ala Asp Arg Tyr Leu Ala Asn Arg
145 150 155 160
Val Val Pro Gly Ser Arg Cys Thr Val Met Gly Ile Phe Ser Ile Tyr
165 170 175
Ser Lys Gly Gly Lys Lys Asp Gly Ala Val Ala Ile Arg Asn Pro Tyr
180 185 190
Leu Arg Ala Val Gly Ile Ser Thr Asp Leu Asp His Thr Ala Lys Gly
195 200 205
Asn Ala Ile Phe Thr Glu Glu Glu Glu Gln Glu Phe Leu Glu Leu Ser

```
    210                 215                 220
Arg Arg Glu Asp Leu Tyr Glu Ala Leu Ala Arg Ser Ile Ala Pro Ser
225                 230                 235                 240
Ile Trp Gly Asn Leu Asp Ile Lys Lys Ala Ile Val Cys Leu Leu Met
                245                 250                 255
Gly Gly Ser Lys Lys Ile Leu Pro Asp Gly Met Lys Leu Arg Gly Asp
            260                 265                 270
Ile Asn Val Leu Leu Leu Gly Asp Pro Gly Leu Ala Arg Pro His Ser
        275                 280                 285
Leu Lys Leu Thr Glu Lys Val Ser Leu Ile Val Leu His Ile Pro Glu
    290                 295                 300
Arg Phe Val Asn Gly Trp Val Asp Arg Ile Ser Ser Gln Arg Pro Ala
305                 310                 315                 320
Asp Thr Arg Asn Leu Tyr Gly Lys Gly
                325
```

<210> 28843
<211> 705
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (13)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28843

```
Arg Ala Leu Tyr Glu His Asp Leu Ser Met Ser Ala Xaa Gln Arg Leu
1               5                  10                  15
Arg Leu Lys Glu Lys Glu Glu Arg Glu Ile Glu Glu Asn Gln His Glu
            20                  25                  30
Ser Leu Ala Gln Asp Ser Glu Asp Gly Leu Ser Ser Ile Ser Met Lys
        35                  40                  45
Arg Thr Ala Ser Ser Ser Thr Ala Ser Gly Pro Thr Ala Asn Arg Arg
    50                  55                  60
Thr Ser Thr Ala Ala Thr Ser Ile Asp Gly Glu Ser Phe Pro Ser Gly
65                  70                  75                  80
Thr Gly Gly Ser Ser Glu Asn Ser Lys Ser Gly Phe Ile Gly Ala Met
                85                  90                  95
Ala Ser Glu Arg Gly Ser Phe Lys Ser Arg Arg Leu Tyr Gly Gln Gly
            100                 105                 110
Leu Ala Gln Ser Ala Gln Asn Gln Gln Asn Thr Thr Leu His Arg Leu
        115                 120                 125
Glu Ser Leu Ser Arg Gln Arg Ala Gly Thr Leu Glu Ser Pro Pro Leu
    130                 135                 140
Thr Arg Ala Tyr Ser Arg Ser Ala Thr Asn Leu Arg Asp Arg Leu Gln
145                 150                 155                 160
Lys Leu Ala Ile Ala Glu Pro Thr Pro Glu Ser Ser Arg Ala Thr Ser
                165                 170                 175
Pro Pro Ser Ser Ala Val Ser Pro Lys Leu Pro Ser Asn Glu Ser Asp
            180                 185                 190
Pro Lys Glu Pro Lys Ser Gln Leu Thr Pro Gly Tyr Gly Val Pro Pro
        195                 200                 205
Leu Ser Pro Pro Val Ser Glu Asn Glu Asp Leu Gly Thr Leu Ala Ala
    210                 215                 220
Ala Leu Gln Pro Glu Asp Leu Gly Lys Ala Thr Ala Met Gly Leu Phe
```

```
225                 230                 235                 240
Asn Lys Pro Gln Thr Ala Phe Asp Glu Ser Gln Phe Thr Arg Arg Gln
                245                 250                 255
Leu Gln Met His Gln Gly Arg Ser Thr Pro Pro Leu Arg Arg Ala Pro
            260                 265                 270
Ser Pro Pro Ser Arg Met Thr Pro Gln Glu Arg Ile Gly Arg Ser Arg
        275                 280                 285
Gly Leu Ser Asn Thr Ser Gly Ser Glu Ser Val Ser Ser His Tyr Ser
    290                 295                 300
Glu Pro His His Ala Ala Asn His Ser Thr Ala Pro Ser Ile Asp Ala
305                 310                 315                 320
Ser Arg Ala Gly Pro Ala Asn Gly Thr Phe Phe Ser Asn Pro Ser Ser
                325                 330                 335
Asp Ala Ser Asp Asp Glu Gly Asp Glu Phe Asn Ala Arg Asp Val Ala
            340                 345                 350
Ala Ala Ile Asp Ala Val His Pro Ala Phe Arg Pro Ser Thr Pro Pro
        355                 360                 365
Lys Pro Ala Thr Pro Pro Glu Glu Pro Gln Ser Val Leu Pro Glu Val
    370                 375                 380
Arg Phe Ser Asp Leu Gly His Leu Lys Pro Ile Ala Glu Ile Glu Ala
385                 390                 395                 400
Ser Glu Gly Thr Ser Val Ala Asp Asp Ser Thr Val Leu Pro Glu Lys
                405                 410                 415
Pro Asp Ser Pro Thr Leu Gly Pro Ser Gly Leu Gly Leu Ser Gly Leu
            420                 425                 430
Ile Arg Thr His Leu Arg Arg Asp Ser Asp Arg Ser Ser Phe His Val
        435                 440                 445
Pro His Ser Pro Val Phe Pro Pro Lys Pro Asn Asp Glu Glu Val Asp
    450                 455                 460
Gly Ser Val Ala Asn Gly Ser Asp Thr Ala Asn Gly Ser Ser Gln Arg
465                 470                 475                 480
Ala Ser Thr Asp Gly Asn Ser Ser Arg Asp Ser Gln Asp Asn Ser Lys
                485                 490                 495
Val Pro Ser Trp Asp Asp Glu Leu Lys Ser Lys His Arg Arg Gln Glu
            500                 505                 510
Ser Thr Glu Thr Gln Arg Glu Arg Glu Glu Phe Glu Met Glu Leu Ala
        515                 520                 525
Glu Arg Arg Arg Arg Val Gln Glu Lys Leu Arg Gly Phe Ala Glu Ser
    530                 535                 540
Glu Ser Arg Ser Ala Ser Pro Ile Ser Gly Tyr Arg Thr Pro Asp Tyr
545                 550                 555                 560
Pro Gln Gln Thr Lys Pro Gly Asn Ala Phe Ala Ile Leu Lys Ser Lys
                565                 570                 575
Asn Pro Lys His Pro Phe Phe Ser Arg Gln Glu Pro Lys Asn Ser Arg
            580                 585                 590
Ala Val Gly Leu Ala Ser Ala Ser Thr Pro Ser Leu Val Pro Asp Asp
        595                 600                 605
Pro Trp Arg Glu Glu Asp Glu Lys Ile Pro Phe Ser Phe Gly Lys His
    610                 615                 620
Ser Asn Thr Ser Ser Pro Gln Ile Ala Gly Glu Lys Ser Ile Arg Ser
625                 630                 635                 640
Arg Val Ala Ala Phe Gly Arg Gly Ser His Glu Gly Ser Arg Glu Ser
                645                 650                 655
Ser Arg Ser Arg Gly Ala Ser Pro His Ser Ser Met Arg Ser Gln Arg
            660                 665                 670
Asp Arg Ser Ser Ser Asp Ala Ser Gly Arg Ser Lys Ser Arg Thr Arg
```

675 680 685
Tyr Arg Val Phe Thr Thr Gly Leu Glu Gly Ser Ala Val Ala His Gly
690 695 700
Gly
705

<210> 28844
<211> 104
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (7)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28844
His Tyr Glu Phe Tyr Tyr Xaa Ile Ala Asn Gln Val Pro Ser Phe Ser
1 5 10 15
Ser Ala Gly Gly Leu Leu Phe Asp Tyr Ser Asn Lys Pro Pro Pro Ala
20 25 30
Ala Ser Ser Asp Asn Pro Leu Ser Arg Pro Asp Asn Asp His Leu Glu
35 40 45
Gly Ala Asp Lys Asp Ala Thr Leu Thr Lys Val Val Asp Arg Arg Trp
50 55 60
Tyr Glu Arg Asn Lys His Ile Phe Pro Ala Ser Leu Trp Arg Glu Tyr
65 70 75 80
Glu Pro Gly Pro Glu Phe Glu Gln Lys Met Arg Ser Thr Arg Arg Asp
85 90 95
Ala Glu Gly Asn Thr Phe Phe Phe
100

<210> 28845
<211> 108
<212> PRT
<213> A.fumigatus

<400> 28845
Glu Thr His His Ile Arg Met Ala Thr Gln Arg Tyr Gln His Ala Ala
1 5 10 15
Leu Pro Ile Asn Val Pro Ser Lys Ala Pro Ala Pro Ala Ser Leu Phe
20 25 30
Pro Ile Ser Arg Ile Ser Gly Ser Pro Pro Asp Ile Ser Asp Thr Ser
35 40 45
Thr Thr Thr Gly Ser Arg Val Ser Gly Phe Ser Tyr Gly Ser Gly Ala
50 55 60
Leu Ser Gly Asp Tyr Glu Ser Ser Ser Ala Ser Tyr Ser Gly Ile Asp
65 70 75 80
Val Val Glu Val Leu Ser Asp Arg Met Gln Asp Val Phe Asp Pro Thr
85 90 95
Pro Leu Asp Arg Gly Leu Ala Lys Gln Ala Gln Thr
100 105

<210> 28846
<211> 123
<212> PRT

<213> A.fumigatus

<400> 28846
Val Leu Trp Leu Ser Cys Ala Ile Ala Asn Trp Tyr Val Ser Leu Ile
1 5 10 15
His Pro Ala Ala Cys Lys Ser Met Ser Val Ser Val Ser Val Ala Asn
20 25 30
Ala Glu Ser Ile Thr Gln His Tyr Gly Ile Trp Gly Asp Thr Asn Gly
35 40 45
Gly Val Ser Thr Gly Glu Ala Ser Ile Ser Leu Ala Asp Leu Cys Phe
50 55 60
Pro Asn Glu His Leu Asp Gly Asn His Gly His Asp Pro Asn Asp Val
65 70 75 80
Leu Phe Ile Gly Phe Thr Ser Lys Asp Ala Val Pro Gly Ala Thr Ala
85 90 95
Lys Trp Lys Ala Lys Asn Ala Lys Glu Phe Glu Asp Ser Ile Lys Ser
100 105 110
Ile Gly Asp Lys Leu Val Ala Gly Leu Lys Ala
115 120

<210> 28847
<211> 91
<212> PRT
<213> A.fumigatus

<400> 28847
Pro Asn Gln Gln Ala Gln Asp Phe Leu Asp Ile Lys Ala Ile Ala Leu
1 5 10 15
Pro Asp Asn Gln Ser Gly Thr Met Arg Leu Ser Glu Ile Leu Thr Val
20 25 30
Ala Leu Val Thr Gly Ala Thr Ala Tyr Asn Leu Pro Asn Asn Leu Lys
35 40 45
Gln Ile Tyr Asp Lys His Lys Val Tyr Cys Thr His Leu Lys Val Cys
50 55 60
Ile Ile Ala Ser Gln Leu Ile Ser Leu Phe Ala Pro Ser Gly Lys Met
65 70 75 80
Phe Gln Gly Thr Gly Lys Arg Val His Gln Trp
85 90

<210> 28848
<211> 148
<212> PRT
<213> A.fumigatus

<400> 28848
Tyr Leu Phe Leu Arg Arg Gln Gly Lys Cys Ser Lys Val Leu Ala Lys
1 5 10 15
Gly Phe Thr Asn Gly Asp Ala Ser Gln Gly Lys Ser Phe Ser Tyr Cys
20 25 30
Gly Asp Ile Pro Gly Ala Ile Phe Ile Ser Ser Ser Lys Gly Tyr Thr
35 40 45
Asn Met Asp Ile Asp Cys Asp Gly Ala Asn Asn Ser Ala Gly Lys Cys
50 55 60
Ala Asn Asp Pro Ser Gly Gln Gly Glu Thr Ala Phe Lys Ser Asp Val
65 70 75 80
Lys Lys Phe Gly Ile Ser Asp Leu Asp Ala Asn Ile His Pro Tyr Val

```
                85                  90                  95
Val Phe Gly Asn Glu Asp His Ser Pro Lys Phe Lys Pro Gln Ser His
            100                 105                 110
Gly Met Gln Pro Leu Ser Val Met Ala Val Val Cys Asn Ser Gln Leu
        115                 120                 125
Val Cys Leu Ser His Pro Ser Ser Ser Leu Gln Val Asp Val Cys Val
    130                 135                 140
Arg Phe Arg Ser
145
```

<210> 28849
<211> 516
<212> PRT
<213> A.fumigatus

<400> 28849

```
Leu Glu Leu Gly Ser Ala Ser Ala Val Leu Lys Thr Ile Tyr Glu Gln
1               5                   10                  15
Lys Leu Gly Val Val Arg Glu Val Glu Arg Asp Ala Val Val Leu Leu
            20                  25                  30
Gln Asn Gln Lys Val Val Ser Pro Leu Asp Pro Ser Ala Leu Glu Ile
        35                  40                  45
Pro Met Thr Val Gly Thr Asp Asn Val Val Ser Trp Pro Ser Asn Gln
    50                  55                  60
Asp Ala Met Arg Ser Tyr Pro Leu Pro Asn Gly Glu Tyr Leu Trp Thr
65                  70                  75                  80
Val Glu Ser Glu Phe Val Phe Pro Gly Gln Phe Thr Leu Thr Ser Ser
                85                  90                  95
Lys Asn Leu Asp Arg Gly Asp Trp Ser Leu Glu Met Gly Ser Lys Ser
            100                 105                 110
Gln Pro Glu Gly His Val Leu Ala Thr Pro Ala Met Asn Ile His Val
        115                 120                 125
Glu Trp Leu Cys Pro Asn Val Tyr Gly Ala Gly Pro Pro Tyr Gly Gly
    130                 135                 140
Ser Pro Ser Glu Val Ile Arg Ala Thr Met Leu Gln Gly Thr Ala Met
145                 150                 155                 160
Lys Cys Asp Phe Gly Lys Leu Pro Thr Glu Gly Phe Ser Glu Lys Thr
                165                 170                 175
Val Arg Ser Asp Thr Trp Val Glu Val Gly Pro Gly Asp Arg Val Arg
            180                 185                 190
Phe Arg Asn Pro Ala Asp Ala Arg Lys Tyr Asn His Lys Gln Ile Pro
        195                 200                 205
Thr Asp Gln Ser Phe Gly Tyr Asp Ile Asn Leu Phe Arg Val Leu Ser
    210                 215                 220
Thr Arg Thr Glu Val Lys Val Gln Trp Gln Asp Leu Ser Val Thr Thr
225                 230                 235                 240
Glu Ala Ala Thr Ser Leu His Lys Phe Asn Gly Gly Asp Asp Glu Val
                245                 250                 255
Trp Pro Gly Ser Leu Val Val Leu Ser Glu Ser Leu Glu Thr Ile Arg
            260                 265                 270
Lys Ser Cys Cys Arg Thr Glu Ser His Arg Ala Arg Lys Val Gly Ile
        275                 280                 285
Val Gln Ala Val Asp Ser Gly Glu Arg Val Ala Ser Val Arg Trp Tyr
    290                 295                 300
Lys Asp Pro Asp Ile Glu Leu Leu His Lys Gly Asn Met Leu Lys Pro
305                 310                 315                 320
```

```
Gly Ser Arg Leu Gly Glu Leu Gly Asp Ile Val Thr Gln Val Ser Val
                325                 330                 335
Tyr Glu Leu Ser Leu Phe Pro Gly Leu Gly Lys Ala Leu Gly Asp Leu
            340                 345                 350
Val Leu Leu Val Pro Glu Lys Val His Arg Ser Val Phe Pro Pro Thr
        355                 360                 365
Pro Arg Asp Pro Pro Ala Val Thr Gly Pro Ser Leu Tyr Ser Phe Leu
    370                 375                 380
Phe Pro Met Asn Phe Phe Glu Met Thr Met Tyr Leu Glu Ser Met Lys
385                 390                 395                 400
Leu Ala Leu Phe Lys Ser Glu Ala Phe Lys Asn Gly Ile Thr Ile Asp
                405                 410                 415
Ser Ser Pro Leu Pro Ser Arg Tyr Val Ile His His Asp Lys Tyr Asn
            420                 425                 430
Gly Gln Ser Pro Cys Asp Phe Leu Gly Arg Ile Val Ser Val Asp Ile
        435                 440                 445
Glu Gly Asn Ile Thr Val Arg Gln Val Gly Arg Thr Ser Cys Arg Asp
    450                 455                 460
Ile Cys Ile Pro Leu Asp Arg Ile Leu Met Val Ile Asp Asp Asp Tyr
465                 470                 475                 480
Asp Met Pro Ala Leu Pro Ile Pro Pro Leu Asp Met Phe Gly Leu Pro
                485                 490                 495
Gly Phe Ser Pro Trp Met Ser Asn Pro Phe Ile Ser Asn Arg Thr Tyr
            500                 505                 510
Glu Tyr Glu Gly
        515
```

<210> 28850
<211> 86
<212> PRT
<213> A.fumigatus

<400> 28850

```
Arg Glu Gly Arg Gly Glu Glu Ser Ile Val Ile Pro Phe Leu Asn Ala
1               5                   10                  15
Ser Asp Leu Lys Ser Ala Ser Phe Met Asp Ser Arg Tyr Ile Val Ile
            20                  25                  30
Ser Lys Lys Phe Ile Gly Lys Arg Lys Leu Tyr Lys Glu Gly Pro Val
        35                  40                  45
Thr Ala Gly Gly Ser Arg Gly Val Gly Gly Lys Thr Asp Arg Trp Thr
    50                  55                  60
Phe Ser Gly Thr Arg Ser Thr Arg Ser Pro Asn Ala Phe Pro Asn Pro
65                  70                  75                  80
Gly Asn Lys Leu Asn Ser
                85
```

<210> 28851
<211> 195
<212> PRT
<213> A.fumigatus

<400> 28851

```
Leu Asp Tyr Asp Ile Ala Ile Leu Asn Leu Ser Glu Arg Gly Leu Thr
1               5                   10                  15
Asp Asp Arg Leu Asn His Leu Leu Thr Ile Val Pro Asn Arg Thr Leu
            20                  25                  30
```

```
Val Leu Leu Glu Asp Val Asp Ala Ala Phe Ser Asn Arg Arg Gln Thr
        35                  40                  45
Asp Thr Asp Gly Tyr Arg Gly Ala Asn Val Thr Phe Ser Gly Leu Leu
    50                  55                  60
Asn Ala Leu Asp Gly Val Ala Ser Ala Glu Glu Arg Ile Ile Phe Leu
65                  70                  75                  80
Thr Thr Asn His Val Glu Arg Leu Asp Glu Ala Leu Ile Arg Pro Gly
                85                  90                  95
Arg Val Asp Met Thr Val Arg Leu Gly Glu Val Thr Arg Tyr Gln Val
            100                 105                 110
Arg Cys Leu Trp Asp Arg Phe Tyr Gly Asp Leu Asp Thr Thr Gly Phe
        115                 120                 125
Tyr Arg Gln Ala Phe Leu Asp Arg Leu Gln Glu Leu Gly Leu Ile Glu
    130                 135                 140
Asp Glu Lys Gly Phe Lys Ala Asp Arg Ser Arg Ser Thr Ser Ala Ala
145                 150                 155                 160
Ala Leu Gln Gly Leu Phe Leu Tyr Asn Lys Gly Asn Met Glu Gly Ala
                165                 170                 175
Val Ala Met Ala Glu Ala Leu Thr His Thr Val His Asp Ser Ala Glu
            180                 185                 190
Gly Asp His
        195

<210> 28852
<211> 169
<212> PRT
<213> A.fumigatus

<400> 28852
Lys Gln Ala Ala Phe Ser Ile Asn Ser Cys Pro Ala Asp Ile Leu Tyr
1               5                   10                  15
Leu Val Phe Gln Phe Leu Ser Ser Ala Glu Leu His Ala Leu Cys Leu
            20                  25                  30
Val Asn Lys Thr Cys Gly Thr Ile Ala Glu Lys Phe Leu Tyr Ser Lys
        35                  40                  45
Ile Gln Met Thr Trp Leu Lys Ala Asp Arg Pro Pro Pro Ile Ile Gln
    50                  55                  60
Leu Leu Arg Thr Leu Leu Ser Arg Pro Gln Leu Ala Ala Tyr Ile Thr
65                  70                  75                  80
Thr Val His Leu Asp Ser Asn Phe Tyr Asp Tyr Trp Asn Phe Gln Phe
                85                  90                  95
Lys Ile Pro Asn Leu Pro Val Ser Gly Ala Glu Leu Asp Gln Pro Ile
            100                 105                 110
Ala Phe Ile Arg Gly Thr Gly Ala Pro Tyr Ser Asn Leu Trp Ile Gln
        115                 120                 125
Glu Leu Arg Gln Gly Ser Leu Asp Ala Phe Val Ala Leu Leu Leu Ala
    130                 135                 140
Gln Leu Ser Asn Val Arg Tyr Leu Tyr Leu Ala Asn Asp Phe Thr Arg
145                 150                 155                 160
Gln Ser Ala Leu Val Gly Met Val Leu
                165

<210> 28853
<211> 84
<212> PRT
<213> A.fumigatus
```

<400> 28853
Glu Gln Ile Leu Arg Ser Phe Tyr Phe Leu Leu Phe Ser Leu Asn Ile
1 5 10 15
Asn Ile His Tyr Ser Gly Ala Val Leu Asn Trp Asn Glu Ala Asp Val
20 25 30
Lys Met Trp Ala Glu Phe Ser Ala Arg Val Tyr His Arg Ile Ser Thr
35 40 45
Ile Pro Thr Ile His Ile Ile Ser Leu Ile Leu Ile Ser Ile Arg Ala
50 55 60
Asn His Val Thr Asp Gln Asn His Leu Tyr His Tyr Gly Lys Asp Ile
65 70 75 80
Val Thr Glu Glu

<210> 28854
<211> 64
<212> PRT
<213> A.fumigatus

<400> 28854
Phe Tyr Asn Ser Ser Phe Gly Arg Leu Cys Gly Leu Glu Glu Thr Val
1 5 10 15
Ile Leu Thr Phe Val Cys Trp Gln Gln Leu Met Lys Tyr Met Ser Leu
20 25 30
Asp Gln Arg Gly His Val Gln Ala Glu Tyr Val Trp Ile Asp Ala Val
35 40 45
Gly Asn Cys Arg Cys Lys Thr Lys Val Cys Asn Phe Ser Pro Ser Leu
50 55 60

<210> 28855
<211> 549
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (482),(537)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28855
Asp Ala Ile Leu Lys Leu Arg Glu Glu His Lys Asp Asp Ile Gly Ser
1 5 10 15
Val Val Gln Leu Val Leu Ser His Ser Cys Ile Gly Ala Lys Asn Asn
20 25 30
Leu Ile Leu Ala Ile Leu Ala Met Tyr Arg Pro Asn Gln Pro Gly Ala
35 40 45
Gly Asn Val Ala Lys Tyr Phe Lys Pro Val Leu Lys Lys Leu Thr Glu
50 55 60
Leu Glu Ser Arg Pro Ala Ala Lys Val Thr Leu Lys Ala Arg Glu Val
65 70 75 80
Leu Ile Gln Cys Ala Leu Pro Ser Met Glu Glu Arg Met Ser Gln Met
85 90 95
Glu Leu Ile Leu Arg Ser Ser Val Val Glu Ser Arg Tyr Gly Glu Thr
100 105 110
Gly Trp Asp His Arg Glu Pro Glu Phe Ser Val Leu Lys Glu Val Val

```
        115                 120                 125
Asp Ser Lys Tyr Thr Val Phe Asp Val Leu Thr Arg Phe Phe Val His
    130                 135                 140
Pro Asp Pro Trp Val Thr Leu Ala Ala Leu Glu Val Tyr Ile Arg Arg
145                 150                 155                 160
Ala Tyr Arg Ala Tyr Thr Leu Lys Gly Ile Gln Tyr Tyr Pro Asp Gly
                165                 170                 175
Glu Val Pro Leu Val Ser Trp Asp Phe Thr Leu Gly Lys Leu Gly Gln
            180                 185                 190
Pro Glu Phe Gly Ser Val His Ser Asn Gln Met Ser Thr Pro Ser Thr
        195                 200                 205
Pro Thr Thr Glu Ser Asn Pro Phe Arg Arg Leu Asn Ser Ile Ser Asp
    210                 215                 220
Met Ser Tyr Leu Val Asn Asp Ser Ser Asn Glu Pro Leu Arg Lys Gly
225                 230                 235                 240
Val Ile Val Pro Val Gln Tyr Leu Glu Asp Ala Glu Glu Gln Leu Pro
                245                 250                 255
Lys Ala Leu Glu Ala Leu Pro Arg Ala Gly Ser Lys Arg Lys Pro Gly
            260                 265                 270
Glu Asn Gly Leu Ile Ala Asp Leu Glu Gly Lys Arg Arg Pro Ala Pro
        275                 280                 285
Arg Ile Glu Ser Asp Asn Glu Leu Thr Gly Val Cys Asn Val Ala Val
    290                 295                 300
Arg Asp Leu Glu Asp Leu Asp Asp Asn Gln Ile Val Ala Gln Ile Asn
305                 310                 315                 320
Thr Ile Leu Ala Gly Leu Arg Asp Glu Leu Leu Ala Arg Arg Val Arg
                325                 330                 335
Arg Val Thr Phe Ile Cys Gly Lys Asp Gly Ser Tyr Pro Gly Tyr Phe
            340                 345                 350
Thr Phe Arg Gly Pro Thr Tyr Glu Glu Asp Glu Ser Ile Arg His Ser
        355                 360                 365
Glu Pro Ala Leu Ala Phe Gln Leu Glu Leu Gly Arg Leu Ser Lys Phe
    370                 375                 380
Lys Ile Lys Pro Val Phe Thr Glu Asn Arg Asn Ile His Val Tyr Glu
385                 390                 395                 400
Ala Ile Gly Lys Gly Pro Glu Asn Asp Asn Ala Val Asp Lys Arg Tyr
                405                 410                 415
Phe Val Arg Ala Val Val Arg Pro Gly Arg Leu Arg Asp Asp Ile Pro
            420                 425                 430
Thr Ala Glu Tyr Leu Ile Ser Glu Ala Asp Arg Leu Met Asn Asp Ile
        435                 440                 445
Leu Asp Ala Leu Glu Ile Ile Gly Asn Asn Asn Ser Asp Leu Asn His
    450                 455                 460
Ile Phe Ile Asn Phe Ser Pro Val Phe Asn Leu Gln Pro Gln Asp Val
465                 470                 475                 480
Glu Xaa Gly Leu Ala Gly Phe Leu Glu Arg Phe Gly Arg Arg Leu Trp
                485                 490                 495
Arg Leu Arg Val Thr Gly Ala Glu Ile Arg Ile Leu Cys Thr Asp Pro
            500                 505                 510
Ala Thr Gly Met Pro Tyr Pro Leu Arg Val Ile Ile Thr His Thr Tyr
        515                 520                 525
Gly Phe Ile Ile Gln Val Glu Leu Xaa Phe Glu Lys Lys Ser Glu Lys
    530                 535                 540
Gly Lys Trp Leu Leu
545
```

<210> 28856
<211> 394
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (24)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28856
His Lys Glu Glu Asn Gly Ala Gly Phe Leu Pro Leu Pro Asn Gly Ile
1 5 10 15
Gly Gly Thr Asn His Phe Phe Xaa Gln Thr Val Gln Phe Tyr Pro Phe
20 25 30
Gln Pro Gly Asn Ser Ala Leu Tyr Ser Ala Phe Val Arg Asn Pro Pro
35 40 45
Arg Leu Ile Pro Ala Ala Glu Tyr Met Tyr Ser Thr Gly Val Phe His
50 55 60
Gly Cys Trp Ser Pro Ala His Gln Gln Pro Ala Ser Gln Glu Ala Thr
65 70 75 80
Ile Glu His Asn Phe Asp Leu Leu Phe Ser His Tyr Gln Lys Gln Ile
85 90 95
Glu Gln His Arg Trp Tyr Gly Phe Trp Asp His Gly Asp Val Gln His
100 105 110
Thr Tyr Asp Pro Tyr Arg His Ala Trp Arg Tyr Asp Val Gly Gly Phe
115 120 125
Ala Trp Asp Asn Ser Glu Leu Ser Thr Asp Leu Trp Leu Trp Leu Tyr
130 135 140
Phe Leu His Thr Arg Arg Ala Asp Val Phe Lys Met Ala Glu Ala Met
145 150 155 160
Thr Arg His Thr Ser Glu Val Asp Thr Tyr His Thr Gly Arg Phe Lys
165 170 175
Gly Phe Gly Thr Arg His Gly Val Gln His Phe Ser Asp Ser Ser Lys
180 185 190
Gln Leu Arg Ile Ser Asn Val Leu Tyr Lys Arg Ile Tyr Tyr Tyr Leu
195 200 205
Thr Gly Asp Glu Arg Ile Gly Asp Leu Ile Ser Glu Gln Gln Asp Cys
210 215 220
Gln Phe Ala Leu Leu Thr Leu Asp Ser His Arg Lys Val Gln Ala His
225 230 235 240
Ala Asp Ile Pro Asp Gly Phe Ala Met Thr Asn Ile Gly Leu Asp Cys
245 250 255
Gly Ala Leu Ala Ala Ala Trp Leu Thr Ala Trp Glu Arg Arg Thr Glu
260 265 270
Gly Trp Glu His Cys Arg Asp His Leu Ile Lys Leu Leu Asp Gly Ile
275 280 285
Ala Arg Leu Lys His Gly Ile Gly Asn Asn Ala Ile Leu Leu Asn Pro
290 295 300
Thr Thr Gly Glu Ile Arg Glu Cys Pro Pro Pro Thr Pro Glu Tyr Ala
305 310 315 320
Ile Ser His Leu Ser Met Leu Phe Gly Phe Pro Glu Ile Phe Ala Glu
325 330 335
Leu Leu Asp Tyr Ala Arg Asp Val Asp Pro Ala Thr Val Asp Arg Phe
340 345 350
Met Ala Val Trp Leu Ser Tyr Cys Lys Ala Tyr Asn Gly Gly Ala Glu

```
        355                 360                 365
Val Gln Arg Arg Ala Val Arg Phe Ala Phe Asn Cys Leu Thr Asp Arg
    370                 375                 380
Arg Arg Lys Ser Ser Val Pro Gln Tyr Asn
385                 390
```

<210> 28857
<211> 82
<212> PRT
<213> A.fumigatus

<400> 28857

```
Val Lys Leu Leu Gly His Tyr Glu Asn Glu Thr Tyr Ser Gln Asn Phe
1               5                   10                  15
Val His Arg Tyr Asn Gly Leu Lys Cys Arg Ile Arg Ser Ala Leu Phe
            20                  25                  30
Val Val Glu Asp Ser Gly Gln Leu Leu Arg Thr Met Ile Ile Thr Leu
        35                  40                  45
Leu Glu Ala Arg Gly His Asp Tyr Ser Leu Val Ser Thr Ser Ala Ser
    50                  55                  60
Leu Ile Leu Arg Val Arg Thr Met Arg Arg Arg Thr Pro Met Gln Ile
65                  70                  75                  80
Leu Val
```

<210> 28858
<211> 453
<212> PRT
<213> A.fumigatus

<400> 28858

```
Leu Gln Pro Ile Ala Leu Trp His Gly Leu Gly Pro Pro Pro Phe Phe
1               5                   10                  15
Phe Leu Ala Thr Ala Ser His Leu Val Pro Ser Cys Pro Tyr Lys Val
            20                  25                  30
Leu Leu Pro Ser Gly Trp Cys Phe Ser His Gly Phe Thr Phe Arg Gly
        35                  40                  45
Cys Leu Asn Leu Pro Ala Asn Leu Ser Ile Ala Tyr Ala Gly Thr Pro
    50                  55                  60
Asp Ser Asp Pro Arg Cys Ser Leu Asp Ala Ile Arg Leu Ala Thr Thr
65                  70                  75                  80
Met Ala Arg Ser Phe Asp Thr Ala Gln Thr Pro Leu Ser Gly Tyr Phe
                85                  90                  95
Pro Gly Asn Met His Phe Gln Asp Pro Asn Gln Ile Pro Ala Tyr Ser
            100                 105                 110
Ile Phe Gly Ala Ser Gln Tyr Pro Asp Ser Val Ala Phe Trp His Asn
        115                 120                 125
Leu Pro Pro Gln Pro Pro Gln Pro Gly Ile Pro Ala Ala Ala Thr Pro
    130                 135                 140
Tyr Ser Ser Pro Pro Pro Lys Gln His His Gln Pro Pro Leu Leu Gln
145                 150                 155                 160
Pro Val Ser Asp Gln Lys Lys His Lys Arg Thr Arg Ser Gly Cys Phe
                165                 170                 175
Thr Cys Arg Ser Arg Arg Ile Lys Cys Asp Glu Ala Arg Pro Val Cys
            180                 185                 190
Glu Arg Cys Arg Lys Gly Asn Arg Glu Cys Val Tyr Pro Ser Pro Thr
```

```
        195                 200                 205
Ala Thr Gly Thr Ser Ser Lys Ala Ala Ser Arg Leu Gly Ala Lys Ala
    210                 215                 220
Arg Ala Gln Arg Pro Pro Ser Gln Gly Ser Asp Ser Ser Gly His Val
225                 230                 235                 240
Gly Pro Asp Glu Phe His Ala Leu Glu Pro Ile Leu Asp Glu Glu Glu
                245                 250                 255
Val Asp Glu Gly Ser Val Asp Ser Ala Thr Leu Leu Ser Ser Ser Thr
            260                 265                 270
Thr Ser Leu Ala Ala Arg Val Lys Pro Gly Pro Ala Thr Lys Gln Ser
        275                 280                 285
Met Gln Ser Leu Arg Lys Arg Gly Thr Lys Leu Thr Ala Pro Asp Ala
    290                 295                 300
Thr Pro Pro Asn Thr Glu Gly Ser Ser Pro Ser Thr Glu Ala Ser Ser
305                 310                 315                 320
Arg Phe Glu Ser Met Ser Ala Arg Ser Ala Ser Val Gly Leu Ser Asn
                325                 330                 335
Gln Glu Ser Leu Gly Ala Asp Ser Phe Ser His Leu Pro Glu Asp Leu
            340                 345                 350
Arg Ser Tyr Leu Thr Phe His Gln Glu Tyr Met Thr Tyr Arg His Tyr
        355                 360                 365
Phe Met Arg Pro Ser Ser Asp Gln Phe Val His His Asn Ile Ile Lys
    370                 375                 380
Phe Ala Leu Gln Tyr Glu Pro Leu Leu Tyr Ala Ile Val Gly Leu Ser
385                 390                 395                 400
Ala Tyr His His Ser Ile His Ser Gly Thr Gly Lys Leu Tyr Thr Phe
                405                 410                 415
Leu Arg Tyr Tyr Asp Lys Ala Leu Lys Leu Leu Arg Lys Ser Leu Ala
            420                 425                 430
Ser Gly Glu Pro His Ser Glu Ala Thr Leu Ile Thr Val Leu Ala Leu
        435                 440                 445
Thr Thr Phe Glu Val
    450
```

<210> 28859
<211> 185
<212> PRT
<213> A.fumigatus

<400> 28859

```
Leu Ser Ser Thr Pro Ser Ser Ser Phe Ala Arg Phe Pro Phe Ser Thr
1               5                   10                  15
Phe Pro Tyr Ser His Pro Cys Leu Ile Val Met Ala Ala Ser Arg Ser
            20                  25                  30
Phe Ala Arg Ser Leu Pro Val Leu Arg Ala Ala Ser Pro Arg Thr Ala
        35                  40                  45
Val Ala Thr Val Ser Ser Ala Arg Ile Ala Ala Ser Ser Ala Ala Arg
    50                  55                  60
Ser Leu Ser Thr Ser Ser Gly Ser Ser Ser Ser Val Leu Ser Ser Gln
65                  70                  75                  80
Arg Thr Ser Ala Ala Met Ser Thr Thr Ser Ser Ser Phe Val Ala Thr
                85                  90                  95
Arg Arg Leu His Ala Thr Ala Gln Gln Leu Ala Pro Ala Thr Thr Ser
            100                 105                 110
Ala Ala Thr Thr Ala Thr Glu Tyr Pro Thr Asp His Thr Pro Ile Ala
        115                 120                 125
```

```
Asn Pro Ile Asp Thr Thr Asn Phe Ile Asp Asn Glu Phe Val Ser Ser
    130                 135                 140
Lys Ala Thr Thr Trp Ile Asp Leu His Asp Pro Ala Thr Asn Asn Leu
145                 150                 155                 160
Val Thr Arg Val Pro Gln Ser Thr Asp Glu Glu Leu Arg Ala Ala Val
                165                 170                 175
Ala Ser Ala Glu Lys Ala Phe Pro Gly
            180                 185
```

<210> 28860
<211> 204
<212> PRT
<213> A.fumigatus

<400> 28860
```
Pro Thr Leu Glu Asp Gln Ser Ser Leu Arg Asn Leu Lys Ala Tyr Arg
1               5                  10                  15
Ala Ala Val Lys Phe Leu Glu Phe Gly Gly Cys Gln Phe Val Gly Pro
            20                  25                  30
Val Ser Asp Lys Arg Ala Arg Phe Gly Phe Glu Ile Trp Thr Met Gln
        35                  40                  45
Asn Asp Ile Leu Phe Asp Asn Met Tyr Ile Gly His Ser Ile Glu Asp
    50                  55                  60
Gly Glu Lys Leu Arg Lys Glu Thr Phe Asp Leu Lys His Pro Val Glu
65                  70                  75                  80
Val Ala Leu Glu Glu Ala Ser Lys Pro Lys Leu Glu Glu Lys Ala Ala
                85                  90                  95
Thr Pro Ser Val Ser Phe Lys Glu Ala Pro Val Thr Tyr Val Arg Glu
            100                 105                 110
Lys Val Glu Tyr Phe Val Gly Val Ala Lys Gln Asp Pro Ile Asn Ala
        115                 120                 125
Val Lys Gln Val Pro Glu Val Ala Gly Gly Leu Gly Ala Leu Leu Leu
    130                 135                 140
Thr Met Ile Leu Val Ile Val Gly Ala Val Gly Ala Ser Ser Pro Ala
145                 150                 155                 160
Pro Ala Ala Ala Ala Lys Lys Gly Lys Glu Ala Ala Ser Ala Ala Lys
                165                 170                 175
Glu Lys Ala Ser Glu Ala Val Ser Ser Ala Ala Asp Thr Ala Lys Gly
            180                 185                 190
Ala Ala Thr Lys Arg Asn Thr Arg Ser Ser Ala Gln
        195                 200
```

<210> 28861
<211> 385
<212> PRT
<213> A.fumigatus

<400> 28861
```
Lys Thr Met Gly Trp Asn Gly Arg Leu Ser Asp Asp Lys Glu Met Gly
1               5                  10                  15
Asn Leu Glu Ala Asp Ile Leu Pro Glu Ile Gly Arg Leu Glu Ala Thr
            20                  25                  30
Ser Trp Ile Val Asn Leu Glu Gln Gln Glu Gly Lys Val Asp Gln Leu
        35                  40                  45
Ala Arg Leu Ile Asp Lys Thr Ile Glu Glu Cys Glu Glu Leu Asp Gly
    50                  55                  60
```

Leu Leu Thr Leu Tyr Ser His Glu Leu Asn Val Ser Phe Ser Pro Gly
65 70 75 80
Ile Leu Ser Leu Pro Pro Ser Asn Arg Met Ala Gln Thr Leu His Glu
85 90 95
Asp Val Ser Tyr Ile Glu Thr Gln Ser Gln Gly Leu Gln Val Gln Thr
100 105 110
Ala Asn Gln Lys Leu Leu His Asn Glu Leu Gln Asn Leu Leu Lys Thr
115 120 125
Leu Ser Ile Ser Ala Val Asp Leu Gln Pro Leu Arg Glu Ser Ser Leu
130 135 140
Ser Asn Pro Asp Gly Leu Arg Glu Thr Glu Ala Ala Leu Ser Thr Leu
145 150 155 160
Tyr Lys Ala Met Leu Met Ile Asp Pro Asp Ile Trp Gln Asn Lys Lys
165 170 175
Arg Leu Gly Asp Ala Ala Gly Glu Gln Gly Ser Val Gly Val Tyr Ala
180 185 190
Asp Thr Glu Ile Gly Gln Met Arg Ala Ile Arg Glu Lys Lys Glu Glu
195 200 205
Tyr Arg Ala Gln Ser Arg Met Phe Leu Gln Arg Leu Arg Gln Phe Met
210 215 220
Ala Ile Ala Tyr Lys Val Ala Glu Gln Lys Arg Val Asp Ala Ala Ala
225 230 235 240
Asn Gly Pro Lys Asp Pro Leu Lys Leu Asp Ser Glu Ala Arg Ala Tyr
245 250 255
Phe Arg Gln Glu Leu Trp Met Tyr Asn Ala Leu Met Leu Phe Ala Arg
260 265 270
Glu Val Ser Gly Ser Glu Trp His Gly Leu Ile Ser Leu Tyr Glu Gln
275 280 285
Gln Ala Lys Leu Pro Tyr Gln Asn Glu Phe Arg Asp Asn Asn Leu Ala
290 295 300
Trp Lys Arg Ala Gly Arg Lys Pro Ser Gly Glu Glu Gln Glu Leu Leu
305 310 315 320
Phe Thr His Gln Glu Lys Glu Lys Glu Ser Glu Gly Ile Thr Met Ala
325 330 335
Ala Arg Lys Leu Thr Val Arg Arg Gly Lys Thr Ile Arg Ala Ala Ala
340 345 350
Gly Leu Arg Leu Thr Pro Gly Glu Lys Arg His Gly Arg Leu Asp Pro
355 360 365
Cys Glu Val Phe Ala Gly Thr Leu Gln Glu Thr Leu Asn Met Ile Ser
370 375 380
Glu
385

<210> 28862
<211> 82
<212> PRT
<213> A.fumigatus

<400> 28862
Gln Asn Phe Ile Val His Phe Phe His Leu Ser Ser Leu Ser Asn Thr
1 5 10 15
Glu Phe Ser Asp Phe Val Ala Ser Gly Asn Pro Asp Glu Arg Pro Leu
20 25 30
Pro Asp Phe Ser Ala Arg His Pro His Asp Pro Asp Arg Gly Met Ala
35 40 45
Ile Lys Val Asp Gln Ile Met Asp Glu Leu Tyr Ser Phe Trp Ser Thr

```
    50                  55                  60
Asp Met Gln Asn Leu Val Asp Trp Ala Ile Pro Pro Asp Pro Leu Tyr
65                  70                  75                  80
Ala Thr
```

<210> 28863
<211> 102
<212> PRT
<213> A.fumigatus

<400> 28863

```
Leu His Pro Arg Phe Ile Ile Arg Cys Leu Gln Lys Leu His Ser Pro
1               5                   10                  15
Leu Asn Gly Leu Phe Asn Arg Phe Leu Asp Glu Gln Ile Arg Gly Ile
            20                  25                  30
Asp Asp Pro Asn Val Tyr Val Asn Asn Arg Lys Gly Val Ile Ser Phe
        35                  40                  45
Ile Pro Val Leu Pro Asn Phe Ser Ala Gly Val Glu Asn Phe Ser Leu
    50                  55                  60
Leu Pro Ile Asn Glu Phe Phe Asp Phe Pro Val Arg Val His Asp Pro
65                  70                  75                  80
Tyr Glu Ser Ile Thr Gln Pro Phe Trp Glu Ser Leu Lys Phe Tyr Ser
                85                  90                  95
Thr Gly Ser Pro Gln Ser
            100
```

<210> 28864
<211> 183
<212> PRT
<213> A.fumigatus

<400> 28864

```
Cys Ser Ile Cys Thr Ser Phe Thr Arg Leu Glu Pro Gly Gln Gln Val
1               5                   10                  15
Thr Ile Gly Asn Ala Val Arg Thr Ala Arg Met Tyr Ile Leu Asp Pro
            20                  25                  30
Asp Leu Gln Pro Val Ser Asp Gly Gln Thr Gly Glu Val Phe Leu Ala
        35                  40                  45
Gly Gln Gln Val Met Arg Gly Tyr Val Gly Asp Asp Ala Lys Thr Ala
    50                  55                  60
Tyr Ser Val Leu Pro Asp Pro Trp His Pro Gly Glu Arg Met Tyr Arg
65                  70                  75                  80
Thr Gly Asp Tyr Gly Tyr Trp Asn Ala Asp Arg Gln Ile Val Tyr Ile
                85                  90                  95
Gly Arg Leu Asp Arg Gln Val Lys Ile Arg Gly Phe Arg Val Glu Leu
            100                 105                 110
Ala Ala Val Glu Gln Lys Met Tyr Gln Glu Glu Pro Arg Leu Thr Gln
        115                 120                 125
Ala Ala Ala Leu Val Val Asn Asp Thr Leu Val Ala Phe Val Met Pro
    130                 135                 140
Leu Asp Val Asp Val Ser Arg Leu Glu Gln Arg Leu Arg Glu Ser Leu
145                 150                 155                 160
Gln Pro Ser Trp Val Pro Gln Val Ile Thr Ala Leu Glu Glu Phe Pro
                165                 170                 175
Trp Asp Gly Gln Pro Gln Gly
```

180

<210> 28865
<211> 272
<212> PRT
<213> A.fumigatus

<400> 28865
Ile Thr Cys Arg Pro Gly Glu Asn Val Asp Gly Arg Ala Gly Thr Leu
1 5 10 15
Pro Tyr Arg Glu Leu Asp Gln Lys Ser Asn Ala Val Ala Ser His Ile
20 25 30
Ala Lys His Phe Ser Arg Ala Gln Val Ile Ala Ile His Ala Asp Gly
35 40 45
Thr Leu Asn Trp Val Val Gly Ile Leu Gly Ile Leu Lys Ala Gly Cys
50 55 60
Ala Tyr Cys Pro Leu Asp Pro Ala Tyr Pro Ile Ala Arg Arg Val Ala
65 70 75 80
Val Tyr Glu Gln Ser Gly Ala Ser Ala Leu Leu Ile Pro Asn Ala Cys
85 90 95
Ser Ser Ser Ala Ala Leu Leu Pro Ile Thr Asp Leu Arg Val Phe Thr
100 105 110
Ile Gln Glu Thr Glu Thr Ser Asp Thr Ser Arg Gln Pro Ser Leu Leu
115 120 125
Ala Asn Ala Asn Glu Asp Ala Leu Ile Val Phe Thr Ser Gly Thr Thr
130 135 140
Gly Arg Pro Lys Gly Val Pro Ile Ser His Arg Gly Leu Leu Ala Leu
145 150 155 160
Gln Ser Asn Pro Glu Ala Thr Met Phe Ser Arg Pro Gly Arg Arg Ile
165 170 175
Ala Gln Phe Met Ser Pro Ala Phe Asp Tyr Cys Ala Asn Glu Ile Phe
180 185 190
Ser Ala Leu Leu His Gly Gly Thr Leu Val Leu Arg Asp Pro Ser Asp
195 200 205
Pro Leu Ala His Leu Ala Lys Val Asp Val Ser Thr Ile Thr Pro Ser
210 215 220
Val Leu Ser Val Leu Asn Pro Asp Asp Tyr Pro Asn Leu Asp Met Val
225 230 235 240
Tyr Ala Thr Gly Glu Pro Val Thr Pro Gly Leu Leu Ala Arg Trp Gly
245 250 255
Glu Gly Arg Ala Phe Tyr Asn Ala Tyr Gly Pro Ala Glu Val Gly Pro
260 265 270

<210> 28866
<211> 174
<212> PRT
<213> A.fumigatus

<400> 28866
Ser Thr Leu Arg Leu Ala Val Pro Arg Glu Leu Leu Gln Arg Gly Asn
1 5 10 15
His Leu Arg His Pro Ala Gly Leu Glu Gly Leu Ala Gln Ser Leu Leu
20 25 30
Gln Thr Ala Asp Ile His Val Lys Arg His Asp Lys Gly His Gln Ser
35 40 45
Ile Val Asp Asn Glu Ser Arg Arg Leu Gly Lys Pro Arg Leu Leu Leu

```
    50                  55                  60
Val His Leu Leu Leu Asp Arg Arg Glu Leu Asp Ala Glu Ala Thr Asp
65                  70                  75                  80
Phe Asp Leu Pro Val Gln Ser Ser Asp Val Asp Asn Leu Ser Val Arg
                85                  90                  95
Val Pro Val Ala Val Val Ala Gly Ala Ile His Pro Leu Thr Arg Met
            100                 105                 110
Pro Gly Ile Arg Gln His Ala Val Gly Arg Leu Gly Ile Val Ser His
        115                 120                 125
Val Ala Ser His His Leu Leu Ser Gly Gln Glu Asp Leu Ser Gly Leu
    130                 135                 140
Ala Val Arg His Gly Leu Glu Ile Arg Val Gln Asp Val His Ala Arg
145                 150                 155                 160
Gly Ala Asn Gly Val Ser Asp Gly Asp Leu Leu Ala Gly Leu
                165                 170
```

<210> 28867
<211> 79
<212> PRT
<213> A.fumigatus

<400> 28867

```
Leu Met Thr Pro Ser Ser Ala Lys Cys Ser Met Arg Cys Gly Gly Asn
1               5                   10                  15
Tyr Glu Arg Leu Arg Lys Ser Arg Ser Ile Asp Arg His Arg Pro Arg
            20                  25                  30
Phe Asp Tyr Ile Ile Thr Ala Ile Ile Ser His Arg Ala Ile Ala Glu
        35                  40                  45
Gln Leu Leu Ser Ala Asn Thr Met His Gln Gly Leu Phe Val Ile Cys
    50                  55                  60
Met Gln Leu Tyr Leu Gly Ser Asp Ser Ile Ala Cys Ile Ala Thr
65                  70                  75
```

<210> 28868
<211> 186
<212> PRT
<213> A.fumigatus

<400> 28868

```
Asn Gln Glu Leu Pro Leu Asn His Phe Leu Asp Leu Ala Tyr Asn Thr
1               5                   10                  15
Pro Leu Trp Ser Ser Pro Asp Ser Thr Leu Thr Trp Leu Asn His Trp
            20                  25                  30
Ala Thr Arg Glu Phe Gly Thr Gln Val Ser Ser Lys Val Ala Asp Ile
        35                  40                  45
Met Asp Arg Tyr Gly Met Tyr Ala Ala Arg Arg Lys Tyr Glu Leu Ile
    50                  55                  60
Asp Ser Ser Thr Phe Ser Val Ile Asn Tyr Asn Glu Ala Asp Arg Val
65                  70                  75                  80
Gln Glu Glu Trp Arg Ala Leu Val Asn Asp Ala Gln Asn Val Tyr Gln
                85                  90                  95
Glu Leu Lys Asp Ser Ala Arg Pro Ala Phe Phe Glu Leu Val Leu Gln
            100                 105                 110
Pro Cys Met Ala Gly Gln Ile Val Thr Asn Ile His Ile Thr Val Ala
        115                 120                 125
Arg Asn Asn Leu Tyr Ala Gly Gln Arg Arg Thr Ser Thr Asn Thr Leu
```

```
    130                 135                 140
Ala Asp Gln Ala Leu Lys Leu Phe Asn Asp Asp His Ala Leu Thr Gln
145                 150                 155                 160
Arg Tyr His Lys Leu Leu Asp Gly Lys Trp Asn His Ile Met Asp Gln
                165                 170                 175
Thr His Leu Gly Tyr Asp Tyr Trp Tyr Val
            180                 185
```

<210> 28869
<211> 197
<212> PRT
<213> A.fumigatus

<400> 28869

```
Trp Thr Arg His Ile Leu Val Met Ile Thr Gly Met Ser Asp Ser Ser
1               5                   10                  15
Leu Cys Ile Phe Asp Met Val Leu Thr Lys Gly Gln Gln Ala Ala Ala
            20                  25                  30
His Glu Asp Thr Leu Pro Pro Leu Ala Tyr Thr Gln Val Leu Glu Glu
        35                  40                  45
Ser Leu Ala Gly Ser Met Gly Val Ser Val Glu Ala Ser Asn Ala Ser
    50                  55                  60
Val Pro Gly Asp Asp Val Trp His Ser Leu Ser Ser Asn Ser Leu Thr
65                  70                  75                  80
Leu Pro Pro Met Asp Pro Tyr Gly Pro Ser Thr Arg Trp Met Asp Ile
                85                  90                  95
Tyr Ser Arg Gly Thr His Glu Phe Thr Phe Thr Val Ser Pro Tyr Asp
            100                 105                 110
Ser Trp Val Lys Ala Thr Pro Ser Ser Gly Lys Ile Ser Val Ser Gly
        115                 120                 125
Asn Asn Thr Asp Ala Arg Ile His Leu Ser Val Asp Trp Glu Lys Val
    130                 135                 140
Pro Ser Gly Ser His Met Ala Leu Ile Asn Val Thr Ile Ser Ser Asp
145                 150                 155                 160
Asp Tyr Gly Asn Phe Gly Met Pro Thr Val Gln Leu Pro Val Ser Lys
                165                 170                 175
Thr Ser Val Pro Ala Asp Phe His Gly Leu Cys Gly Val Gly Trp His
            180                 185                 190
Gly Gln His Arg Ser
        195
```

<210> 28870
<211> 197
<212> PRT
<213> A.fumigatus

<400> 28870

```
Thr Ser Asn Gln Lys Asn Ile Thr Gln Phe Phe Lys Glu Gly Ala Ile
1               5                   10                  15
Arg Ser Lys Asp Trp Glu Val Leu Trp Thr Leu Gly Met Arg Gly Lys
            20                  25                  30
His Asp Thr Ala Asn Pro Thr Asn Thr Lys Gln Thr Leu Gly Asp Ile
        35                  40                  45
Val Asn Thr Gln Gln Gln Ile Leu Ser Asp Val Leu Asn Met Thr Asn
    50                  55                  60
Ile Ser Ser Ile Pro Gln Met Trp Cys Leu Tyr Lys Glu Val Gly Gln
```

65 70 75 80
Phe Tyr Glu Glu Gly Leu Arg Ala Pro Asp Asp Val Thr Leu Leu Trp
85 90 95
Ala Asp Asp Asn Trp Gly Asn Ile Gln Arg Leu Pro Leu Gly Asn Glu
100 105 110
Thr Ala Arg Ser Gly Gly Ala Gly Val Tyr Tyr His Phe Asp Tyr Val
115 120 125
Gly Asp Pro Arg Asp Tyr Lys Trp Ile Asn Thr Ile Ser Leu Gln Lys
130 135 140
Thr Trp Glu Gln Met His Leu Ala Tyr Glu Arg Gln Ala Arg Gln Ile
145 150 155 160
Trp Ile Val Asn Ile Gly Asp Leu Lys Gly Val Val Ser Thr Glu Ser
165 170 175
Ile Ala Gly Leu Asp Cys Ser Lys Pro Asn Leu Lys Ser Gly Thr Ser
180 185 190
Pro Glu Pro Leu Pro
195

<210> 28871
<211> 210
<212> PRT
<213> A.fumigatus

<400> 28871
Ser Thr Ser Pro Ser His Arg Met Thr Thr Ala Thr Leu Glu Cys Gln
1 5 10 15
Gln Ser Asn Phe Leu Ser Ala Arg Arg Gln Ser Gln Gln Ile Phe Thr
20 25 30
Gly Phe Val Glu Ser Asp Gly Thr Val Ser Ile Glu Ala Asp His Ala
35 40 45
Thr Arg Asn Thr Ser Ser Thr Asp Val Ser Tyr Ala Val Ile Pro Arg
50 55 60
Tyr Gly His Thr Leu Ser Gly Val Thr Leu Leu Pro Val Thr Ile Glu
65 70 75 80
Thr Gln Gln Pro Pro Ser Ser Pro Arg Leu Glu Tyr Asp Met Tyr Leu
85 90 95
Phe Ser Asn Val Ser Thr Val Lys Ala Thr Val Tyr Leu Gly Pro Ser
100 105 110
Leu Asn Thr Asp His Ser Arg Pro Leu Lys Tyr Ala Ile Ser Ile Asn
115 120 125
Asp Ala Asp Pro Gln Val Val Gln Phe Val Pro Ser Thr Pro Leu Gly
130 135 140
Ser Leu Pro Ser Asn Trp Glu Thr Thr Val Arg Asn Ala Val Trp Thr
145 150 155 160
Asn Thr Thr Ser His Ala Ile Gln Gly Gly Gly Arg Lys Asn Thr Leu
165 170 175
Lys Leu Trp Ala Ile Glu Pro Gly Val Val Phe Gln Lys Ile Val Val
180 185 190
Asp Leu Gly Gly Val Arg Pro Ser Tyr Leu Gly Pro Pro Glu Ser Met
195 200 205
Ile Val
210

<210> 28872
<211> 223
<212> PRT

<213> A.fumigatus

<220>
<221> UNSURE
<222> (163)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28872
Pro Arg Cys Leu Ser Gly Gly Arg Arg Arg Leu Gly His Arg His Gly
1 5 10 15
Gln Ala Asp Glu Ser Val Tyr Cys Leu Pro Arg Gly Arg Leu Ser Arg
20 25 30
Leu Cys Gln Arg Pro Pro Gly Gln Arg Pro Pro Arg His Gln Gly Pro
35 40 45
Pro Ala Thr Gly Arg Arg Pro Asn His Ser Arg His Arg Phe Arg Asp
50 55 60
His Arg Asn Arg His Leu Arg Pro Arg Val Glu Lys Ser Gln Asp Arg
65 70 75 80
His Arg Pro Pro Gln Ser Gln Thr His Ala Gly His Leu Arg Pro Ala
85 90 95
Gln His Pro His His Ala Leu Gly Arg Pro Cys Leu Val Arg Ser Gly
100 105 110
Arg Pro Leu Pro Leu Ala Arg Val Leu Asp Arg His Pro Leu Gln Arg
115 120 125
Ala His Pro Ala Pro His Gln Pro His Gln Pro Ala Arg Leu Pro Gly
130 135 140
Ser Gln Pro Glu Phe Pro Thr Phe Ser Arg Cys Lys Pro Leu Arg Ser
145 150 155 160
Thr Val Xaa Tyr Leu Ala Pro Arg Arg Pro Gly Pro Gly Arg Leu Arg
165 170 175
Arg Pro Asn Pro Gln Met Leu Leu Ala Pro Asp Phe Trp Pro Arg Ser
180 185 190
Gly Phe Gly Lys Arg Pro Pro Ser Ile Tyr Ser His Leu His Gly Leu
195 200 205
Thr Pro Ile Phe Gln Pro Arg Thr Arg Gly Leu Gln Ala Leu Pro
210 215 220

<210> 28873
<211> 179
<212> PRT
<213> A.fumigatus

<400> 28873
Ile Ser Thr Trp Arg Ser His Ser Leu Ser Pro Ser Pro His Trp Ala
1 5 10 15
Ile Ser Gly Leu Pro Ser Ser Trp Pro Ser Ser Ser Ser Ser Ser Ser
20 25 30
Ser Thr Thr Ser Ser Ser Ser Thr Arg Leu Ser Ile Ala Met Thr Ser
35 40 45
Ile Arg Val Ala Pro Ser Ala Ala Lys Arg Ala Leu Asn Leu Leu Arg
50 55 60
Thr Val Gln Tyr Thr His Pro Pro Ser Cys Pro Cys His Ser Asn Pro
65 70 75 80
Asn His His His His Leu Gln Ser Asn His Val Arg Arg Leu Ala Thr
85 90 95
Pro Val Asp Pro Ser Arg Gln Lys Glu Tyr Ala Phe Glu Met Ala Ala

```
            100                 105                 110
Ser Ser Ile Arg Phe Gly Pro Gly Ala Thr Arg Glu Val Gly Met Asp
        115                 120                 125
Phe Ala Asn Met Lys Ala Lys Arg Val Cys Ile Val Thr Asp Gln Asn
    130                 135                 140
Val Ala Lys Leu Asp Ala Met Lys Gln Ala Val Glu Gly Leu Ser Lys
145                 150                 155                 160
Glu Gly Ile Glu Phe Thr Val Tyr Asp Lys Val Arg Val Glu Pro Lys
                165                 170                 175
Asp Ser Ser
```

<210> 28874
<211> 256
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (195)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28874

```
Val Gln His Ala Pro Ser Leu Pro Val Ser Arg Pro Val Arg Thr Ala
1               5                   10                  15
Lys Thr Pro Arg Arg Val Lys Asp Ala Ile Ala Phe Ala Lys Pro Tyr
            20                  25                  30
Asn Pro Asp Ala Phe Leu Ala Val Gly Gly Gly Ser Val Ile Asp Thr
        35                  40                  45
Ala Lys Leu Met Asn Leu Tyr Thr Val Phe Pro Glu Ala Asp Phe Leu
    50                  55                  60
Asp Phe Val Asn Ala Pro Leu Gly Lys Gly Leu Pro Val Thr Lys Ala
65                  70                  75                  80
Leu Arg Pro Leu Val Ala Val Pro Thr Thr Ala Gly Thr Gly Ser Glu
                85                  90                  95
Thr Thr Gly Thr Ala Ile Phe Asp Leu Val Ser Lys Lys Ala Lys Thr
            100                 105                 110
Gly Ile Ala His Arg Asn Leu Lys Pro Thr Leu Gly Ile Cys Asp Pro
        115                 120                 125
Leu Asn Thr Arg Thr Met Pro Ser Ala Val His Ala Ser Ser Gly Leu
    130                 135                 140
Asp Val Leu Cys His Ser Leu Glu Ser Trp Thr Ala Ile Pro Tyr Asn
145                 150                 155                 160
Glu Arg Thr Pro Arg Pro Thr Asn Pro Ile Asn Arg Pro Ala Tyr Gln
                165                 170                 175
Gly Ala Asn Pro Asn Phe Arg His Phe Leu Ala Ala Ser Pro Cys Ala
            180                 185                 190
Ala Pro Xaa Asn Thr Leu Pro Arg Ala Val Pro Asp Pro Asp Asp Phe
        195                 200                 205
Glu Gly Pro Ile Pro Lys Cys Ser Trp Pro Arg Thr Ser Gly Arg Gly
    210                 215                 220
Arg Val Ser Ala Asn Ala Arg Arg Pro Ser Ile Pro Ile Cys Met Asp
225                 230                 235                 240
Leu Pro Pro Phe Ser Asn Pro Glu Pro Gly Ala Tyr Lys His Cys Arg
                245                 250                 255
```

<210> 28875
<211> 204
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (143)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28875
Ile Cys Ile Leu Ser Ser Pro Arg Pro Thr Phe Ser Thr Leu Ser Thr
1 5 10 15
Pro Pro Trp Ala Lys Ala Ser Pro Ser Pro Arg Pro Ser Gly His Trp
20 25 30
Ser Pro Ser Gln Pro Gln Gln Ala Pro Val Pro Arg Pro Gln Glu Pro
35 40 45
Pro Ser Ser Thr Ser Cys Arg Lys Lys Pro Arg Pro Ala Ser Pro Thr
50 55 60
Ala Ile Ser Asn Pro Arg Trp Ala Ser Ala Thr Arg Ser Thr Pro Ala
65 70 75 80
Pro Cys Pro Arg Pro Ser Met Pro Arg Gln Val Trp Thr Ser Ser Ala
85 90 95
Thr Arg Ser Ser Pro Gly Pro Pro Ser Leu Thr Thr Ser Ala Pro Arg
100 105 110
Ala Pro Pro Thr Pro Ser Thr Gly Pro Pro Thr Arg Glu Pro Thr Arg
115 120 125
Ile Ser Asp Ile Phe Ser Leu Gln Ala Pro Ala Gln His Arg Xaa Ile
130 135 140
Pro Cys Pro Ala Pro Ser Arg Thr Arg Thr Thr Ser Lys Ala Gln Ser
145 150 155 160
Pro Asn Ala Pro Gly Pro Gly Leu Leu Ala Ala Val Gly Phe Arg Gln
165 170 175
Thr Pro Ala Val His Leu Phe Pro Ser Ala Trp Thr Tyr Pro His Phe
180 185 190
Pro Thr Gln Asn Pro Gly Leu Thr Ser Ile Ala Gly
195 200

<210> 28876
<211> 218
<212> PRT
<213> A.fumigatus

<400> 28876
Arg Ser Arg Lys Asn Arg Met Gly Ser Thr His Cys Pro Leu Arg Leu
1 5 10 15
Arg His Ser Ile Glu Pro Arg Gln Leu Pro Gly Arg Ser Ala Arg Ser
20 25 30
Tyr Thr Arg Glu Gln Arg Phe Gln Ala Ile Ala Asp Val Leu Lys Pro
35 40 45
Gly Asp Tyr Val Val Ile Glu Phe Gly His Asn Asp Gly Gly Ser Leu
50 55 60
Arg Thr Asp Asn Gly Arg Thr Asp Cys Pro Gly Ser Gly Asp Glu Thr
65 70 75 80
Cys Thr Thr Thr Phe Asn Gly Val Thr Glu Thr Val Phe Thr Phe Pro
85 90 95

```
Lys Tyr Leu Gln Asp Ala Ala Lys Met Phe Gln Ser Lys Gln Ala Lys
            100                 105                 110
Val Val Ile Ser Ser Gln Thr Pro Asn Asn Pro Trp Glu Thr Gly Thr
        115                 120                 125
Phe Ser Tyr Thr Pro Ser Arg Phe Val Glu Leu Ala Lys Leu Ala Ala
    130                 135                 140
Gln Arg Ala Gly Val Asp Tyr Val Asp His Gly Ala Tyr Val Ala Asp
145                 150                 155                 160
Met Tyr Lys Ser Leu Gly Lys Thr Thr Val Asp Ser Phe Phe Pro Asn
                165                 170                 175
Asp His Thr His Thr Ser Ser Thr Gly Ala Glu Val Val Ala Gln Ala
            180                 185                 190
Phe Leu Lys Ala Val Val Cys Ser Gly Ala Arg Leu Lys Glu Val Leu
        195                 200                 205
Thr Thr Thr Asn Phe Pro Gly Lys Cys Leu
    210                 215
```

<210> 28877
<211> 122
<212> PRT
<213> A.fumigatus

<400> 28877

```
Gly Thr Glu Leu Ser Ser Thr Ile Arg His Ser Gly Ile Gly Pro Gln
1               5                   10                  15
Thr Tyr Lys Pro Arg Phe Arg Met Lys Cys Phe Ala Phe Leu Ser Ala
            20                  25                  30
Leu Ala Leu Phe Pro Gly Thr Leu Ser Ala Thr Ile Tyr Met Ala Gly
        35                  40                  45
Asp Ser Thr Met Ala Lys Gly Gly Gly Gly Ser Gly Thr Asp Gly Lys
    50                  55                  60
Ser Gln Gly Lys Ser Pro Phe Ala Arg Tyr Ile Tyr Asn Ala Leu Val
65                  70                  75                  80
Lys Thr Gly Trp Gly Leu His Ile Ala Pro Phe Val Ser Gly Thr Val
                85                  90                  95
Ser Asn Gln Gly Ser Cys Pro Ala Ala Val Leu Ala Arg Ile Pro Ala
            100                 105                 110
Asn Asn Val Ser Arg Pro Ser Gln Met Ser
        115                 120
```

<210> 28878
<211> 65
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (4)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28878

```
Ala Gly Pro Xaa Tyr Phe Tyr Leu Ala Arg Ser Phe Ala Pro Val Val
1               5                   10                  15
Lys Asn Glu Leu Val Thr Lys Ala Ala Phe Ser Asp Gly Arg Thr Val
            20                  25                  30
Tyr Phe Pro Pro Arg Leu Tyr Phe Asp Arg Arg Ser Leu Thr Asp Phe
```

```
        35                  40                  45
Leu Gly His Leu Cys Phe Asn Met Tyr Cys Gly Thr Asn Thr Phe Leu
    50                  55                  60
Ser
65

<210> 28879
<211> 224
<212> PRT
<213> A.fumigatus

<400> 28879
Val Ile Thr Ser Phe Lys Leu Pro Val Pro Val Phe Glu Ser Asn Pro
1               5                   10                  15
Ala Ser Pro Thr Met Ala Lys Lys Val Thr Cys Lys Gln Cys Asp Glu
            20                  25                  30
Lys Lys Pro Thr Cys Thr Asn Cys Arg Gln His Ala Val Ile Cys Asp
        35                  40                  45
Tyr Ala Thr Glu Ser Thr Ala Pro Ser Arg Pro Ser Arg Gly Gln Tyr
    50                  55                  60
Arg Phe Arg Gln Ser Lys Tyr Glu Ile Gln Ile Asp Pro Ser Thr Pro
65                  70                  75                  80
Asp Thr Thr Ser Ile Gln Ser Ser Asn Pro Gly Pro Thr Pro Pro Pro
                85                  90                  95
Pro Leu Glu Ser Ile Ser Leu Ala Asp Leu His Leu Phe His His Tyr
            100                 105                 110
Val Thr Ala Met Ala Ser Thr Leu Thr Asp Gly Gln Asp Pro Lys His
        115                 120                 125
Leu Trp Asp Val His Val Pro Gln Trp Gly Phe Val Phe Pro Ser Ile
    130                 135                 140
Leu His Leu Ile Leu Ala Leu Ser Ala Leu His Leu Ala His Gln His
145                 150                 155                 160
Pro Ala Leu Arg Ala Gln Tyr Arg Asn Gln Ala Asp Ala His Phe Thr
                165                 170                 175
Phe Gly Val Arg Ser Val Thr Thr Val Leu Ala Ser Leu Asn Glu Asp
            180                 185                 190
Asn Cys Gln Tyr Ile Tyr Ile Ser Ala Val Leu Ile Cys Phe Val Tyr
        195                 200                 205
Phe Ala His Gly Pro Arg Thr Gly Glu Phe Leu Val Phe Ser Glu Thr
    210                 215                 220

<210> 28880
<211> 258
<212> PRT
<213> A.fumigatus

<400> 28880
Met Ser Glu Gln Ala Glu Leu Asn Lys Asn Gly Ser Gln Glu Gly Lys
1               5                   10                  15
Asp Val Arg Pro Pro Glu Arg Ala His Leu Ala Gln Asp Thr Leu Ala
            20                  25                  30
Asp Arg Gln Gly Ser Leu Gly Pro Leu His Glu Asp Arg Pro Arg His
        35                  40                  45
Ile Pro Ser Gln Ile Ser Leu Arg Ser Gln Ser Gln Ile Ala Ser Ile
    50                  55                  60
Pro Ser Asn Thr Gly Ala Pro Pro Thr Gly Gly Glu Ala Asp Val Ala
```

65 70 75 80
Glu Glu Leu Ala Trp Gly Pro Ala His Pro Cys Tyr Pro His Leu Asn
85 90 95
Pro His Val Pro Ile Gly Ser Gln Glu Tyr Leu Thr Thr Arg Ile Ile
100 105 110
Arg Ile Arg Arg Asp Trp Met Val Lys Gly Asp Leu Ala Pro Thr Phe
115 120 125
Ser Asn Leu Tyr Pro Glu Ile Leu Asp Pro Leu Leu Pro Glu Gln Glu
130 135 140
Phe Arg Arg Val Ile Ala Thr Val Asn Glu Glu Leu Ile Lys Ala Phe
145 150 155 160
Asp Pro Phe Ser Phe Arg Asn Leu Leu Asp Gly Ala Leu Gly Leu Val
165 170 175
Thr Gly Trp Leu Trp Glu Asp Ile Gly Ala Ala Gly Ile Lys Ser His
180 185 190
Leu Gln Gln Val Glu Asp Trp Leu Asp Lys Trp Asn Arg Glu Val Gly
195 200 205
Ala Lys Asp Gly Val His Ile Trp Ser Leu Arg Arg Thr Ala Tyr Leu
210 215 220
Ser Leu Asp Ile Gln Ile Pro Asp Pro Lys Val Gly Ile Val His Ser
225 230 235 240
Glu Gly Met Ser Leu Pro Gly Thr Arg Pro Asn Ser Gly Val Gly Leu
245 250 255
Gly Phe

<210> 28881
<211> 66
<212> PRT
<213> A.fumigatus

<400> 28881
Pro Thr Ser Pro Pro Thr Ala Pro Ile Tyr Pro Glu Ser Phe Ser Gly
1 5 10 15
Arg Ile Pro Asn Phe Ile Pro Pro Phe Cys Gln Gly Ala His Ser Asn
20 25 30
Ala Leu Phe Pro Leu Phe Glu Arg Pro His Ile Gln Asn Ala Leu Arg
35 40 45
His Ser Arg Leu Gln Pro Lys Arg Arg Glu Ser His Leu Pro Arg Leu
50 55 60
Ser Gln
65

<210> 28882
<211> 169
<212> PRT
<213> A.fumigatus

<400> 28882
Thr Asp Arg Leu Pro His Leu Arg Pro Pro Phe Ile Leu Arg Ala Ser
1 5 10 15
Pro Ala Glu Ser Pro Ile Ser Ser Leu Pro Ser Ala Arg Ala Pro Ile
20 25 30
Pro Thr Pro Ser Phe Pro Phe Leu Arg Asp Pro Ile Phe Lys Met Leu
35 40 45
Ser Gly Ile Leu Val Phe Asn Gln Lys Gly Glu Asn Leu Ile Phe Arg

```
    50                  55                  60
Ala Phe Arg Ser Asp Cys Arg Pro Arg Leu Ala Asp Ile Phe Arg Ile
65                  70                  75                  80
Gln Val Ile Ser Asn Pro Gln Val Arg Ser Pro Ile Leu Thr Leu Gly
                85                  90                  95
Ser Thr Thr Phe Ser His Val Lys His Glu Asn Ile Tyr Leu Val Ala
            100                 105                 110
Val Thr Lys Ser Asn Ala Asn Ala Ala Leu Val Phe Glu Phe Leu Tyr
        115                 120                 125
Arg Leu Val Leu Leu Gly Lys Ser Tyr Phe Gly Lys Phe Asp Glu Glu
    130                 135                 140
Ala Val Lys Asn Asn Phe Val Leu Ile Tyr Glu Leu Leu Asp Gly Glu
145                 150                 155                 160
Tyr Ser Leu Lys Gln Gly Gly Leu Glu
                165
```

<210> 28883
<211> 161
<212> PRT
<213> A.fumigatus

<400> 28883

```
Arg Ile Ile Val Leu Glu Ile Leu Asp Phe Gly Tyr Pro Gln Asn Thr
1               5                   10                  15
Asp Pro Asp Thr Leu Lys Met Tyr Ile Thr Thr Glu Gly Val Lys Ser
            20                  25                  30
Ala Ile Val Asn Asn Pro Thr Asp Ser Ser Arg Ile Thr Met Gln Ala
        35                  40                  45
Thr Gly Ala Leu Ser Trp Arg Arg Ala Asp Val Lys Val Pro Gln Glu
    50                  55                  60
Arg Ser Leu Arg Arg Arg His Arg Arg Arg Glu Pro Ala His Val Arg
65                  70                  75                  80
His Gly His Arg Ala Pro Arg Arg Arg His Arg Pro Asp Arg His Ala
                85                  90                  95
Arg Leu Pro Leu Arg His Pro Gly Val Gln Val Arg Ala Glu Arg Pro
            100                 105                 110
Pro Ser Pro Arg Gln Arg Gln Arg Arg Arg Cys Trp Pro Ile Leu Val
        115                 120                 125
Leu Ala Arg Pro Leu Trp Gln Gln Ser Asn Pro Arg Gly Cys Arg Leu
    130                 135                 140
Arg His Ala Gly Arg Leu Pro Val Pro Pro Val Arg Glu Thr Gly Pro
145                 150                 155                 160
Leu
```

<210> 28884
<211> 270
<212> PRT
<213> A.fumigatus

<400> 28884

```
Lys Ser Ser Thr Leu Ala Ile Pro Lys Thr Pro Thr Arg Thr Arg Ser
1               5                   10                  15
Arg Cys Thr Ser Gln Arg Arg Ala Ser Ser Leu Pro Ser Ser Thr Thr
            20                  25                  30
Pro Arg Thr Arg Ala Gly Ser Gln Cys Lys Gln Gln Ala Arg Ser Pro
```

```
        35                  40                  45
Gly Ala Val Gln Thr Ser Lys Tyr Arg Lys Asn Glu Ala Phe Val Asp
    50                  55                  60
Val Ile Glu Asp Val Asn Leu Leu Met Ser Ala Thr Gly Thr Val Leu
65                  70                  75                  80
Arg Ala Asp Val Thr Gly Gln Ile Val Met Arg Ala Tyr Leu Ser Gly
                85                  90                  95
Thr Pro Glu Cys Lys Phe Gly Leu Asn Asp Arg Leu Leu Leu Asp Ser
            100                 105                 110
Asp Ser Gly Gly Gly Ala Gly Pro Ser Ser Ser Ser His Ala His Phe
        115                 120                 125
Gly Ser Lys Ala Thr Arg Ala Ala Ala Gly Ser Val Thr Leu Glu Asp
    130                 135                 140
Cys Gln Phe His Gln Cys Val Lys Leu Gly Arg Phe Asp Ala Asp Arg
145                 150                 155                 160
Ile Ile Ser Phe Val Pro Pro Asp Gly Glu Phe Glu Leu Met Arg Tyr
                165                 170                 175
Arg Ala Thr Glu Asn Val Asn Leu Pro Phe Lys Val His Pro Ile Val
            180                 185                 190
Arg Glu Val Gly Thr Thr Lys Val Glu Tyr Ser Val Ala Ile Lys Ala
        195                 200                 205
Asn Tyr Ser Ser Lys Leu Phe Ala Thr Asn Val Val Ile Arg Ile Pro
    210                 215                 220
Thr Pro Leu Asn Thr Ala Lys Thr Thr Glu Arg Thr Ser Gln Gly Arg
225                 230                 235                 240
Ala Lys Tyr Glu Pro Glu His Asn Asn Ile Val Trp Lys Ile Ala Arg
                245                 250                 255
Leu Ser Arg Arg Gln Arg Val Cys Ala Ser Gly Leu His His
            260                 265                 270
```

<210> 28885
<211> 91
<212> PRT
<213> A.fumigatus

<400> 28885

```
Phe Asp Phe His Cys Ser Pro Ile Ser Ser Ser Ile Met Ile Gly Ala
1               5                   10                  15
Thr Arg Arg Trp Phe Arg Arg Asn Arg Lys Gly Leu Ala Ile Gly Ala
            20                  25                  30
Gly Ile Ile Gly Ala Gly Tyr Leu Ala Gly Gln Tyr Val Leu Ser Lys
        35                  40                  45
Ile Thr Glu Ala Arg Glu Gln Met Ser Ser Asp Arg Ile Ala Arg Glu
    50                  55                  60
Lys Tyr Val Thr Phe Gly Phe Thr Leu Ile Phe Trp Pro Asn Glu Met
65                  70                  75                  80
Asp Lys Thr Ser Ile His Ser Cys Ala Arg Leu
                85                  90
```

<210> 28886
<211> 130
<212> PRT
<213> A.fumigatus

<400> 28886

```
Leu Ile Asp Leu Ser Ser Leu Arg Arg Arg Phe Glu Gln Asn Gln Thr
```

```
1               5                   10                  15
Asp Cys Thr Tyr Thr Val Leu Ala Leu Leu Pro Thr Ala Ala Glu Gly
            20                  25                  30
Ile Val Glu Ala Leu Pro Val Glu Glu Leu Thr Lys Glu Leu Gln Lys
        35                  40                  45
Lys Arg Ala Glu Arg Leu Ala Arg Leu Gln Ala Gly Glu Gly Thr Val
    50                  55                  60
Ser Asp Leu Ser Ser Val Ser Pro Ser Ala Ala Asp Asp Asp Arg Arg
65                  70                  75                  80
Ser Leu Ser Ser Phe Gln Ser Asp Gly Phe Val Arg Thr Ser Gln Val
                85                  90                  95
Gly Glu Ser Ser Phe Asp Gly Glu Gly Pro Ala Arg Val Lys Arg Asn
            100                 105                 110
Lys Thr Gln Leu Trp Asn Glu Val Lys Ile Thr Cys Thr Leu Pro Ser
        115                 120                 125
Leu Val
    130
```

<210> 28887
<211> 97
<212> PRT
<213> A.fumigatus

<400> 28887

```
Asn Cys Ser Asp Gly Ile Ala Asn Val Ala Thr Ala Ala Val Thr Arg
1               5                   10                  15
Ser Phe Thr Leu Ile Tyr Thr Leu Ser Leu Leu Thr Ile Phe Thr Arg
            20                  25                  30
Ile Gln Leu Asn Leu Leu Gly Arg Arg Asn Tyr Leu Ser Ser Val Ile
        35                  40                  45
Ser Leu Ala Thr Pro Pro Ala Asn Thr Ser Thr Ile Lys Leu Glu Asp
    50                  55                  60
His Asp Asp Asp Asp Leu Thr Gln Thr Leu Gly Asn Asp Phe Glu Thr
65                  70                  75                  80
Asn Pro Arg Tyr Leu Ala Phe Arg Trp Trp Leu Leu Pro Arg Gly Trp
                85                  90                  95
Glu
```

<210> 28888
<211> 173
<212> PRT
<213> A.fumigatus

<400> 28888

```
Ile Gly Gln Leu Cys Lys Thr Glu Trp Gln Glu Gly Pro Arg Thr His
1               5                   10                  15
Leu Arg Tyr Ser Cys Ala Leu Thr Ala Phe Arg Gly Tyr Ser Gln Ala
            20                  25                  30
Asp Ser Val Val Trp His Ser Gln Leu Pro Ser Trp Val Ser Ala Ile
        35                  40                  45
Ser Asp Lys Asn Thr Leu Thr Ser Val Leu Lys Asn His Ile Thr Thr
    50                  55                  60
Val Met Thr Arg Tyr Lys Gly Gln Ile Tyr Ala Trp Val Phe Cys Pro
65                  70                  75                  80
Leu Ser His Thr Met Pro Ala Pro Ala Asn Ser Cys Lys Gly Arg Arg
```

```
                85                  90                  95
Gln Arg Asp Leu Gln Arg Gly Arg Leu Pro Pro Arg Gln Arg Leu Leu
            100                 105                 110
Pro Arg Ala Gly Arg Gly Leu Cys Ala Asp Cys Leu Arg Asp Gly Ala
        115                 120                 125
Leu Cys Gly Ser Leu Gly Glu Ala Val His Gln Arg Leu Gln Val Ser
    130                 135                 140
Leu Trp Phe Cys Arg Glu Met Tyr Ser Val Leu Asp Leu Thr Ile Thr
145                 150                 155                 160
Val Ser Thr Arg Leu Ala Met Ala Lys Pro Arg Gly Trp
                165                 170
```

<210> 28889
<211> 132
<212> PRT
<213> A.fumigatus

<400> 28889

```
Thr Thr Glu Pro Gly Pro Cys Gly Gly Ser Val Leu Leu Leu Ala Val
1               5                   10                  15
Leu Cys Asn Tyr Asn Thr Ala Val Glu Thr Leu Phe Gln Gln Thr Leu
            20                  25                  30
Gln Gln Thr Arg Ile Gln Ser His Ser Ile Ile Leu Thr Met Val Val
        35                  40                  45
Leu Ser Lys Leu Val Ser Ser Ile Leu Phe Val Ser Leu Val Ser Ala
    50                  55                  60
Gly Val Ile Asp Glu Arg Gln Ala Ala Gly Ile Asn Gln Ala Phe Thr
65                  70                  75                  80
Ser His Gly Lys Lys Tyr Phe Gly Thr Ala Ser Asp Gln Ala Leu Leu
                85                  90                  95
Gln Lys Ser Gln Asn Glu Ala Ile Val Arg Lys Asp Phe Gly Gln Leu
            100                 105                 110
Thr Pro Glu Asn Ser Met Lys Trp Asp Ala Thr Glu Arg Arg Ser Leu
        115                 120                 125
Gly His Cys Gly
    130
```

<210> 28890
<211> 76
<212> PRT
<213> A.fumigatus

<400> 28890

```
Pro Gly Thr Arg Ala Arg Ser Thr Pro Gly Tyr Phe Ala Leu Tyr Pro
1               5                   10                  15
Thr Gln Cys Gln Pro Gln Leu Ile Ala Ala Lys Asp Val Val Asn Glu
            20                  25                  30
Ile Phe Asn Glu Asp Gly Ser Leu Arg Asp Ser Val Phe Ser Arg Val
        35                  40                  45
Leu Gly Glu Asp Phe Val Arg Ile Ala Phe Glu Thr Ala Arg Ser Val
    50                  55                  60
Asp Pro Ser Ala Lys Leu Tyr Ile Asn Asp Tyr Lys
65                  70                  75
```

<210> 28891
<211> 174

<212> PRT
<213> A.fumigatus

<400> 28891
Leu Phe Leu Lys Ala Leu Lys Pro Thr Leu Val Arg Val Leu Arg Pro
1 5 10 15
Ala Ser Lys Asp Lys Ser Pro Trp Phe Ser Cys Leu Arg Asn Ala Asp
20 25 30
Pro Pro Cys Thr Ala Leu Thr Ala Leu Ala Ser Ser Gly Val Ser Glu
35 40 45
Val Ala Ile Thr Glu Leu Asp Ile Ala Gly Ala Ser Ser Gln Asp Tyr
50 55 60
Val Asn Val Cys Leu Leu Ile Ala Asn Gly Arg Val Ile Asp Thr Asn
65 70 75 80
Arg Asn Arg Ser Ser Arg His Ala Trp Met Ser Pro Asn Val Trp Glu
85 90 95
Ser Thr Val Trp Gly Gly Val Gly Gln Gly Leu Leu Ala Leu Pro Gly
100 105 110
Pro Leu Arg Cys Trp Phe Asp Ser Asn Tyr His Pro Lys Ala Arg Ile
115 120 125
Met Pro Ser Leu Leu Leu Ser Asp Leu Gly Ser Gly Ala Tyr Asp Leu
130 135 140
Pro Leu Met Trp Gly Gly Trp Met Tyr Leu Gly Cys Ala Ala Gly Leu
145 150 155 160
Asp Thr Ile Arg Asn His Pro Trp His Lys Thr Gly Thr Leu
165 170

<210> 28892
<211> 78
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (18),(21)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28892
Pro Cys Ser Met Ala Asp Leu Pro Phe Ile Thr Asn Arg Gly Tyr Thr
1 5 10 15
Gly Xaa Gly Gly Xaa Pro Thr Lys Gly His Arg Ala Val Gln Val Pro
20 25 30
Ser Pro Pro Thr Arg Asn Val Asn Cys Pro Lys Pro Val Leu Gln Ser
35 40 45
Ser Gly Tyr Arg Ala Ala Gly Met Val Asn Thr Gly Tyr Phe His Met
50 55 60
Pro Val Val Gln Thr Lys Gly His Val Thr Met Gln Gly Leu
65 70 75

<210> 28893
<211> 108
<212> PRT
<213> A.fumigatus

<400> 28893
Leu Gln Arg Thr Ser Ser Thr Arg Ser Ser Thr Arg Thr Ala Pro Ser

```
1               5                   10                  15
Ala Thr Ala Ser Ser Pro Ala Cys Trp Ala Arg Thr Leu Cys Gly Leu
            20                  25                  30
Pro Ser Arg Arg Arg Ala Leu Trp Ile Pro Arg Arg Ser Cys Thr Ser
        35                  40                  45
Thr Ile Thr Ser Lys Leu Val Val Leu Ser Arg Asp Val Leu Arg Pro
    50                  55                  60
Gly Ser Asp His His Ser Leu Asp Ser Ala Ser Tyr Gly Lys Thr Gln
65                  70                  75                  80
Gly Met Val Arg Tyr Val Lys Lys Trp Leu Ala Ala Gly Ile Pro Ile
                85                  90                  95
Asp Gly Ile Gly Glu His Arg Ser Arg Ser Cys Val
            100                 105
```

<210> 28894
<211> 193
<212> PRT
<213> A.fumigatus

<400> 28894

```
Ile Asn Met Ala Gln Pro Gln Ala Gly Tyr Trp Thr Leu Pro Ile Ile
1               5                   10                  15
Ala Ser Tyr Leu Ser Glu Val Asn Pro Ala Asn Asn Pro Tyr Gln Glu
            20                  25                  30
Arg Ile Asp His Leu Trp Ser Asn Ile Leu Asn His Tyr Phe Pro Leu
        35                  40                  45
Arg Asp Gly Phe Gly Thr Glu Arg Glu Ala Leu Val Lys Pro Pro Arg
    50                  55                  60
Arg Phe Ala Thr Asn Val Ala Ile Thr Asn Val Arg Pro Leu Gly Met
65                  70                  75                  80
His Lys Val Val Leu Val Glu Ala Lys Thr Phe Pro Arg Asn Thr Asp
                85                  90                  95
Ile Gly Trp Phe Ser Val Tyr Pro Trp Ala Asp Val Glu Ser Ile Leu
            100                 105                 110
Gln Ser Phe Met Lys Lys Ala Pro Asp Thr Phe Gly Asn Val Gln Thr
        115                 120                 125
Met Tyr Gly Ile Val Ala Val Gly Asp Arg Val Arg Phe Tyr Thr Met
    130                 135                 140
Asn Ser Gln Asn Asn Thr Gly Gly Ile Leu Thr Pro Phe Pro Val Gly
145                 150                 155                 160
Gly Pro Gln Pro Leu Leu Ser Val His Thr Asp Ala His Ser Ile His
                165                 170                 175
Asp Ile Leu Thr Ala Ile Ser Leu Glu Ile Arg Thr Gly Trp Asn Thr
            180                 185                 190
Tyr
```

<210> 28895
<211> 374
<212> PRT
<213> A.fumigatus

<400> 28895

```
Glu Glu Gly Val Leu Glu Ser Cys Leu Thr His Val Asp Gly Arg Ser
1               5                   10                  15
Leu Leu Phe Val Ala Ser Leu Phe Glu Asp Gln Pro Val Leu Val Asp
```

```
            20                  25                  30
Ile Ser Ser Pro Lys Pro Ile Lys Arg Ile Leu Pro Ser Ala Pro Phe
        35                  40                  45
Arg Pro Pro Pro Ser Ala Ser Glu Glu Val Asp Pro Ala Met Ala Ala
    50                  55                  60
Lys Gln Ala Ala Gln Asp Ala Lys His Ser Thr Cys Val Thr Ile Phe
65                  70                  75                  80
Ser Ala Phe Gly Asn His Ile Ile Ala Gly Thr Ser Lys Gly Trp Ile
                85                  90                  95
Asn Ile Ile Glu Thr Gln Thr Cys Thr Thr Ile His Ser Thr Arg Leu
            100                 105                 110
Cys Tyr Gly Val Val Ile Leu Leu Arg Leu Ala Ser Asn Gly Arg Asp
        115                 120                 125
Leu Leu Ile Asn Ser Ser Asp Arg Val Ile Arg Thr Ile Ile Met Pro
    130                 135                 140
Asp Leu Ser Gln Leu Gly Ile Asp Leu Glu Pro Ala Asn Ile Lys Leu
145                 150                 155                 160
Gln Val Glu His Lys Phe Gln Asp Val Val Thr Arg Leu Ser Trp Lys
                165                 170                 175
His Val Thr Phe Ser Ser Thr Gly Glu Phe Val Thr Ala Ser Thr Phe
            180                 185                 190
Met Asn Pro Asp Ile Tyr Val Trp Glu Arg Ser His Gly Ser Leu Val
        195                 200                 205
Lys Ile Leu Glu Gly Pro Arg Glu Glu Leu Gly Val Val Glu Trp His
    210                 215                 220
Pro Ser Arg Pro Met Val Val Ala Cys Gly Leu Glu Ser Gly Cys Ile
225                 230                 235                 240
Tyr Thr Trp Ser Ile Val Thr Pro Gln Lys Trp Ser Ala Leu Ala Pro
                245                 250                 255
Asp Phe Gly Glu Val Glu Glu Asn Val Glu Tyr Met Glu Arg Glu Asp
            260                 265                 270
Glu Phe Asp Ile His Pro Ala Glu Glu Ile His Gln Arg Arg Leu Asp
        275                 280                 285
Gln Glu Asp Glu Val Pro Asp Val Leu Thr Ile Glu Pro Leu Lys Ser
    290                 295                 300
Gly Ala Asp Gly Glu Met Glu Ala Phe Arg Met Pro Val Leu Leu Asp
305                 310                 315                 320
Ile Ser Asp Ser Glu Ser Glu Glu Asp Ile Val Ala Val Gly Pro Gly
                325                 330                 335
Thr Met Arg Arg Arg Ser Pro Gly Ala Gly Arg Glu Trp Met Asn Ser
            340                 345                 350
Asn Gly Asp Gly Asp Lys Glu Ser Gly Lys Pro Gly Ala Gly Arg Gly
        355                 360                 365
Gln Arg Gly Arg Arg Lys
    370
```

<210> 28896
<211> 75
<212> PRT
<213> A.fumigatus

```
<400> 28896
Arg Lys Cys Met Glu Lys Phe Gly Asp Gly Pro Lys Thr Tyr Gly Asn
1               5                   10                  15
Thr Pro Tyr Asn Pro Thr Ile Ser Thr Phe Ser Val Ala Asn Ser Tyr
            20                  25                  30
```

```
Asp Arg Ala Pro Phe Phe Val Gln Tyr Gln Ile His Ala His Ala Glu
        35                  40                  45
Thr Ser Glu Ser Ser His Glu Asn Thr Gly Thr Lys Ala Tyr Pro Val
    50                  55                  60
Ser Cys Ala Leu Glu Ser Leu Thr Val Gly Phe
65                  70                  75
```

<210> 28897
<211> 60
<212> PRT
<213> A.fumigatus

<400> 28897

```
Thr Leu Leu Ala Glu Arg Leu Phe Lys Lys Ser Thr Pro Lys Phe Arg
1               5                   10                  15
Ser Leu Pro Arg Asn Pro Phe Gly Leu Lys Thr Gly Asn Pro Pro Leu
            20                  25                  30
Leu Gln Phe Ser Val Lys His Pro Ser Gln Gly Ser Val Phe Ser Thr
        35                  40                  45
Leu Leu Phe Pro Pro Gly Thr Ile Ser Asp Ile Phe
    50                  55                  60
```

<210> 28898
<211> 663
<212> PRT
<213> A.fumigatus

<400> 28898

```
Tyr Leu Arg Arg Arg Lys Phe Pro Asp Trp Val Val Gly Ala Pro Gly
1               5                   10                  15
Cys Leu Arg Leu Gln Leu Cys Ser Asn Arg Ser Pro Lys Arg Val Asp
            20                  25                  30
Ile Ile Phe Ser Cys Leu Ser Asp Gln Glu Leu Ser Leu Ile Gln Asp
        35                  40                  45
Thr Ala Leu Gln Asp Lys Ser Ala Leu Arg Phe Phe Gln Met Ser Glu
    50                  55                  60
Cys Ser Lys Arg Leu Glu Gln Pro Leu Arg Tyr Lys Leu Leu Thr Ala
65                  70                  75                  80
His Trp Cys Ser Ile Ser Ser Val Ser Gly Ser Asp Glu Ser Pro Arg
                85                  90                  95
Cys Gln Gln Tyr Asn Ile Gln Thr His Cys Asn Tyr His Pro Arg Ser
            100                 105                 110
Cys Arg Pro Arg Gly Pro Asp Thr Met Ser Arg Thr Glu His Ser Ile
        115                 120                 125
Thr Asn Gly His Ala Val Ser Ser Ala Gln Asn Gly Glu Arg Pro Asn
    130                 135                 140
Ala His Leu Pro Ile Asp Val Phe Asn Ala Ser Ser Val Ala Glu Ile
145                 150                 155                 160
Lys Ala Ala Leu Ser His Leu His Asp Gln Glu Val Ala Val Thr Ala
                165                 170                 175
Arg Leu Asp Ala Leu Val Ala Ser Gln Lys Asp Phe Ser Arg Glu Leu
            180                 185                 190
Gly Arg Leu Asp Leu Leu Arg Ala His Leu Gly Ser Gln Thr Ser Thr
        195                 200                 205
Thr His Ala Ile Ser His Gly Met Leu Ser Asp Ala Ala Ala Thr Ala
    210                 215                 220
```

```
Asp Arg Ile Ser Ser Ala Val Arg Gln Leu Asp Leu Glu Gln Ser Arg
225                 230                 235                 240
Val Lys Ala Thr Leu Glu Val Val Glu Gln Val Ser Glu Leu Lys Ala
                245                 250                 255
Cys Val Leu Gly Val Ala Gly Ser Met Gly Ala Pro Gln Asp Trp Glu
            260                 265                 270
Thr Ala Ala Ser Tyr Leu Asn Arg Ala Ser Lys Val Pro Pro Glu Val
        275                 280                 285
Val His Gly Thr Phe Ala Ala Glu Met Val Pro Thr Ala Glu Val Pro
    290                 295                 300
Asp Pro Pro Asn Val Thr Val Asp Asn Ala Gly Val Ser Leu Cys Gly
305                 310                 315                 320
Leu Phe Val Arg Glu Leu Asp Lys Ala Val Lys Glu Asn Asp Gly Ala
                325                 330                 335
Lys Ile Thr Arg Phe Phe Lys Ile Phe Pro Leu Ile Gly Arg Ser Glu
            340                 345                 350
Val Gly Leu Asp Val Tyr Gly Arg Tyr Val Cys Gln Gly Val Ala Ser
        355                 360                 365
Arg Ala Arg Ala Asn Leu Asn Ala Ser Thr Gly Gly Ala Gln Ser Lys
    370                 375                 380
Asp Gly Phe Leu Tyr Ala Asn Ala Leu Thr Lys Leu Phe Glu His Ile
385                 390                 395                 400
Ala Gln Leu Ile Asp Gly His Gly Gly Leu Val Glu Arg His Tyr Gly
                405                 410                 415
Pro Arg Lys Met Thr Arg Val Ile Glu Arg Leu Gln Leu Glu Ala Asp
            420                 425                 430
Leu Gln Gly Gly Ile Ile Leu Asp Thr Trp Ser Asp Glu Arg His Ile
        435                 440                 445
Asp Arg Lys Leu Thr Asp Ile Lys Ser Tyr Ala Phe Thr Phe Leu Val
    450                 455                 460
Gln Ser Phe Leu Pro Ala Gln Arg Ser Ala Thr Pro Arg Ser Asn Ser
465                 470                 475                 480
Pro Ala Thr Arg Asp Gly Leu Pro Ala Glu Asp Glu Gly Val Asp Met
                485                 490                 495
Lys Glu Ile Asp Gly Leu Leu Asn Glu Met Ala Val Met Leu Ser Arg
            500                 505                 510
Trp Ser Leu Tyr Cys Arg Phe Ile Ala Glu Thr Cys Asn Val Arg Tyr
        515                 520                 525
Leu Thr Ala Ser Thr Ser Leu Cys Met Asp Val Phe Gly Lys Leu Thr
    530                 535                 540
Leu Cys Lys Ala Thr Glu Asp Glu Ser Gln Lys Phe Thr Pro Pro Lys
545                 550                 555                 560
Phe Leu Gln Glu Ala Ser Leu Ser Lys Lys Ile Thr Asp Arg Leu Ile
                565                 570                 575
Asn Pro Phe Asn Thr Met Thr Thr Phe Phe Phe Arg Arg Ser Val Glu
            580                 585                 590
Lys Ala Phe Gln Leu Asp Glu Gln Pro Ser Gly Leu Thr Leu His Pro
        595                 600                 605
Gln Lys Pro Leu Lys Ala Asp Pro Pro His Ile Thr Ser Ala Val Asp
    610                 615                 620
Asp Ile Met Tyr Met Val His Gln Val Leu Gln Gln Phe Leu Ala Pro
625                 630                 635                 640
Ser Gln Ile Ser Val Val Thr Asn Val Val Pro Thr Leu Gly Arg Val
                645                 650                 655
Leu Asp Arg Thr Ser Ser Glu
            660
```

<210> 28899
<211> 183
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (177)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28899
Trp Gln Val Gly Ala Gly Ile Ser Thr Ser Ala Gly Ile Pro Asp Phe
1 5 10 15
Arg Ser Pro Asp Thr Gly Leu Tyr Ser Asn Leu Ala Phe Leu Asp Leu
20 25 30
Pro Glu Pro Glu Asp Val Phe Asp Ile Ser Tyr Phe Arg Glu Asn Pro
35 40 45
Arg Pro Phe Tyr Ala Leu Ala Arg Glu Leu Ala Pro Gly Arg Tyr Arg
50 55 60
Pro Thr Ile Ala His Ser Phe Val Lys Leu Leu His Asp Lys Gly Leu
65 70 75 80
Leu Leu Lys His Phe Thr Gln Asn Ile Asp Cys Leu Glu Arg Leu Ala
85 90 95
Gly Val Pro Gly Glu Lys Ile Val Glu Ala His Gly Ser Phe Ala Ser
100 105 110
Gln His Cys Ile Asp Cys Lys Ala Ala Tyr Pro Gly Pro Gln Met Lys
115 120 125
Glu Ala Ile Ala Lys Gly Glu Val Pro His Cys Pro His Cys Asn Gly
130 135 140
Phe Val Lys Pro Asp Ile Val Phe Phe Gly Glu Ala Leu Pro Glu Gly
145 150 155 160
Ile Pro Cys Lys Pro Lys Ser Ala Lys Asn Lys Gln Ile Tyr Val Leu
165 170 175
Xaa Met Gly Asp Gln Ser His
180

<210> 28900
<211> 255
<212> PRT
<213> A.fumigatus

<400> 28900
Cys Gln Val Thr Gly Pro Gly Val Pro Ser Leu Arg Thr Ser Ser Ser
1 5 10 15
Pro Ser Ala Phe Pro Ser Leu Leu Asp Pro Ser Ile Trp Ile Glu Thr
20 25 30
Phe Leu Cys Ile Ile Met Thr Met Ser Lys Ala Arg Gly Leu Ala Arg
35 40 45
Val Ser Ser Met Ala Asn Phe Arg Thr Asp Ala Thr Gly Ser Thr Val
50 55 60
Asp Asn Ala Ser Pro Ala Pro Ser Pro Ser Leu Pro Ala Glu Ser Leu
65 70 75 80
Arg Pro Ser Thr Thr Thr Ile Ala Trp Thr Met Met Ser Leu Cys Leu
85 90 95
Ser Val Leu Leu Ser Ala Leu Asp Leu Thr Ile Val Thr Pro Ala Ile

```
            100                 105                 110
Pro Thr Ile Val Gly Ala Phe Lys Thr Ala Ala Gly Tyr Ile Trp Val
        115                 120                 125
Gly Ser Ala Tyr Thr Leu Ala Tyr Ala Ala Ile Thr Pro Val Trp Gly
    130                 135                 140
Ser Val Ser Asp Ile Trp Gly Arg Lys Pro Ile Met Leu Ile Ala Val
145                 150                 155                 160
Ala Val Phe Leu Val Gly Ser Leu Val Cys Ala Leu Ala Arg Asn Met
                165                 170                 175
Asp Ala Leu Ile Ala Gly Arg Ala Leu Gln Gly Leu Gly Gly Ser Gly
            180                 185                 190
Met Gly Ile Met Val Asn Ile Val Val Ser Asp Met Phe Ser Leu Arg
        195                 200                 205
Asp Arg Gly Leu Tyr Leu Ala Ile Thr Ser Leu Val Trp Ala Val Gly
    210                 215                 220
Ser Ala Ile Gly Pro Val Leu Gly Gly Val Phe Thr Thr Arg Leu Ser
225                 230                 235                 240
Trp Arg Trp Cys Phe Trp Ile Asn Cys Glu Ala Phe His Leu Thr
                245                 250                 255
```

<210> 28901
<211> 281
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (275),(277)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28901

```
Ala Tyr Ser Ile Asn Arg Leu Val Pro Val Gly Ala Val Ser Phe Leu
1               5                   10                  15
Val Leu Leu Phe Phe Met Arg Val Pro Ser Pro Arg Thr Pro Ile Ala
            20                  25                  30
Ala Gly Leu Lys Val Ile Asp Trp Thr Gly Ser Leu Leu Ile Val Gly
        35                  40                  45
Gly Ala Leu Met Val Leu Leu Ala Leu Glu Phe Gly Asp Val Gly Tyr
    50                  55                  60
Ser Leu Ser Ser Ala Thr Val Ile Cys Leu Gly Ser Phe Gly Thr Ala
65                  70                  75                  80
Val Met Ala Leu Phe Val Val Asn Glu Trp Lys Met Ala Arg Thr Pro
                85                  90                  95
Leu Ser His Phe Ala Val His Leu Pro Asp Lys Ile Ala Pro Tyr Val
            100                 105                 110
Ala Phe His Val Ile Ile Pro Gly Tyr Gly Gln Ala Tyr Tyr Leu Pro
        115                 120                 125
Leu Tyr Ala Gln Ser Val Leu Thr Ala Ser Ala Leu Thr Ser Gly Leu
    130                 135                 140
Tyr Leu Leu Pro Leu Ile Val Ser Cys Ser Leu Ala Ala Ala Ala Ala
145                 150                 155                 160
Gly Ile Leu Met Gln Gln Thr Gly Lys Tyr Leu Ser Val Met Tyr Val
                165                 170                 175
Ala Gln Gly Phe Leu Val Leu Gly Ser Gly Leu Leu Ile Ser Leu Glu
            180                 185                 190
Phe Glu Ala Ser Ile Thr Lys Leu Val Ile Phe Gln Ile Leu Val Gly
```

```
        195                 200                 205
Phe Gly Val Gly Met Asn Ile Glu Ala Pro Ile Leu Ala Ala Gln Ala
    210                 215                 220
Ala Thr Ser Val Leu Asp Thr Ala Ala Val Thr Ala Thr Met Gly Phe
225                 230                 235                 240
Val Arg Ser Leu Ser Thr Ala Ile Ser Val Val Val Gly Gly Val Val
                245                 250                 255
Phe Gln Asn Glu Met Ser Ser Pro Arg Gly Gly Ser Ile Asn Ser Cys
            260                 265                 270
Arg Tyr Xaa Asn Xaa Pro Arg Ala Leu
        275                 280
```

<210> 28902
<211> 74
<212> PRT
<213> A.fumigatus

<400> 28902

```
Val Thr Ser Lys Thr Gly Ala Pro Ser Arg Arg Ser Met Pro Val Met
1               5                   10                  15
Leu Met Ala Ile Ala Gly Leu Glu Lys Asp Ile Thr Gly Pro Gly Met
            20                  25                  30
Thr Pro Leu Arg Pro Ser Leu Leu Glu Asn Met Gln Val Leu Leu Arg
        35                  40                  45
Leu Val Leu Lys Val Ser Ala Gly Ile Leu Asp Ala Lys Ala Ile Glu
    50                  55                  60
Asp Ser Pro Asn Phe Ser Thr Glu Pro Ala
65                  70
```

<210> 28903
<211> 368
<212> PRT
<213> A.fumigatus

<400> 28903

```
Leu Ser Leu Ile Asp Pro Ser Ser Asn Arg His Leu Met Ile Pro Phe
1               5                   10                  15
Ala Arg Asn Pro His Phe Val Gly Arg Gln Lys Glu Ile Gln Glu Ile
            20                  25                  30
Glu Asp Ser Ile Tyr Ala Pro Asp Gly Leu Lys Lys Leu Ala Ile Thr
        35                  40                  45
Gly Leu Gly Gly Val Gly Lys Thr Gln Ile Ala Leu Glu Leu Ala Tyr
    50                  55                  60
Arg Met Arg Asp Arg Glu Pro Glu Cys Ser Ile Phe Trp Ile Pro Cys
65                  70                  75                  80
Thr Ser Tyr Glu Ala Val Glu Gln Ala Tyr Ile Ser Ile Ala Gln Met
                85                  90                  95
Val Gly Leu His Thr Val Glu Pro Gly Glu Met Lys Glu Arg Leu Gln
            100                 105                 110
Thr Tyr Phe Ser Gln Thr Asp Glu Lys Trp Ile Leu Ile Phe Asp Asn
        115                 120                 125
Ala Asp Glu Met Ala Met Trp Val Lys Gly Ser Pro Ala Ala Pro Ser
    130                 135                 140
Leu Lys Asn Ile Ile Pro Arg Ser Glu Asn Gly His Val Leu Phe Thr
145                 150                 155                 160
Ser Arg Asn Arg Gln Leu Ala Leu Lys Leu Ala Ala Ser Asn Val Val
```

```
                165                 170                 175
Ser Val Pro Asp Val Asp Gln Asn Ile Ala Lys Glu Ile Phe Arg Lys
            180                 185                 190
Leu Leu Ile Arg Lys Asp Leu Leu Gln Asp Asp Tyr Val Thr Ser Ala
        195                 200                 205
Leu Leu Glu Gln Leu Ala Phe Leu Pro Leu Ala Ile Ser Gln Ala Ala
    210                 215                 220
Ala Cys Ile Asn Gln Asn Asp Ile Ser Leu Ala Arg Tyr Met Ser Leu
225                 230                 235                 240
Leu Gly Glu Gln Glu Ala Ser Thr Met Glu Leu Leu Gly Gly Glu Phe
                245                 250                 255
Glu Asp Asp Gly Arg Tyr Ala Gly Ile Gln Asn Thr Val Ala Thr Thr
            260                 265                 270
Trp Leu Ile Ser Phe Leu Gln Ile Gln Gln Val Asp Glu Val Ala Gly
        275                 280                 285
Asp Tyr Leu Ser Phe Met Ala Cys Ile Asn Pro Arg Asp Ile Pro Glu
    290                 295                 300
Ser Ile Leu Pro Pro Thr Thr Ser Thr Lys Arg Lys Val Glu Ala Leu
305                 310                 315                 320
Gly Leu Leu Lys Ala Tyr Ser Phe Val Asn Ala Gln Val Asn Asp Ser
                325                 330                 335
Ile Leu Ser Leu His Arg Leu Val His Leu Ala Thr Arg Asn Trp Leu
            340                 345                 350
Arg Asn Thr Asp Ser Ser Pro Arg Asp Asp Arg Pro Ala Leu Met Tyr
        355                 360                 365
```

<210> 28904
<211> 319
<212> PRT
<213> A.fumigatus

<400> 28904

```
Ile Glu Tyr Thr Tyr Gly Met Val Val Thr Thr Leu Ala Ala Val Glu
1               5                   10                  15
Asp Ser Asn Pro Asp Ile Tyr Val Arg Ile Asp Gly Asp Met Asp Pro
            20                  25                  30
Ile Lys Pro Gly Asp Asp Val Glu Pro Asn Leu Ala Ala Val Pro Pro
        35                  40                  45
Lys Pro Ile Thr Ser Lys Leu Arg Thr Ala Ile Lys His Leu Arg Ala
    50                  55                  60
Arg Ala Gly Pro Trp Ser Arg Phe Arg Gly Met Ser Met Phe Leu Thr
65                  70                  75                  80
Tyr Leu Phe Ala Arg Gly Phe Leu Leu Ser Met Met Pro Phe Glu Leu
                85                  90                  95
Asp Gln Phe Val Phe Gln Phe Ile Phe Gln Met Val Val Gly Val Leu
            100                 105                 110
Leu Ala Asn Leu Gln Leu Ala Trp Val His Ile Val Ile Ser Glu Pro
        115                 120                 125
Ser Pro Lys Arg Phe Tyr Gln Arg Ile Pro Gly Tyr Gln Ala Trp Leu
    130                 135                 140
Lys Ile Ala Pro Val Val Ala Phe Glu His Ala Val Ala Gly Leu Ala
145                 150                 155                 160
Phe Tyr Val Pro Leu Ile Val Met Asn Ala Tyr Gly Leu Leu Glu Lys
                165                 170                 175
Leu Ala Ser Ala Pro Asp Asp Gly Val Pro Pro Ala Glu Thr Val Arg
            180                 185                 190
```

```
Gln Ala Leu Thr Val Val Ala Leu Pro Ser Leu Leu Ser Leu Ile Ala
        195                 200                 205
Ser Ile Pro Ala Arg Val Val Phe Ile Arg Val Ala Ala Ser Met Leu
    210                 215                 220
Pro Glu Glu Asp Glu Ser Ile Val Pro Phe Asp Arg Ser Phe Gly Gly
225                 230                 235                 240
Lys Val Ala Pro Ala Ile Leu Gly Gly Ser Gly Lys Leu Ser Ile Thr
                245                 250                 255
Asp Ala Trp Lys Thr Phe Asp Arg Ala Ala Ala Arg Ile Arg Phe Leu
            260                 265                 270
Lys Val Val Gly Lys Val Met Ala Leu Glu Ser Gly Val Phe Val Phe
        275                 280                 285
Phe Ser Leu Ala Leu Ala Gly Glu Ile Tyr Met Gly Ala Glu Ala Leu
    290                 295                 300
Met Lys Ile Ile Ala Asp Met Ile Ala Arg Ser Gly Gly Ser Ala
305                 310                 315

<210> 28905
<211> 289
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (83)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28905
Leu Tyr Leu Ser Ala Asp Ala Ser Thr Pro Cys Gly Glu Asp Thr Thr
1               5                   10                  15
Ser His Pro Asp Tyr Ile Arg Phe Tyr Asn Ser Leu Trp Leu Val Ala
            20                  25                  30
Asn Asp Val Ile Ile Gly Ile Ala Leu Gly Ser Tyr Ile Ile Asp Asn
        35                  40                  45
Ala Asn Trp Val Ala Phe Gln Ile Asn Ser Val Leu Thr Gly Trp Thr
    50                  55                  60
Val Lys Gly Leu Gln Arg Thr Ile Ser Trp Leu Met Asp Trp Pro Ala
65                  70                  75                  80
Gly Leu Xaa Leu Asn Asn Glu Leu Ala Ala Phe Leu Gly Asp Leu Phe
                85                  90                  95
Leu Trp Val Ile Glu Asn Trp Ala Gly Met His Phe Leu Leu Leu Asp
            100                 105                 110
Leu Leu Phe Ser Phe Ala Asn Phe Gly Ala Ala Cys Ile Ala Asn Leu
        115                 120                 125
Gln Pro Tyr Leu Pro His Val Ile Tyr Val Val Gly Cys Ser Ser Phe
    130                 135                 140
Ala Gly Ala Ser Met Pro Ile Ala Leu Phe Ser Asp Leu Val Ser Ile
145                 150                 155                 160
Leu Thr Val His Ile Tyr Ser Phe Tyr Val Ala Ser Ala Arg Ile Phe
                165                 170                 175
Asn Trp Gln Leu Thr Ile Ile Ile Ser Leu Phe His Leu Phe Arg Gly
            180                 185                 190
Lys Lys Arg Asn Val Leu Arg His Arg Ile Tyr Ser Cys Asp Tyr Asp
        195                 200                 205
Leu Asp Gln Leu Leu Leu Gly Thr Ile Leu Phe Thr Val Leu Phe Phe
    210                 215                 220
```

```
Leu Leu Pro Thr Val Ile Val Phe Tyr Leu Thr Phe Ala Ser Ala Arg
225                 230                 235                 240
Met Leu Ile Ile Ser Leu Lys Ala Ala Leu Asp Thr Cys Leu Ala Phe
                245                 250                 255
Leu Asn His Phe Pro Leu Phe Ala Leu Met Leu Arg Val Lys Asp Ser
            260                 265                 270
Arg Arg Leu Pro Ser Met Leu Val Leu Leu Ile Cys Leu Ile Ser Ser
        275                 280                 285
His
```

<210> 28906
<211> 81
<212> PRT
<213> A.fumigatus

<400> 28906

```
Leu Phe Thr Gly Arg Phe Val Pro Pro Ile His Arg Arg Asn Leu Tyr
1               5                   10                  15
Ser Met Gln Tyr Ser Met Leu Pro Ala His Arg Ala Gly Met Ala Glu
            20                  25                  30
Val Trp Ser Leu Leu Thr Gln Pro Arg Lys Thr Ser Ser Gly Ser Ser
        35                  40                  45
Gly Ser Ser Ser Met Gly Gly Val Thr Ala Ala Asn Gly Leu Val Arg
    50                  55                  60
Ile Pro Ser Gly Phe Gly Gln Gly Asp Val Arg Arg Arg Gly Tyr Arg
65                  70                  75                  80
Tyr
```

<210> 28907
<211> 60
<212> PRT
<213> A.fumigatus

<400> 28907

```
Asn Thr Leu Pro Asp Leu Thr Ser Ser Ala Gly Thr Asn His Ile Lys
1               5                   10                  15
Ala Ile Leu Tyr Lys Ser Leu Gly Ile Asp Ser Arg Thr Ile Leu Ala
            20                  25                  30
Leu Ala Ala Val Tyr Gly Thr Val Ala Phe Leu Thr Asn Cys Leu Thr
        35                  40                  45
Thr Lys Tyr Leu Thr Asp Gln Trp Gly Arg Arg Lys
    50                  55                  60
```

<210> 28908
<211> 73
<212> PRT
<213> A.fumigatus

<400> 28908

```
Ser Asn Gly Ala Ser Gly Arg Val Ala Phe His Cys Gln Cys Ser Arg
1               5                   10                  15
Ser Val Pro Ser Thr Leu Pro Ala Gly Tyr Met Ala Met Glu Leu Arg
            20                  25                  30
Leu Ser Glu Cys Ala Val Thr Glu Ala Gly Pro Ser Ala Phe Ala Asn
```

```
        35                  40                  45
Ile His Glu Asn Tyr Tyr Tyr Val Phe Val Ala Cys Thr Ala Phe Phe
    50                  55                  60
Phe Val Val Ala Tyr Phe Tyr Phe Pro
65                  70
```

<210> 28909
<211> 62
<212> PRT
<213> A.fumigatus

<400> 28909

```
Ala Asn Pro His Leu Arg His Arg Met Ile Leu Thr Gly Leu Gly Gly
1               5                   10                  15
Ile Ile Leu Ile Glu Ile Tyr Ala Ala Val Met Gln Arg Glu Phe Gln
            20                  25                  30
Asn Thr Asn Asn Arg Val Gly Lys Gly Phe Ala Ile Leu Gly Ile Tyr
        35                  40                  45
Met Phe Val Val Ile Tyr Cys Thr Ser Phe Leu Ser Leu Ser
    50                  55                  60
```

<210> 28910
<211> 98
<212> PRT
<213> A.fumigatus

<400> 28910

```
Gly Ser Leu Glu Pro Cys Tyr Phe Glu Pro Val Gly Ser Phe Gln Pro
1               5                   10                  15
Arg Gly Glu Asp Val Ile Met Phe Ala Gly Leu Val Thr Phe Met Pro
            20                  25                  30
Asn Ser Pro Arg His Leu Ile Arg Lys Gly Lys Ile Glu Gln Ala Arg
        35                  40                  45
Ser Glu Phe Val Arg Ile Arg Arg Asp Leu Arg Ser Asp Asp Val His
    50                  55                  60
Arg Glu Phe Glu Leu Met Leu Ala Gln Ile Lys Tyr Glu Lys Glu Arg
65                  70                  75                  80
Glu Ile Thr Ser Tyr Arg Glu Ile Phe Arg Leu Phe Arg His Arg Val
                85                  90                  95
Leu Val
```

<210> 28911
<211> 64
<212> PRT
<213> A.fumigatus

<400> 28911

```
Cys Thr Ala Ser Glu Thr Lys Gln Lys Thr Leu Glu Glu Ile Ala Ala
1               5                   10                  15
Ser Phe Gly Asp Lys Val Ile Leu Pro Glu Asp Gln Gly Asp Gln Gln
            20                  25                  30
Gly Glu Asn Asp Glu Asp Glu Asp Glu Asp Val Lys Lys Val Lys Pro
        35                  40                  45
Asn Ser Gln Gln Ile Glu Val Ala Val Ala Gly Arg Asp Gly Ser Val
    50                  55                  60
```

<210> 28912
<211> 67
<212> PRT
<213> A.fumigatus

<400> 28912
Tyr Val Leu Thr Leu Val Pro Arg Thr His Ala Pro Ser Ser Leu Val
1 5 10 15
Val Gly Val Leu Arg Lys Lys Thr Lys Tyr Pro Pro Pro Lys Ala Arg
20 25 30
Pro Leu Pro Ile Arg Ile Ala Gln Leu Leu Leu Gln Thr Glu Lys Lys
35 40 45
Gly Ala Lys Ala Ile Ser Tyr Phe Leu Leu Val Gln Leu Pro Arg Ser
50 55 60
Asn Gly Ser
65

<210> 28913
<211> 85
<212> PRT
<213> A.fumigatus

<400> 28913
Gln Arg His Cys Lys Leu Ala Ser Asp Thr Thr Leu Asp Asn Asn Leu
1 5 10 15
Gly Trp Ser Leu Pro Gln Gly Val Cys Ala Ala Ala Asp Asp Glu Asp
20 25 30
Gly Asp Glu Ala Ala Ser Ala Val Met Thr Thr Met Thr Thr Trp Pro
35 40 45
Val Glu Thr Asp Tyr Pro Ser Asp Tyr Leu Ser Ser Trp Ser Leu Trp
50 55 60
Ala Gly Leu Thr Pro Ile Thr Thr Thr Thr Ala Ala Ala Ala Ala Thr Ile
65 70 75 80
Thr Ile Ser Gly Leu
85

<210> 28914
<211> 87
<212> PRT
<213> A.fumigatus

<400> 28914
Asp Leu Val Tyr Gly Thr Phe Phe Ile Glu Asn Leu Thr Lys Leu Leu
1 5 10 15
Trp Asp Tyr Trp Ser Tyr Leu Gly Thr Leu Gly Thr Phe Ile Leu Asp
20 25 30
Gly Ser Glu Val Gly Ile Met Gly Thr Tyr Tyr Cys Tyr Leu Ala Gly
35 40 45
Tyr Gly Leu Leu Thr Ile Leu Phe Tyr Gly Val Phe Thr His Gly Phe
50 55 60
Thr Asp Pro Leu Gln His Ser Leu Phe Ser Arg Leu Ser Gly Ala Ser
65 70 75 80
His Arg Ala Arg Thr Ala Ser
85

<210> 28915
<211> 72
<212> PRT
<213> A.fumigatus

<400> 28915
Ser Thr Gly Lys Trp Thr Ile Gln Asn Thr Asp Ser Leu Thr Leu Tyr
1 5 10 15
Ala Phe Ala Lys Tyr Val Gln Asn Ala Leu Gly Asn Ile Tyr Pro His
20 25 30
Leu Pro Leu Ala Pro Pro Pro Pro Thr Ser Ala Thr Ile Leu Phe Lys
35 40 45
Ile Gly Asp Leu Phe Thr Leu Tyr Asn Lys Gly Thr Val Asn Trp Pro
50 55 60
Gln Thr Pro Pro Ser Thr Thr Thr
65 70

<210> 28916
<211> 121
<212> PRT
<213> A.fumigatus

<400> 28916
Leu Thr Ala Phe Ile Asp Ile Val Pro Ile Val Met Ala Gly Ile Ile
1 5 10 15
Gly Ile Tyr Gly Leu Val Val Ser Val Leu Ile Ala Asn Asp Leu Gly
20 25 30
Gln Ser Val Pro Leu Tyr Thr Gly Phe Ile Gln Leu Gly Ala Gly Leu
35 40 45
Ala Val Gly Leu Ala Gly Met Ala Ala Gly Tyr Val Pro Pro Ser Arg
50 55 60
Thr Pro Ser Ser Asn Ser Val Ser Asn Gln Leu Thr Leu Val Ser Cys
65 70 75 80
Ser Phe Ala Ile Gly Ile Val Gly Asp Ala Gly Val Arg Gly Thr Ala
85 90 95
Gln Gln Pro Arg Leu Tyr Val Gly Met Ile Ser Ile Leu Ile Phe Ala
100 105 110
Glu Val Leu Gly Glu Tyr His Asp Met
115 120

<210> 28917
<211> 131
<212> PRT
<213> A.fumigatus

<400> 28917
Pro Phe Phe Gly Ala Leu Gly Cys Thr Ser Ala Ile Val Phe Thr Cys
1 5 10 15
Phe Gly Ala Ala Tyr Gly Thr Ala Lys Ala Gly Val Gly Val Cys Gly
20 25 30
Met Ala Val Leu Arg Pro Asp Leu Ile Val Lys Ser Met Phe Thr Ala
35 40 45
Ser Tyr Arg Phe Gly Arg Pro Asp Asp Val Leu Thr Asp Gly Phe His
50 55 60
Arg Tyr Arg Ser His Cys His Gly Trp Tyr His Trp Tyr Leu Trp Thr
65 70 75 80

```
Gly Arg Ile Arg Leu Asp Arg Lys Arg Leu Gly Ser Glu Arg Ser Val
                85                  90                  95
Val His Arg Val His Ser Val Gly Cys Arg Pro Gly Arg Arg Ser Arg
            100                 105                 110
Arg Tyr Gly Ser Trp Val Cys Ser Thr Ile Thr Asn Ser Leu Leu Lys
        115                 120                 125
Phe Cys Glu
    130
```

<210> 28918
<211> 83
<212> PRT
<213> A.fumigatus

<400> 28918

```
Tyr Leu Ser Asp Ile Met Ala Pro Met Ser Ile Ala Asp Leu Val Ala
1               5                   10                  15
Ala Leu Pro Ala Glu Asp Thr Trp Gly Pro Ala Thr Pro Ser Asp Asn
            20                  25                  30
Met Leu Asp Gly Val Pro Tyr Ala Pro Phe Ser Lys Gly Asp Lys Leu
        35                  40                  45
Gly Arg Met Ala Asp Trp Thr Gly Asp Gly Asn Asp Arg Asp Arg Ser
    50                  55                  60
Gly Arg Gln Ala Tyr Asn Arg Asn Tyr Arg Gly Glu Pro Asn Arg Pro
65                  70                  75                  80
Ala Arg Arg
```

<210> 28919
<211> 504
<212> PRT
<213> A.fumigatus

<400> 28919

```
Asp Leu Leu Ile Gly Leu Arg Asn Val Met Met Ala Ser Pro Asn Ser
1               5                   10                  15
Leu Ser Ser Ala Tyr Thr Ser Gly Leu Arg Arg Gln Pro Ser Leu Arg
            20                  25                  30
Gln Met Ser Thr Leu Ser Arg Ser Asn Ser Arg His Thr Ser Pro Ala
        35                  40                  45
Leu Asp Tyr His Thr Thr Ser Arg Asn Glu Gly Val Ser Ile Ser Arg
    50                  55                  60
Gln Tyr Ser Ala Gly Asp Ser Ser Asp Asp Glu Val Pro Glu Pro Lys
65                  70                  75                  80
Phe Ser Ala Ser Val Lys Ala Leu Leu Asp Glu Asp Gly Leu Gly Ser
                85                  90                  95
Ser Pro His Leu Lys Tyr Ser Ser Asn Glu Arg Pro Ser Ser Thr Glu
            100                 105                 110
Arg Ala Met Ser Ala Ala Thr Ser Gln Ser Arg Gln Ser Arg Thr Ser
        115                 120                 125
Ser Pro Leu Asp Arg Ser Thr Gly Ser Pro Ala Pro Arg Val Val Arg
    130                 135                 140
Ile Ala Pro Ala Leu Ala Asn Asn Asn Arg His Ala Arg Glu Gly Ser
145                 150                 155                 160
Pro Leu Ala Gln Ser Glu Ser Ala Gly Ser Ser Ala Asn Tyr Ser Ser
                165                 170                 175
```

```
Lys Glu Leu Ile Thr Pro Ala Pro Arg Pro Arg Ser Val Arg Ile Thr
            180                 185                 190
Gly Ser Arg Ser His Thr Arg Ser Pro Thr Ser Glu Ser Pro Ser Gln
        195                 200                 205
Lys Arg Ser Ala Asp Arg Ser Ser Val His Glu His Ser Ser Ala Glu
    210                 215                 220
Arg Ser Glu Asn Gly Arg Thr Val Asn Tyr Glu Asp Asp Tyr Ala Pro
225                 230                 235                 240
Arg Phe Ser Thr Ala Ser Val Leu Arg Ser Arg His Gly Asp Asp Val
                245                 250                 255
Gly Met Gln Ser Ser Leu Arg Val Lys Arg Val Gly Arg Leu Thr Gly
            260                 265                 270
Thr Phe Leu Asn Gly Pro Ala Arg Arg Gly Val Leu Arg Arg Gln Ser
        275                 280                 285
Glu Glu Asn His Asp Pro Gln Ser Tyr Ser Ala Glu Arg His Arg Glu
    290                 295                 300
Ser Ser Leu Asp Pro Asn Asp Asp Asn Ala Glu Tyr Arg Tyr Asn Ala
305                 310                 315                 320
Lys Thr Arg Thr Ser Ser Ser Pro Lys Val Thr Trp Ala Asp Pro Ser
                325                 330                 335
Pro Ser Gln Glu Ala Glu Arg Pro Arg Ala Tyr Asp Pro Ala Ser Ala
            340                 345                 350
Ser Ser Gly Glu Gly Pro Phe Ser Arg Ser Ser Ser Pro Arg Ser Ser
        355                 360                 365
Gly Ser His Ser Lys Ser Thr Pro Gly Ser Ala Ser Glu Met Ser Ser
    370                 375                 380
Lys Pro Ser Ser Ala His Glu Glu Pro Val Phe Lys Val Pro Pro Leu
385                 390                 395                 400
Pro Gln Leu Pro Ala Thr Arg Asp Gln Glu Asn Glu Pro Pro Pro Thr
                405                 410                 415
Phe Lys Arg Asp Lys Pro His Gly Leu Ser Leu Leu Ser Lys Pro Glu
            420                 425                 430
Lys Leu Ser Val Val Tyr Gly Asp Asp Lys Lys Asp Asn Glu Glu Thr
        435                 440                 445
Pro Ala Gly His Ser Pro Arg Lys Ile Leu Ala Thr Arg Ser Ser Asn
    450                 455                 460
Thr Pro His Arg Pro Ala Pro His Pro Pro Lys Met Ser Met Leu Glu
465                 470                 475                 480
Thr Ala Thr Ala Thr Gly Gly Ala Ala Thr Ala Cys Pro Cys Leu His
                485                 490                 495
Ala Lys Ala Gly Arg Lys Arg Val
            500
```

<210> 28920
<211> 72
<212> PRT
<213> A.fumigatus

<400> 28920

```
Met Ser Asp Leu Pro Thr Val Leu Pro Tyr Gln Leu Asp Asp Asp Gly
1               5                   10                  15
Leu Leu Tyr Met Thr Lys His Arg Leu Ile Ser Glu Gly Ile Thr Glu
            20                  25                  30
Glu Pro Trp Ile Tyr Ile Pro Arg Pro Leu Ala Lys Asp Met Phe Arg
        35                  40                  45
Leu Ile His Asp Lys Trp Asn His Gln Gly Ile Asp Lys Cys Leu Ala
```

```
    50                  55                  60
Ser Leu Asn Gly Phe Thr Leu Tyr
65                  70

<210> 28921
<211> 78
<212> PRT
<213> A.fumigatus

<400> 28921
Gly Arg Cys Ile Leu Cys Gln Tyr Ile Glu His Tyr Pro Val Cys Leu
1               5                   10                  15
Gln Asn Lys Ile Arg His Tyr Lys Leu Tyr Arg Ser Leu Gln Pro Leu
            20                  25                  30
Gln Val Pro Pro Ala Leu Phe Lys Ile Ile Thr Ile Asp Phe Ile Val
        35                  40                  45
Gly Leu Pro Asp Asp Asn Gly Tyr Asp Gln Leu Leu Val Ile Ile Asn
    50                  55                  60
Lys Phe Ser Lys Arg Val Ser Leu Ile Pro Gly Lys Ser Thr
65                  70                  75

<210> 28922
<211> 84
<212> PRT
<213> A.fumigatus

<400> 28922
Lys Gly Tyr Phe Thr Val Leu Lys Ala Arg Trp Leu Tyr Ser Ala Ala
1               5                   10                  15
Phe His Pro Gln Thr Asn Gly Gln Thr Glu Arg Val Ile Gln Val Ile
            20                  25                  30
Lys Val Met Leu Arg His Ser Tyr Thr Thr Ala Glu Gln Pro Asp Leu
        35                  40                  45
Phe Arg Trp Thr Ile Asp Leu Pro Ser Ile Ile Ser Thr Ile Asn Gly
    50                  55                  60
Ser Leu Asn Glu Ser Thr Asn Ala Thr Pro His Gln Leu Leu Phe Ser
65                  70                  75                  80
Ile Asn Leu Cys


<210> 28923
<211> 182
<212> PRT
<213> A.fumigatus

<400> 28923
Leu Asp Ala Glu Glu Ser Ile Lys Tyr Thr Ser Ile Arg Met Lys Glu
1               5                   10                  15
Ile Tyr Asp Arg Asn His Lys Pro Ile Lys Phe Arg Val Gly Asp Gln
            20                  25                  30
Val Tyr Val Arg Leu Tyr Arg Gly Tyr Ser Leu Pro Thr Lys Gln Ala
        35                  40                  45
Asn Tyr Lys Leu Gln Leu Gln Asn Ala Gly Pro Phe Arg Val Leu Glu
    50                  55                  60
Arg Val Gly Arg Leu Ala Tyr Tyr Ile Lys Leu Pro Ser Thr Trp Lys
65                  70                  75                  80
```

```
Ile His Pro Val Leu Ser Val Ala His Leu Glu Pro Ala Pro Ala Thr
                85                  90                  95
Pro Asp Pro Phe His His Glu Leu Pro Lys Pro Pro Ala Val Ile Asp
            100                 105                 110
Ala Glu Val Tyr Pro Gly Glu Asp Asp Ile Tyr Lys Val Lys Arg Leu
        115                 120                 125
Leu Asp Lys Arg Thr Val Gln Arg Gly Arg Lys His Thr Pro Tyr Val
    130                 135                 140
Glu Tyr Leu Val Arg Trp Lys Gly Tyr Gly Pro Glu Asp Asp Gln Trp
145                 150                 155                 160
Val His Lys Asp Asp Leu Gln Gly Ser Leu Lys Leu Ile Glu Ala Phe
                165                 170                 175
Glu His Asn Arg Pro Met
            180
```

<210> 28924
<211> 296
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (28),(91),(154)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28924

```
Tyr Pro Thr Asn His Phe Leu Tyr Lys Gly Thr Leu Ala Val Asn Arg
1               5                   10                  15
Leu Asp Phe Lys Tyr His Pro Val Ala Met Ala Xaa Ile Phe Lys Ser
            20                  25                  30
Leu Ala Leu Val Ser Ala Leu Phe Ala Ala Ile Ser Ser Ala Ala Pro
        35                  40                  45
Val Asn Leu Asp Lys Arg Glu Val Asp Val Val Trp Thr Thr Val Thr
    50                  55                  60
Thr Val Val Trp Thr Thr Ile Asp Val Thr Thr Thr Ile Tyr Pro Thr
65                  70                  75                  80
Pro Gln Ala Pro Thr Pro Pro Val Val Glu Xaa Thr Pro Thr Pro Thr
                85                  90                  95
Pro Ser Ala Ala Pro Glu Gln Ala Glu Pro Ile Glu Thr Ser Thr Gln
            100                 105                 110
Pro Glu Thr Thr Lys Ser Gln Pro Thr Gln Pro Ser Val Gly Thr Phe
        115                 120                 125
Ile Pro Val Ala Ala Ala Ala Ala Ala Ala Ala Asp Ser Ala Ala Pro
    130                 135                 140
Ile Pro Glu Glu Pro Ala Pro Gln Pro Xaa Thr Thr Ala Ala Pro Ser
145                 150                 155                 160
Thr Ser Thr Thr Thr Gln Ala Ala Pro Ser Ala Pro Pro Ala Ala Asn
                165                 170                 175
Ser Gly Ser Thr Glu Lys Ala Ala Ser Ser Gly Tyr Ser Gly Pro Cys
            180                 185                 190
Ser Lys Gly Ser Pro Cys Val Gly Gln Leu Thr Tyr Tyr Asp Thr Ala
        195                 200                 205
Thr Ser Ala Ser Ala Pro Ser Ser Cys Gly Leu Thr Asn Asp Gly Phe
    210                 215                 220
Ser Glu Asn Val Val Ala Leu Pro Val Gly Ile Met Thr Asp Ala Asp
225                 230                 235                 240
```

```
Cys Gly Lys Thr Val Thr Ile Thr Tyr Asn Gly Ile Thr Lys Thr Ala
                245                 250                 255
Thr Val Val Asp Lys Cys Met Gly Cys Lys Pro Thr Asp Leu Asp Ala
            260                 265                 270
Ser Arg His Leu Phe Gly Glu Leu Ala Asp Phe Ser Ala Gly Arg Ile
        275                 280                 285
Asp Gly Met Ser Trp Tyr Phe Asn
    290                 295
```

<210> 28925
<211> 131
<212> PRT
<213> A.fumigatus

<400> 28925

```
Val Ala Leu Phe Ser Ala Arg Leu Ala Pro Val Leu Ser Lys Leu Ser
1               5                   10                  15
Gly Pro Ala Ala Glu Val Lys Ser Ile Cys Leu Thr Met Val Ser Ala
            20                  25                  30
Gly Leu Asp Thr Val Pro Gly Asn Leu Ile Met Gly Ile Ala Tyr Leu
        35                  40                  45
Ala Ser Glu Ala Gly Gln Arg Ile Gln Gln Lys Ala Tyr Glu Glu Ile
    50                  55                  60
Leu Lys Val Tyr Pro Asn Gly Asp Ala Trp Glu Lys Cys Leu Val Glu
65                  70                  75                  80
Glu Lys Val Pro Tyr Ile Thr Ala Leu Val Lys Glu Thr Leu Arg Phe
                85                  90                  95
Trp Thr Val Ile Pro Ile Cys Leu Pro Arg Glu Ser Thr Lys Asp Ile
            100                 105                 110
Val Tyr Asn Gly Ala Thr Ile Pro Ala Gly Thr Thr Phe Phe Met Val
        115                 120                 125
Ser Arg Tyr
    130
```

<210> 28926
<211> 64
<212> PRT
<213> A.fumigatus

<400> 28926

```
Lys Thr Asn Arg Glu Ala Glu Gly Phe Arg Val Arg Arg Asp Lys Tyr
1               5                   10                  15
Leu Thr Phe Leu Leu Asp Met Leu Lys Glu Arg Ile Ala Lys Gly Thr
            20                  25                  30
Asp Lys Pro Cys Ile Thr Gly Asn Ile Leu Lys Asp Pro Glu Ala Lys
        35                  40                  45
Leu Asn Glu Gly Lys Trp Pro Cys Ser Arg Leu Asp Trp Arg Arg Cys
    50                  55                  60
```

<210> 28927
<211> 72
<212> PRT
<213> A.fumigatus

<400> 28927

```
Phe Arg Pro Arg Ala Glu Ser Pro His Phe Pro Ser Ala Phe Val Phe
```

```
1               5                   10                  15
Arg Pro Pro Pro Arg Pro Leu Glu Ser Leu His His Phe Tyr Asn Ile
            20                  25                  30
Ile Leu Phe Thr Thr Met Asp His Thr Gln Thr Pro Leu Val Pro Asp
        35                  40                  45
Ser Trp Pro Asn Ala Arg Asp Glu Asp Ala Arg Pro Arg Lys Arg Arg
    50                  55                  60
Leu Lys Tyr Ile Thr Lys Ala Trp
65                  70
```

<210> 28928
<211> 68
<212> PRT
<213> A.fumigatus

<400> 28928

```
Ala Ser Gly Tyr His Gly Pro Pro Pro Thr Ile Arg Thr Asn Ser Pro
1               5                   10                  15
Arg Ser Asn Glu Cys Lys Arg Arg Lys Ile Lys Cys Asn Gly Gln Ser
            20                  25                  30
Pro Cys Gln Arg Cys Gly Arg Gln Gln Ile Glu Cys Val Tyr Ala Gly
        35                  40                  45
Arg Thr Arg Pro Pro Asp Ser Ser Asp Gln Gln Tyr Val His Ala Leu
    50                  55                  60
Ile His Ser Ile
65
```

<210> 28929
<211> 124
<212> PRT
<213> A.fumigatus

<400> 28929

```
Asn Ala Tyr Ala Ala Asp Tyr Asp Asp Glu His Phe Lys Met Pro Asp
1               5                   10                  15
Lys Phe Ile Pro Glu Arg Tyr Leu Asp Val Ser Glu Gly Ser Gly Thr
            20                  25                  30
Pro His Tyr Gly Tyr Gly Ala Gly Ser Arg Met Cys Ala Gly Ser His
        35                  40                  45
Leu Ala Asn Arg Glu Leu Tyr Thr Ala Tyr Ile Arg Leu Ile Thr Ala
    50                  55                  60
Phe Thr Met His Pro Ala Arg Asp Pro Ala Asp Gln Pro Ile Leu Asp
65                  70                  75                  80
Ala Ile Glu Cys Asn Ala Ile Pro Thr Ala Leu Thr Thr Glu Pro Lys
                85                  90                  95
Pro Phe Lys Val Gly Phe Lys Pro Arg Asp Ala Ser Lys Leu Gln Gln
            100                 105                 110
Trp Ile Ala Glu Ser Asp Glu Arg Thr Lys Glu Leu
        115                 120
```

<210> 28930
<211> 120
<212> PRT
<213> A.fumigatus

<400> 28930

```
Val Glu Gly Ser Ala Tyr Leu Leu Asn Phe Pro Phe Gln Pro Ala Ser
1               5                  10                  15
Thr Phe Asp Thr Glu Gly Ala Phe Ser Ser Pro Ser Pro Phe Phe Ile
            20                  25                  30
Thr Tyr Ser Asp Lys Leu Leu Asp Ser Thr Ser Pro Gln Pro Thr Ile
        35                  40                  45
Asp Ala Thr Thr Leu Asp Leu Leu Ser Pro His Ser Thr His Ala Ser
    50                  55                  60
Leu Ile Lys His Ala Phe Ser Pro Ser Gly Gln Lys Ala Arg Pro Leu
65                  70                  75                  80
Arg Phe Asp Val Asn Gly Arg Lys Gly Arg Arg Ala Ile Cys Val Leu
                85                  90                  95
Tyr Gly Asp Gly Leu Arg Tyr Glu Val Leu Asp Met Asp Ala Glu Leu
            100                 105                 110
Ala Asp Glu Asp Glu Glu Ser Glu
        115                 120
```

<210> 28931
<211> 66
<212> PRT
<213> A.fumigatus

<400> 28931

```
Ser Val Asp Pro Cys Gly Glu Asp His Arg Gln Trp Leu Gln Ala Gly
1               5                  10                  15
Ala Gly Val Thr Ser Tyr Ser Lys Pro Glu Arg Glu Phe Ala Glu Thr
            20                  25                  30
Cys Glu Lys Leu Glu Ser Val Ala Pro Phe Val Ile Pro Gln Arg Asp
        35                  40                  45
Ser Leu Gly Leu Lys Ser Arg Val Arg Arg Ala His Leu Arg Ser Gln
    50                  55                  60
Arg Cys
65
```

<210> 28932
<211> 167
<212> PRT
<213> A.fumigatus

<400> 28932

```
Tyr Lys Tyr Leu Arg Ile Arg Arg Leu Leu Lys Gly Glu Asp Ser Gly
1               5                  10                  15
Arg His Leu Lys Met Lys Thr Leu Ser Ser Thr Ala Phe Ile Ser Leu
            20                  25                  30
Leu Ala Phe Thr Thr Ala Ala Glu Ala Ile Phe Asp Asn Val Thr Val
        35                  40                  45
Phe Ala Pro Pro Ser Asn Trp Pro Ser His Arg Thr Ser Tyr Gly Arg
    50                  55                  60
Thr Leu Leu Leu Asp His Thr Lys Thr Asp Pro Val Leu Leu Ser Thr
65                  70                  75                  80
Trp Ser Phe Ser Pro Pro Asp Gly Thr Tyr Leu Pro Ile Tyr Arg Ser
                85                  90                  95
Thr Asp Gly Gly Gln Thr Trp Ser Asp Phe Ser Lys Val His Phe Ser
            100                 105                 110
Asn Asn Gly Gly Tyr Val Gly Gly Ser Ile Trp Gln Pro Phe Leu Tyr
        115                 120                 125
```

```
Glu Leu Pro Arg Gln Val Gly Gln Tyr Pro Arg Gly Thr Ile Leu Ala
    130                 135                 140
Ser Gly Asn Ala Ile Pro His Asp Phe Ser Ser Thr Asn Ile Glu Val
145                 150                 155                 160
Tyr Ala Ser Leu Asp Arg Gly
                165
```

<210> 28933
<211> 234
<212> PRT
<213> A.fumigatus

<400> 28933

```
Arg Phe Ser Trp Glu Phe Val Ser Val Val Ala Thr Gly Gly Pro Pro
1               5                   10                  15
Asn Thr Thr Asn Gly Ala Thr Pro Val Trp Glu Pro Phe Ile Ser Met
            20                  25                  30
Tyr Glu Asp Glu Leu Thr Val Tyr Tyr Ser Asp Gln Arg Asp Pro Leu
        35                  40                  45
His Gly Gln Lys Leu Ala His Gln Ser Thr Arg Asp Leu Val His Trp
    50                  55                  60
Gly Pro Val Val Asn Asp Ala Ala Tyr Ala Asn Tyr Thr Leu Arg Pro
65                  70                  75                  80
Gly Met Thr Thr Val Ala Arg Ile Gly Asn Gly Lys Tyr Leu Leu Ser
                85                  90                  95
Tyr Glu Leu Gly Asn Ala Pro Asp Val Pro Tyr Ala Val His Tyr Arg
            100                 105                 110
Ile Ala Asp Asn Pro Leu Lys Phe Asp Glu Ala Thr Pro Tyr Leu Leu
        115                 120                 125
Gln Ser Arg Asp Gly Thr Ile Pro Ser Ala Cys Pro Tyr Thr Val Trp
    130                 135                 140
Thr Pro Val Gly Gly Pro His Gly Thr Ile Val Met Ser Asp Gly Thr
145                 150                 155                 160
Tyr Ser Glu Val Phe Ile Asn Arg Asp Asn Gly Asn Pro His Ala Trp
                165                 170                 175
Ile Lys Val Pro Thr Gly Lys Gly Val Ala Tyr Ser Arg Ala Leu Thr
            180                 185                 190
Val Met Pro Asp Pro Ser Val Ile Leu Phe Phe Asn Gly Gly Leu Tyr
        195                 200                 205
Gly Glu Asn Asn Thr Thr Val Thr Ala Gly Glu Trp Ile Val Pro Arg
    210                 215                 220
His Gln Arg Ser Ala Arg Gln Val Ala Arg
225                 230
```

<210> 28934
<211> 78
<212> PRT
<213> A.fumigatus

<400> 28934

```
Ala Pro Cys Pro Leu Lys Ile Pro Arg Gly Ile Thr Asn Asp Asn Ser
1               5                   10                  15
Ser Ser Ala His Ala Leu His Ala Gly Trp Asn Ser Arg Asn Ser Asn
            20                  25                  30
Ser Val Arg Thr Arg Thr Ile Ala Ala Ala Leu Tyr Asn Met Ser Ser
        35                  40                  45
```

```
Gln Thr Ser Gln Ile Ile Gly Ser Asn Ile Tyr His Asp Cys Glu Cys
    50                  55                  60
Gly Gln Ile Pro Ser Met Arg Ala Leu Cys Ser Leu Ala Asn
65                  70                  75

<210> 28935
<211> 78
<212> PRT
<213> A.fumigatus

<400> 28935
Ala Ser Thr Phe Val Lys Ile Ala Asp Ala Pro Arg Tyr Ile Ala Gly
1               5                   10                  15
Asn Arg Thr Leu Leu Ile Ile Ile Cys Thr Asn Ile Val Leu Tyr Ala
            20                  25                  30
Leu Thr Lys Leu Tyr Tyr Val Met Gln Asn Arg Arg Arg Asp Met Lys
        35                  40                  45
Trp Gln Ala Met Thr Glu Asp Gln Arg Val Asp Tyr Val Ala Thr Thr
    50                  55                  60
Gln Asp Gln Gly Asn Arg Arg Leu Asp Phe Arg Phe Ala His
65                  70                  75

<210> 28936
<211> 67
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (4)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28936
Gly Pro Leu Xaa Gln Gly Phe Cys Tyr Thr Ala Ala Ser Phe Ala Asp
1               5                   10                  15
Ile Leu Ala Gly Phe Leu Ala Phe Gly Ile Leu His Leu Arg Gly Val
            20                  25                  30
Gly Gly His Ala Gly Trp Arg Trp Leu Phe Leu Ile Glu Val Cys Thr
        35                  40                  45
Arg Pro Ser Pro Phe Val Leu Met Leu Ile Ile Tyr Thr Asn Arg Gly
    50                  55                  60
Cys Ser His
65

<210> 28937
<211> 104
<212> PRT
<213> A.fumigatus

<400> 28937
Asp Pro Ser Lys Gly Thr Met His Asn Arg Gln Pro Leu Thr Leu Lys
1               5                   10                  15
Leu Ile Trp Gln Ser Phe Lys Asp Tyr His Ile Trp Pro Leu Tyr Ile
            20                  25                  30
Ile Arg Leu Leu Phe Leu Ile Pro Ser Ser Glu Tyr Asn Thr Arg Phe
        35                  40                  45
```

```
Asp Gly Leu Tyr Leu Pro Pro Lys Ser Ala Asn Ala Asn Ser Asn Asn
    50                  55                  60
Ile Ala Ile Leu Tyr Leu Ala Val Glu Arg Phe Trp Ile Gln His Phe
65                  70                  75                  80
Pro Tyr His Ser Ala Ile His Ser Met His Val Thr Gln Phe Arg Lys
                85                  90                  95
Gln Pro Gln Ile Phe Ala Glu Tyr
            100
```

<210> 28938
<211> 213
<212> PRT
<213> A.fumigatus

<400> 28938

```
Leu Ile Arg Ser Asn Ile Ser Pro Leu Ile Ala Glu Gln Tyr Arg Glu
1               5                  10                  15
Glu Val Pro Tyr Ile Lys Thr Leu Lys Asn Gly Asn Arg Val Ile Val
            20                  25                  30
Asp Pro Ala Ala Thr Ile Ser Arg Ile Tyr Leu Tyr Phe Tyr Met Met
        35                  40                  45
Ile Asn Ile Gly Ser Ile Leu Gly Gln Val Ser Met Val Tyr Ala Glu
    50                  55                  60
Lys Tyr Val Gly Phe Trp Leu Ser Tyr Phe Leu Pro Thr Val Met Tyr
65                  70                  75                  80
Leu Gly Cys Pro Ile Val Leu Phe Phe Cys Arg Asn Lys Tyr His Leu
                85                  90                  95
Val Lys Pro Thr Gly Ser Val Tyr Thr Gln Ala Ile Arg Leu Trp Lys
            100                 105                 110
Leu Ala Met Lys Gly Arg Trp Ser Leu Asn Pro Ala Arg Met Tyr Val
        115                 120                 125
Ser Pro Phe Ala Val Val Cys Trp Trp His Phe Thr Asp Pro Arg Ser
    130                 135                 140
Trp Lys Lys Asn Pro Lys Pro Phe Trp Asp Ser Val Lys Pro Ser Ala
145                 150                 155                 160
Leu Gly Arg Asp Arg Pro Gln Trp Met Thr Phe Asp Asp Glu Trp Val
                165                 170                 175
Asp Glu Val Ser Arg Gly Leu Lys Ala Cys Lys Val Phe Leu Trp Tyr
            180                 185                 190
Pro Leu Tyr Cys Thr Leu Val Ser Leu Thr Arg Gln Ser Arg Arg Ser
        195                 200                 205
Ser Pro Thr Leu Ile
    210
```

<210> 28939
<211> 66
<212> PRT
<213> A.fumigatus

<400> 28939

```
Arg Val Gly Leu Ala Tyr Asn Gln Met Ile Asn Asn Leu Thr Ser Gln
1               5                  10                  15
Ala Ala Thr Met Arg Leu Gly Gly Val Pro Asn Asp Ile Ile Asn Asn
            20                  25                  30
Leu Asn Pro Leu Ser Leu Ile Ile Phe Ile Pro Ile Met Asp Lys Leu
        35                  40                  45
```

Ile Tyr Pro Gly Leu Arg Arg Met Gly His Gln Val Gln Pro Thr Gln
50 55 60
Ala His
65

<210> 28940
<211> 147
<212> PRT
<213> A.fumigatus

<400> 28940
Ser Thr Gly Leu Phe Leu Leu Leu Ile Pro Leu Leu Leu His Ser Pro
1 5 10 15
Val Ser Val Glu Gln Phe Arg Cys Ile Cys Leu Cys Phe Phe Ile Phe
20 25 30
Val Ala Met Asn Val Ser Asp Pro Val Glu Val Ala Glu Val Ala Arg
35 40 45
Ala Arg Ala Ser Ala Gln Asp Ala Gln Ile Asp Glu Lys Thr Asp His
50 55 60
Lys Leu Ser Leu Thr Pro Ser Ile Glu Glu Val Pro Pro Ala Ser Lys
65 70 75 80
Glu Ala Gly Val Ser Ser Ala Ala Tyr Glu Asp Asp His Ser His Leu
85 90 95
Gln Arg Gln Phe Pro Ser Asp Asp Asp Phe Lys His Leu Arg Arg Ile
100 105 110
Ala Gly Asp Ile Pro Trp Thr Ala Tyr Thr Val Ala Phe Val Glu Leu
115 120 125
Cys Glu Arg Phe Ser Tyr Tyr Gly Thr Thr Ala Val Cys Met Cys Ser
130 135 140
Asp Leu His
145

<210> 28941
<211> 78
<212> PRT
<213> A.fumigatus

<400> 28941
Pro Met Val Val Asn Ala Phe Trp Ser Tyr Val Met Pro Leu Ala Gly
1 5 10 15
Ala Tyr Met Ala Asp Gln Tyr Trp Gly Arg Phe Arg Thr Ile Met Phe
20 25 30
Ser Ile Ala Ala Ala Leu Leu Gly His Ile Ile Leu Ile Val Ser Ala
35 40 45
Leu Pro Pro Val Ile Ala His Pro Asn Gly Ala Ile Ala Cys Phe Ser
50 55 60
Ile Gly Leu Leu Ile Met Gly Val Gly Thr Gly Gly Phe Lys
65 70 75

<210> 28942
<211> 103
<212> PRT
<213> A.fumigatus

<400> 28942
Phe Gly Lys Gly Pro Asn His Ala Val Thr Thr Ala Cys Thr Thr Gly

```
1               5                   10                  15
Ala His Ser Ile Gly Asp Ala Ala Arg Phe Ile Thr Cys Gly Asp Ala
            20                  25                  30
Asp Val Met Leu Ala Gly Gly Ala Glu Ser Cys Ile His Pro Leu Ala
        35                  40                  45
Ile Gly Gly Phe Ala Arg Ala Arg Ser Leu Ala Thr Asp Phe Asn Asp
    50                  55                  60
Ala Pro Glu Lys Ala Ser Arg Pro Phe Asp Ala Asp Arg Lys Gly Phe
65                  70                  75                  80
Val Val Gly Glu Gly Ala Ala Met Leu Val Leu Glu Val Gly Gly Phe
                85                  90                  95
Phe Gly Asp Ile Asn Trp Cys
            100
```

<210> 28943
<211> 61
<212> PRT
<213> A.fumigatus

<400> 28943
```
Leu Leu Ser Ser Leu Pro Asp Phe Gly Val Leu Val Leu Arg Val Met
1               5                   10                  15
Asp Leu Ala Trp Gln Asp Glu Arg Lys Met Ala Arg Phe Ala Gln Tyr
            20                  25                  30
Ala Met Ala Ala Ser Glu Glu Ala Leu Glu Asp Ala Cys Trp Lys Pro
        35                  40                  45
Thr Ser Phe Glu Glu Arg Glu Ala Thr Val Arg Asp Cys
    50                  55                  60
```

<210> 28944
<211> 81
<212> PRT
<213> A.fumigatus

<400> 28944
```
Gln Cys Leu Val Gln Gly Tyr Arg Lys Val Ser Pro Leu Phe Val Pro
1               5                   10                  15
Lys Leu Leu Ile Asn Leu Gly Ala Gly His Leu Ser Met Arg Tyr Gly
            20                  25                  30
Phe Met Val Ser Tyr Gln Pro Gly Ser Ile Thr Glu Leu Asp Ala Asp
        35                  40                  45
Leu Gly Arg Ala Pro Ile Met Pro Ser Arg Arg Pro Ala Arg Pro Glu
    50                  55                  60
Arg Ile Arg Leu Val Met Gln Leu Val Leu Ser Arg Val Val Met Arg
65                  70                  75                  80
Thr
```

<210> 28945
<211> 212
<212> PRT
<213> A.fumigatus

<400> 28945
```
His Leu Gln Cys Asp Glu Ile Lys Pro Thr Cys Gly Asn Cys Ala Leu
1               5                   10                  15
```

```
Arg Gly Glu Pro Cys Asp Trp Pro Ala Glu Thr Asp Ser Gln Gly His
            20                  25                  30
Cys Thr Pro Arg Pro Gln Thr Asp Ser Leu Arg Ala Lys Ala Pro Lys
        35                  40                  45
Asp Gln Ser Lys Arg Trp Ala Pro His Pro Asp Thr Ala Ser Pro Arg
    50                  55                  60
Pro Leu Gln Phe Asp Ile Ala Ser Asp Ala Ala Gly Gly Arg Ser Thr
65                  70                  75                  80
Leu Leu Pro Gly Glu Leu Asn Met Val Asp Leu Gln Leu Tyr Ser Gln
                85                  90                  95
Phe Met Leu His Thr Ser Lys His Met Thr Leu Asn Leu Arg Arg Gln
            100                 105                 110
His Ile Trp Gln Thr Val Ile Pro Arg Phe Ala Met Arg Ser Glu Ala
        115                 120                 125
Leu Met His Leu Leu Leu Ala Leu Ala Gly Leu Asp Tyr Ala Ala Ala
    130                 135                 140
Gly Thr Ala Asp Glu His Leu Gly Leu Val Ser Pro Asp Ile Gln Ser
145                 150                 155                 160
Gln Pro Ser Pro Ala His Gly Asp His Asp His Arg His Arg His Asn
                165                 170                 175
Asp Thr Leu Asp Ala Thr Tyr Leu Arg Ile Ile Ile Glu His His Gln
            180                 185                 190
Arg Gly Leu Glu Ala Phe Arg Thr Glu Val Phe Thr Thr Gly Leu Glu
        195                 200                 205
Gly Ser Ala His
    210

<210> 28946
<211> 178
<212> PRT
<213> A.fumigatus

<400> 28946
His Gln Ser Gln Thr Glu Ala Leu Met Val Leu Tyr Leu Ala Gly Gly
1               5                   10                  15
His Asp Glu Glu Cys Phe Glu Thr Ala Ser Thr Ala His Leu Arg Pro
            20                  25                  30
Leu Thr Ser Ile Thr Val Leu Val Val Met Gln Ala Val Leu Leu Leu
        35                  40                  45
Ala Gly Ile Ala Leu Leu Ala Ser Phe Thr Pro Ala Thr Leu Ala Ser
    50                  55                  60
Gln His Val Leu Gly Leu Glu Ala Ala Ser Gly Val Asn Asn Asp Met
65                  70                  75                  80
Val Ile Thr Gly Val Tyr Lys Asp Glu Lys Ile Lys His Pro Met Ile
                85                  90                  95
Ile Ile His Asp Ile Asn Gly Lys Ile Val Trp Asn Trp Ser Val Ser
            100                 105                 110
Asp Val Gly Glu Thr Val Pro His Glu Leu Leu Thr Cys Ile Ala Thr
        115                 120                 125
His Arg Ala Ala Thr Glu Val Lys Phe Ala Ala Lys Gly Ser Lys Val
    130                 135                 140
Thr Ala Ile Ile Gly Ser Ala Ala Leu Val Ile Asn Tyr Pro Gly Lys
145                 150                 155                 160
Gln Val Leu Ser Gly Ile Cys Leu His His Pro Gly Leu Glu Gly Ile
                165                 170                 175
Ala Leu
```

<210> 28947
<211> 288
<212> PRT
<213> A.fumigatus

<400> 28947
Phe Ser Ser Tyr Leu Lys Val Ser Asn Phe Ala Ser Phe His Ser Leu
1 5 10 15
Tyr Ser Ser Thr Cys Ala Glu Tyr His Leu Ser Ala Leu Ala Asn Gly
20 25 30
Ala Leu Leu Ala Thr Ala Pro Val Asn Arg Ala Leu Pro Asn Ala Pro
35 40 45
Asp Gly Tyr Thr Pro Gln Gly Glu Thr Cys Pro Ser Lys Arg Pro Ser
50 55 60
Ile Arg Asn Ala Thr Ala Leu Ser Ser Ala Glu Thr Ser Trp Leu Lys
65 70 75 80
Ala Arg Arg Asn Asn Thr Lys Asp Ala Leu Lys Ala Phe Leu Ser Gly
85 90 95
Val Asp Leu Gly Ser Phe Asn Gly Ser Asp Tyr Ile Ala Asn His Ser
100 105 110
Ala Asn Ala Ser Ala Leu Pro Asn Ile Gly Ile Ala Val Ser Gly Gly
115 120 125
Gly Tyr Arg Ala Leu Met Asn Gly Gly Gly Ala Leu Gln Ala Phe Asp
130 135 140
Asn Arg Thr Thr Asn Ser Thr His Ser Gly Gln Leu Gly Gly Ile Leu
145 150 155 160
Gln Ser Ala Thr Tyr Leu Ser Gly Leu Ser Gly Gly Ser Trp Leu Val
165 170 175
Gly Ser Ile Tyr Met Asn Asn Phe Ser Asp Val Ser Ser Leu Gln Asp
180 185 190
Asn Gly Ser Val Trp Gln Phe Gln Asp Ser Ile Phe Ser Gly Pro Thr
195 200 205
Gln Ser Thr Thr Trp Asp Ile Gly Thr Val Glu Tyr Tyr Ser Gln Leu
210 215 220
Leu Gly Ala Val Asp Gly Lys Ser Asn Ala Gly Tyr Glu Val Ser Ile
225 230 235 240
Thr Asp Tyr Trp Tyr Val Phe Cys Ser Pro Ala Pro Trp Arg Glu Lys
245 250 255
Gly Ile Leu Thr Ile His Thr Gly Asp Val Leu Ser Leu Thr Ser Ser
260 265 270
Ser Thr Arg Pro Lys Val Ala Ser Val Ile Pro Gly Arg Arg Leu Leu
275 280 285

<210> 28948
<211> 277
<212> PRT
<213> A.fumigatus

<400> 28948
Phe Leu Gly Cys Ile Val Ala Ala Arg Gln Trp Phe Cys Val Ala Val
1 5 10 15
Ser Gly Phe Tyr Leu Gln Trp Ser Asp Ser Glu His His Met Gly Tyr
20 25 30
Arg His Gly Gly Val Leu Phe Ser Ala Val Gly Cys Gly Gly Arg Glu

```
        35                  40                  45
Ile Glu Cys Arg Leu Arg Gly Leu Tyr His Arg Leu Leu Val Cys Phe
    50                  55                  60
Leu Phe Pro Cys Pro Leu Glu Arg Glu Arg Asn Thr His Tyr Thr His
65                  70                  75                  80
Arg Gly Arg Ser Leu Ser Tyr Gln Leu Ile Asn Ala Ser Glu Gly Gly
                85                  90                  95
Val Gly Tyr Thr Trp Ser Ser Ile Ala Leu Ser Lys Asp Phe Gln Ala
            100                 105                 110
Gly Thr Met Pro Met Pro Leu Val Ile Ala Asp Gly Arg Ala Pro Gly
        115                 120                 125
Glu Ile Leu Val Pro Ala Asn Thr Thr Val Phe Glu Phe Asn Pro Trp
    130                 135                 140
Glu Phe Gly Ser Trp Asp Arg Ser Leu Ser Ala Phe Val Ser Leu Glu
145                 150                 155                 160
Phe Leu Gly Ser Asn Phe Ser Lys Gly Thr Leu Ala Thr Gly Glu Lys
                165                 170                 175
Cys Val Arg Gly Phe Asp Asn Ala Gly Phe Ile Met Gly Thr Ser Ser
            180                 185                 190
Ser Leu Phe Asn Gln Ala Phe Leu Gln Met Asn Asn Thr Asp Ala Pro
        195                 200                 205
Ser Val Val Lys Asp Ala Ile Ser Ala Ile Leu Gly Lys Ile Gly Ser
    210                 215                 220
Glu Asn Asn Asp Ile Ala Val Tyr Lys Pro Asn Pro Phe Tyr Arg Tyr
225                 230                 235                 240
Ala Ser Gln Ser Lys Tyr Thr Ser Ser Pro Ser Leu Thr Leu Val Asp
                245                 250                 255
Gly Gly Glu Asp Leu Gln Asn Ile Pro Tyr Ser Pro Arg Gly Gln Lys
            260                 265                 270
Ile Arg Ala Ser Val
        275
```

<210> 28949
<211> 75
<212> PRT
<213> A.fumigatus

```
<400> 28949
Arg Asn Cys Glu Ile Ser Lys Ile Gln Asn Cys Arg Asn Leu Lys Leu
1               5                   10                  15
Asn Asn Phe Lys Leu Pro Pro Leu Val Asp Lys Phe Lys Val Phe Phe
            20                  25                  30
Pro Pro Lys Pro Phe Pro Leu Asp Phe Lys Trp Val Lys Thr Ser Asp
        35                  40                  45
Thr Leu Pro Ser Leu Leu Leu Phe Gly Pro Gly Pro Phe Glu Gly Thr
    50                  55                  60
Asp Arg Pro Leu Cys His Pro Arg Phe Asn Lys
65                  70                  75
```

<210> 28950
<211> 63
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE

<222> (50)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28950
Pro Ala Asp Thr Leu Arg Ile Val Ser Glu Leu Lys Asp Arg Met Val
1 5 10 15
Lys Ile Trp Asp Pro Arg Thr Gly Lys Cys Glu Arg Thr Phe Thr Gly
20 25 30
His Ser Gly Pro Val Thr Cys Ile Gly Leu Gly Asp Ser Arg Phe Ala
35 40 45
Thr Xaa Asn Glu Asp Cys Lys Val Arg Met Tyr Ser Phe Gln Thr
50 55 60

<210> 28951
<211> 134
<212> PRT
<213> A.fumigatus

<400> 28951
Thr Lys Gln Phe Ser Asn Ala Gly Thr Gln Leu Leu Ser Gly Tyr Glu
1 5 10 15
Thr Ala Thr Arg Pro Pro Arg His His Gln Leu Ser Pro Pro Tyr Pro
20 25 30
Pro Pro Pro His Leu Pro Pro Leu Pro Pro Pro Ser Ser Pro Leu His
35 40 45
Pro Gln Arg Leu Pro Arg Leu Pro Arg Pro Arg Ala Arg Arg His Ser
50 55 60
Leu Asn Thr Asn Arg Leu Arg Ser His Leu His Pro Pro Pro Leu His
65 70 75 80
Arg Pro Arg Ser Pro Leu Ser Pro Leu His Pro Ala Ile Pro Pro Pro
85 90 95
Gln Ala Arg Ala Ala Pro Leu Leu Phe Pro His Pro Gly Arg Ala Pro
100 105 110
Pro Asn Arg Arg Arg Asp Ser Ser Pro Thr Asp Arg Arg Pro Ser Ala
115 120 125
Pro Ala Lys Gln Cys Thr
130

<210> 28952
<211> 153
<212> PRT
<213> A.fumigatus

<400> 28952
Leu Pro Ser Ser Thr Val Arg Pro Arg Glu Pro Glu Leu Asn Asn Phe
1 5 10 15
Gln Met Gln Ala Leu Asn Phe Ser Pro Asp Thr Arg Gln Leu Pro Val
20 25 30
Leu Leu Ala Thr Thr Asn Ser Pro Leu Pro Ile Leu Leu Leu Leu Thr
35 40 45
Cys Leu Pro Ser Leu Leu Leu Ala Ala His Tyr Ile Arg Lys Asp Tyr
50 55 60
His Ala Phe Leu Ala Leu Gly Pro Gly Gly Thr Pro Ser Thr Pro Thr
65 70 75 80
Gly Tyr Ala Arg Ile Cys Ile Leu Arg Leu Phe Thr Val Arg Asp Pro
85 90 95

```
Leu Ser Pro Pro Ser Thr Pro Pro Ser Leu His Pro Lys His Gly Gln
            100                 105                 110
Leu Pro Ser Ser Phe Pro Thr Arg Ala Gly Pro Arg Pro Thr Val Ala
        115                 120                 125
Gly Ile Ala Pro Pro Gln Thr Asp Asp Pro Ala Arg Gln Gln Asn Asn
    130                 135                 140
Val Arg Asp Ala Val Glu Pro Asp Pro
145                 150

<210> 28953
<211> 90
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (52)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28953
Val Met Leu Val Asn Gly Leu Lys Gly Ser Arg His Phe Glu Asn Lys
1               5                   10                  15
Tyr Ile Gln Phe Thr Gly Val Arg Asn Ser Val Val Lys Thr Arg Ser
            20                  25                  30
Leu Leu Cys Gly Glu Gln Tyr Phe Gln Asn Thr Gln Gly Ile Ile Phe
        35                  40                  45
Val Val Asp Xaa Asn Asp Arg Asp Arg Ile Val Glu Thr Arg Glu Asp
    50                  55                  60
Leu Gln Arg Met Leu Asn Glu Asp Glu Leu Arg Asp Ala Leu Leu Leu
65                  70                  75                  80
Val Phe Ala Asn Lys Gln Asp Leu Pro Val
                85                  90

<210> 28954
<211> 75
<212> PRT
<213> A.fumigatus

<400> 28954
Trp Leu Gly Asp Gln Gly Arg Gln Arg His Leu Ala Tyr Lys Arg Asp
1               5                   10                  15
Leu Leu Leu Gly Gly Ile Cys Met Phe Ser Asn Gly Ser Ser Phe Leu
            20                  25                  30
Tyr Ala Ile Ser Phe Tyr Phe Phe Phe Arg Pro Gly Val Asp Ser Asn
        35                  40                  45
Lys Tyr Ser Phe Val Pro Leu Lys Asn His Phe Phe Ile Cys Cys Ser
    50                  55                  60
Cys Pro Arg Glu Leu Arg Leu Ala Arg Arg Leu
65                  70                  75

<210> 28955
<211> 171
<212> PRT
<213> A.fumigatus

<400> 28955
```

```
Thr Asp Gly Glu Leu Leu Ser Lys Val Ser Ile Gly Val Cys Ala Cys
1               5                  10                  15
Arg Cys Arg Cys Trp Asn Leu Thr Lys Cys Ser Pro Gln Ser Gly Pro
            20                  25                  30
Lys Lys Ser Pro Ile Leu Ser Lys Ile Pro Ile Pro Thr His Glu Asn
        35                  40                  45
Ile Tyr Thr Val Pro Asn Ile Leu Thr Phe Ser Arg Leu Val Ala Ala
    50                  55                  60
Pro Leu Val Gly Tyr Phe Leu Val His Asp His His Ala Ala Ala Leu
65                  70                  75                  80
Ser Leu Phe Val Tyr Ala Gly Leu Thr Asp Leu Val Asp Gly Tyr Ile
                85                  90                  95
Ala Arg Arg Tyr Asn Leu Gln Thr Val Val Gly Thr Ile Ile Asp Pro
            100                 105                 110
Met Ala Asp Lys Leu Leu Met Thr Ile Gly Val Ala Cys Leu Ala Val
        115                 120                 125
Asn Gly Ser Ile Pro Gly Gly Ser Pro Arg Pro Ser Asn Asp Ala Asp
    130                 135                 140
Leu Val Val Ser Ser Asn Ile Glu Gln Gly Asp Leu Pro Tyr Phe Leu
145                 150                 155                 160
Gly Val Thr Asp Trp Glu Gln Tyr Gly Leu Pro
                165                 170
```

<210> 28956
<211> 92
<212> PRT
<213> A.fumigatus

<400> 28956

```
Leu Gly Thr Val Trp Leu Ala Val Ile Ile Leu Gly Arg Asp Val Gly
1               5                  10                  15
Leu Ala Leu Ser Ala Ile Tyr Tyr Arg Trp Ile Ser Leu Pro Pro Pro
            20                  25                  30
Lys Thr Met Ala Arg Tyr Trp Asp Phe Ser Leu Pro Ser Ala Glu Val
        35                  40                  45
Lys Pro Thr Gly Ile Ser Lys Val Asn Thr Ala Leu Gln Leu Val Leu
    50                  55                  60
Val Gly Ser Ala Ile Ala Leu Pro Val Ile Pro Glu Ala Val Leu Asp
65                  70                  75                  80
Ala Trp Asn Leu Gln Asp Gly Met Thr Ala Leu Gln
                85                  90
```

<210> 28957
<211> 73
<212> PRT
<213> A.fumigatus

<400> 28957

```
Val Lys Gly Pro Leu Ile Leu Thr Arg Leu Lys Gly Ile Lys Leu Gly
1               5                  10                  15
Leu Gln Phe Arg Ser Lys Val Leu Ile Ala Ala Phe Thr Arg Ser Val
            20                  25                  30
Arg Asp Pro Phe Val His Ala Arg Asn Ala Gly Leu Leu Ala Leu Ala
        35                  40                  45
Ala Thr Ile Glu Phe Phe Asn Glu Glu Asp Cys Ala Gly Lys Ile Leu
    50                  55                  60
```

Pro Arg Tyr Leu Ser Leu Phe Ala Arg
65 70

<210> 28958
<211> 264
<212> PRT
<213> A.fumigatus

<400> 28958
Leu Leu Ala Leu Thr Glu Tyr Pro Met Leu Val Arg Asp Gln Ala Asn
1 5 10 15
Lys Thr Leu Asp Leu Tyr Leu Gln Arg Ile Arg Asn Phe Ser Ser Ser
20 25 30
Met Ala Asp Thr Ala Ile Thr Ala Thr Ala Ser Ala Glu Thr Pro Lys
35 40 45
Asp Ala Ala Arg Ile Gly Thr Ser Asn Asp Lys Ser Trp Ala Gly Trp
50 55 60
Ala Ile Ser Ser Phe Thr Asn Lys Leu Ala Thr Ala Asn Gly Glu Ile
65 70 75 80
Gln Pro Ser Thr Gly Thr Ser Lys Leu Ala Glu Thr Glu Ala Thr Arg
85 90 95
Ser Val Ser Val Pro Arg Pro Thr Gln Ser Ser His Pro Thr Gln Leu
100 105 110
Asp Leu Pro Lys Lys Glu Leu Arg Ala Glu Ala Gln Pro Leu Gly Arg
115 120 125
Ser Leu Ser Asp Gln Pro Val Ser Thr Ser Ile Thr Ala Asn Gly Thr
130 135 140
Asp Asp Val Tyr Glu Ala Trp Gly Ala Val Asp Asp Asp Glu Glu Glu
145 150 155 160
Asn Gly Leu Lys Asp Asp Asp Pro Phe Ser Ala Pro Val Val Thr Ser
165 170 175
Ser Pro Val Pro Lys Ser Ala Thr Val Pro Phe Asp Asp Gly Gly Glu
180 185 190
Pro Asp Phe Ala Gly Trp Leu Ala Ala Gln Ser Lys Ala Lys Ala Lys
195 200 205
Lys Pro Leu Pro Lys Gly Leu Ser Lys Pro Ala Ala Thr Thr Thr Gly
210 215 220
Thr Arg Asn Ser Gly His Thr Asn Leu Ser Lys Pro Lys Thr Val Val
225 230 235 240
Ala Pro Thr Lys Lys Ile Asp Thr Lys Pro Lys Asp Glu Gly Glu Asp
245 250 255
Asp Gly Trp Gly Asp Ala Trp Asp
260

<210> 28959
<211> 81
<212> PRT
<213> A.fumigatus

<400> 28959
Thr Ala Ala Ser Gly Gly Cys Thr Phe Thr Asn Thr Ile Val Asp Ile
1 5 10 15
Phe Val Ile Leu Leu Leu Val Cys Arg Arg Gly Asn Leu Ser Leu Ile
20 25 30
Phe Gln Pro Arg Thr Trp Thr Leu Pro Thr Ala Trp Leu Gly Ile Ser
35 40 45

```
Leu Gly Leu Leu Met Ser His Glu Gly Phe Trp Trp Glu Phe Ala Tyr
    50                  55                  60
Ala Ala Gly Gly Met Ser Asn Cys Pro Cys Ser Val Leu Pro Val Ser
65                  70                  75                  80
Gly
```

<210> 28960
<211> 61
<212> PRT
<213> A.fumigatus

<400> 28960

```
Gln Leu Ala Arg Gln Leu Lys Tyr Pro Gln Pro Asn Gln Asp Arg Leu
1               5                   10                  15
Ile Gln Arg Ile Ala Pro Asn Tyr Leu Tyr Ile Ser Ser Arg Ala Glu
            20                  25                  30
Glu His Asp Ala Val Cys Ser Thr Ala Gln Pro Pro Thr Val Asn Thr
        35                  40                  45
Ser Gln Gly Asn Gln His Gly Trp Ala Cys His Ile Pro
    50                  55                  60
```

<210> 28961
<211> 86
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (76),(81),(84)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28961

```
Ser Cys Leu Pro Ile Met Ser Thr Arg Ser Arg Ser Arg Ser Ser Ser
1               5                   10                  15
Tyr Ala Val His Asp Phe Met His Tyr Asp Leu Asn Thr Asn Ile Leu
            20                  25                  30
Arg His Val Phe Met Asn His Ala Val Leu Leu Asp Asn Asn Glu Ser
        35                  40                  45
Pro His Val Asp Asp Tyr Gln Ala Cys His Ala Phe Arg Ser Asn Thr
    50                  55                  60
Leu Tyr Phe Trp Lys Leu Met Gly Tyr Gly Gln Xaa Lys Lys Arg Thr
65                  70                  75                  80
Xaa His Leu Xaa Ile Pro
                85
```

<210> 28962
<211> 129
<212> PRT
<213> A.fumigatus

<400> 28962

```
Phe Ser Pro Glu Glu Phe Leu Ala Thr Ser Val Leu Arg Asn Pro Lys
1               5                   10                  15
Ala Gln Glu Lys Leu Lys Leu Trp Leu Ser Ala Ala Arg Ser Ala Tyr
            20                  25                  30
```

```
Val Leu Asn Phe Lys Phe Ala Arg Arg Pro Lys Ile Trp Met Leu Ser
        35                  40                  45
Gly Leu Tyr Leu Leu Glu Asp Ala Cys Thr Met Val Ser Arg His Ser
    50                  55                  60
Ser Ser Lys Ile Ser Ala Gly Val Ser Gly Ser Leu Val Gly Ala Leu
65                  70                  75                  80
Ser Ser Val Pro Val Gly Gly Phe Leu Asn Leu Gly Glu Gly Asn Ser
                85                  90                  95
Trp Glu Met Thr Met Glu Leu Thr Glu Gln His Val Trp Ala Ala Gln
            100                 105                 110
Tyr Arg Leu Leu Asp Ala Arg Phe Ile Lys Val Asp Lys Arg Ala Pro
        115                 120                 125
Tyr
```

<210> 28963
<211> 156
<212> PRT
<213> A.fumigatus

<400> 28963

```
Gly Ala Tyr Ala Arg Val Thr Gly Pro Gly Lys Ile Leu Gly Thr Thr
1               5                   10                  15
Gly Cys Lys Thr Leu Tyr Pro Arg Ile Thr Glu Val Cys Ala Pro Tyr
            20                  25                  30
Ser Leu Val Gln Ser Ser Phe Asn Phe Leu Asp Ser Gln Glu Ala Leu
        35                  40                  45
Gln Glu His Ala Tyr Val Ser Asn Val Ser Asn Val Ile Phe His Gly
    50                  55                  60
Arg Ser Arg Leu Thr Pro Gly Ile Ser Leu Ser Gly Gly Asp Ile Ile
65                  70                  75                  80
Asp Leu Thr Leu Ala Trp Asn Lys Asp Ser Glu Arg Ile Val Val Ala
                85                  90                  95
Lys Lys Gly Val Arg Ile Ile Leu Lys Glu Tyr Val Phe Trp Pro Ile
            100                 105                 110
His Gly Ile His Tyr Ala Ser Ser Ser His Asp Leu Val Leu Lys Asn
        115                 120                 125
Ser Trp Gln Arg Leu Ser Cys Ala Thr Pro Arg Arg Arg Arg Ser Ser
    130                 135                 140
Asn Tyr Gly Cys Pro Pro Leu Gly Ala Pro Thr Ser
145                 150                 155
```

<210> 28964
<211> 74
<212> PRT
<213> A.fumigatus

<400> 28964

```
Arg Ala Thr Arg Gly Ser Phe Gln Pro Arg Gly Glu Asp Ser Cys Asp
1               5                   10                  15
Pro Gln Leu Ala Ser Leu Phe Ser Ala Phe Thr Ala Phe Asn Gln Ala
            20                  25                  30
Gly Ser Met Leu Arg Asp Tyr Ser Ile Arg Ile Cys Val Cys Thr Met
        35                  40                  45
Glu Gln Ala Ala Arg Lys Gln Arg Val Gln Leu Ser Ile Gln Leu Ser
    50                  55                  60
```

```
Arg Gln His Gly Glu Pro His Asp His Ala
65                  70

<210> 28965
<211> 701
<212> PRT
<213> A.fumigatus

<400> 28965
Trp Gly Phe Ser His Ala Gly Cys Leu Ile Val Lys Val Val Asp His
1               5                  10                  15
Lys Ser Val Ser Ala Gln Ala Arg Lys Ser Thr Ala Pro Ser Thr Asn
            20                  25                  30
Gly Asn Asn Thr Pro Phe Ser Ile His Asn Tyr Asn Glu His Ile Thr
        35                  40                  45
Pro Ser Ala Tyr Val Pro Tyr Pro Glu Gln Asn Gln Leu Thr Ser Glu
    50                  55                  60
Ala Thr Val Thr Lys Thr Asp Ala Ala Thr Gly Ser Gln Ser Asp Glu
65                  70                  75                  80
Asn Gly Lys Val Glu Gln Thr Gly Asp Ser Asp Ser Ser Asn Lys Glu
                85                  90                  95
Asn Glu Ser Asp Ala Leu Gln Lys Gln Thr Pro Ala Lys Pro Arg Val
            100                 105                 110
Phe Thr Thr Val Leu His Pro Thr Pro Arg Ser Leu Gln Ala Glu Leu
        115                 120                 125
Thr Leu Leu Ala Thr Thr Pro Asp Pro Arg Ala Ala Lys Gln Ser Ala
    130                 135                 140
Thr His Ser Ser Thr Arg Pro Gln Pro Thr Ser Ser Ser Thr Ala Pro
145                 150                 155                 160
Gln Ser Pro Val Val Ala Ser Asn Pro Pro Asp Arg Gly His Val Ala
                165                 170                 175
Lys Arg Gln Lys Met Leu Val Glu Pro Gln Asp Leu Leu Glu Cys Glu
            180                 185                 190
Ser Lys Leu Thr Arg Ala Leu Ala Pro Pro Leu Phe Leu Asp Pro Val
        195                 200                 205
Asn Ser Leu Glu Ala Ala Gln Asp Leu Leu Lys Tyr Leu Glu Ser Pro
    210                 215                 220
Leu His Cys Ala Pro Pro Pro Ser Pro Lys Arg Arg Lys Arg Thr Val
225                 230                 235                 240
Ala Glu Leu Ala Ala Asp Glu Ala Leu Ala Ala Glu Glu Glu Arg Phe
                245                 250                 255
Met Leu Ile Met Asp Glu Arg Leu Glu Pro Ala Thr Ser Gly Ala Ala
            260                 265                 270
Gly Gly Pro Lys Ser Ala Val Asp Asp Thr Gly Gly Gly Ala Pro Phe
        275                 280                 285
Glu Pro Arg Phe Ser Arg Phe Lys Thr Leu Glu Asn Ile Arg Met Gln
    290                 295                 300
His Glu Glu Lys Ala Lys Arg Glu His Glu Ile Lys Val Lys Gln Glu
305                 310                 315                 320
Met Ala Lys Arg Gln Gln Gln Glu Gln Glu Arg Glu Arg Arg Arg Leu
                325                 330                 335
Leu Glu Gln Arg Gln Ala Glu Glu His Ala Lys Glu Glu Ala Arg Arg
            340                 345                 350
Gln His Leu Ala Ala Gln Gln Ala Gln Ala Gln Leu Ala Ala Gln Gln
        355                 360                 365
Gln Asn Arg His Val Met Thr Gln Ala Asn Gly Val Ser Gln Ala Pro
```

```
    370                 375                 380
Gln Ser Ser Pro Val Val Arg Asn Gln Thr Pro Leu Asn Ala Ser Ser
385                 390                 395                 400
Pro Leu Val Gly Asn Thr Met Val Thr Gln Ala Gly Val Pro Met Ser
                405                 410                 415
Met Thr Ser Ser Ala Gln Gly Ala Gly Ser Pro Gln Arg Pro Pro Ser
            420                 425                 430
Ala Leu Gln His Gly His Pro Asn Met Met Ser His Pro Met Ala Pro
        435                 440                 445
Ser Arg Ser Gln Gln Gly Gln Ser Arg His Gly Thr Pro Gln Met Thr
    450                 455                 460
Gln Gly Thr Pro Ala Met Ser His Ala Thr Pro Ile Met Arg Asn Val
465                 470                 475                 480
Thr Pro Thr Gln Arg Leu Ser His Gly Ser Pro Ser Gln Ser Thr Met
                485                 490                 495
Ala Pro Thr Pro Val Met Ser Pro Gly His Asp Glu His Pro Ala Asp
            500                 505                 510
Gly Arg Arg Tyr Gly Ser Tyr Ala Ala Thr Thr Ala Asn Asp Thr Ala
        515                 520                 525
Lys Ala Ala Val Ala Arg Ala Thr Arg Thr Thr Arg Thr Arg Ser Val
    530                 535                 540
His Thr Ala Ala Ala Cys Ser Ile Thr Ser Glu Arg Thr Cys Ser Ala
545                 550                 555                 560
Lys Tyr Pro Val Ala Pro Ala Ala Asp Asp Ala Ser Ser Ala Ala Glu
                565                 570                 575
Pro Ser Gly Ala Ala Thr Glu Ala Gly Glu Ser Ala Asn Val Ser Ser
            580                 585                 590
Phe Thr Ala Ala Lys Pro Val Asp Pro Asp Ala Asp Gly Ser Ala Ala
        595                 600                 605
Ala Ala Asp Ala Arg Pro Thr Ala Thr Gly Ser Thr Ile Pro Gly Pro
    610                 615                 620
Ser Gly Gln Pro Ala Asn Asp Ser Ser Thr Thr Ala Ala Asp Asp Asp
625                 630                 635                 640
Gly Gly Ser Cys Ser Gly Gln Cys Trp Thr His Ala Ala Glu Phe Pro
                645                 650                 655
Gly Arg Gln Tyr Gly Ala Ala Val Gln Pro Thr Leu Pro Thr Ala Pro
            660                 665                 670
Phe Ala Ser Pro Ala Gly Asp Val Tyr Ser Val Tyr Gly Ser Ile Trp
        675                 680                 685
Ala Pro Asn Ala Ile Ser Ala Ser Tyr Cys Thr Ala Val
    690                 695                 700
```

<210> 28966
<211> 253
<212> PRT
<213> A.fumigatus

<400> 28966

```
Ala Gln Ala Met Met Asn Thr Pro Gln Met Gly Gly Gly Met Gly Leu
1               5                   10                  15
Thr Pro Gln Gln Gln Gln Met Ile Leu Gln Arg Gln Gln Leu Leu Ala
            20                  25                  30
Gln His Gly Gln Leu Gly Pro Ala Gln Phe Thr Pro Gln Gln Leu Ala
        35                  40                  45
Gln Leu Gln Ala Asn Ala His Ala Gln Gln Asn Ile Gln Ser His Gln
    50                  55                  60
```

```
Gln Gln Met Met Gln Ala Gln Gln Gln Asn His Gln Ala Gln Gln Gln
65                  70                  75                  80
Lys Leu Gly Asn Gln Gln Thr Tyr Gln Ala Ser Leu Leu Arg Asn Gln
                85                  90                  95
Trp Thr Gln Met Gln Met Ala Gln Gln Gln Gln Gln Thr Gln Gly Gln
            100                 105                 110
Gln Pro Gln Ala Gln Gln Ser Gln Val His Gln Gly Ser Pro Gln Met
        115                 120                 125
Thr Pro Gln Gln Gln Gln Gln Met Met Met Ala Ala Ala Ala Gln Ala
    130                 135                 140
Asn Ala Gly His Met Pro Gln Asn Phe Gln Gly Val Asn Met Ala Gln
145                 150                 155                 160
Arg Tyr Ser Gln Leu Tyr Gln Gln Arg Leu Leu Arg Leu Arg Gln Glu
                165                 170                 175
Met Ser Thr Arg Phe Met Ala Gln Tyr Gly Pro Pro Thr Gln Tyr Pro
            180                 185                 190
Pro His Ile Ala Gln Gln Tyr Ser Ile Gly Leu Glu Arg Ser Ala Lys
        195                 200                 205
Ala Trp Val Gln Glu Ile Ile Arg Arg Glu Arg Glu Ala Ala Gln Gln
    210                 215                 220
Gln Arg Ala Ser Gln Val Ala Ala Val Gln Ala Gln Val Met Gln Gln
225                 230                 235                 240
Gln Gln Gln Gln Asn Met Met His Asn Ala Met Gly Lys
                245                 250
```

<210> 28967
<211> 188
<212> PRT
<213> A.fumigatus

<400> 28967

```
Ala Arg Asp Gly Gln Ala Thr Ala Thr Gly Thr Arg Lys Arg Glu Ala
1               5                  10                  15
Ser Ala Val Gly Ala Ala Ser Ser Arg Gly Ala Cys Gln Gly Gly Ser
            20                  25                  30
Ser Lys Ala Thr Ser Gly Arg Ala Thr Gly Pro Gly Thr Ala Cys Cys
        35                  40                  45
Thr Ala Ala Glu Ser Thr Cys His Asp Thr Gly Lys Arg Gly Gln Pro
    50                  55                  60
Gly Ser Pro Ile Val Thr Ser Gly Ser Lys Ser Asp Thr Pro Gln Arg
65                  70                  75                  80
Leu Val Thr Ala Gly Trp Gln Tyr Asp Gly His Thr Ser Arg Cys Ser
                85                  90                  95
His Glu His Asp Ile Phe Cys Ala Gly Cys Arg Lys Pro Thr Ala Thr
            100                 105                 110
Pro Val Gly Leu Thr Ala Arg Pro Ser Glu Tyr Asp Glu Pro Ser Asn
        115                 120                 125
Gly Ala Leu Glu Glu Pro Ala Gly Ser Glu Ser Ala Arg His Ser Ser
    130                 135                 140
Asp Asp Ser Gly Asn Thr Gly His Val Ser Cys Asn Ser Asp His Ala
145                 150                 155                 160
Gln Arg Tyr Thr Tyr Ser Ala Pro Glu Pro Trp Gln Pro Lys Pro Val
                165                 170                 175
Asp His Gly Ser Asn Thr Gly Asn Glu Pro Arg Pro
            180                 185
```

<210> 28968
<211> 315
<212> PRT
<213> A.fumigatus

<400> 28968
Asp Ala Lys Pro Leu Ala Glu Pro Leu Trp Lys Gln Leu Thr His Thr
1 5 10 15
Gly Ala Tyr Trp Val Phe Val Ser Pro Lys Phe Ala Lys Val Ala Asn
20 25 30
Lys Arg Gln Phe Pro Ala Leu Thr Tyr Val Trp Asn Gly Val Lys Tyr
35 40 45
Ala Ser Tyr Ala Gln Ile Ile Ser Ser Ser Leu Gln Met Leu Ala His
50 55 60
Ala Ala Thr Gly Ala Tyr Gln Gln Ile Asn Gly Thr Lys Ala Met Gly
65 70 75 80
Ala Val Asp Thr Leu Asn Pro Ala Ile Ala His Thr Leu Leu Asn Pro
85 90 95
Ile Ala Ala Ser Ser Ile Asp Ile Lys Pro Thr Asn Gln Gly Val Arg
100 105 110
Phe Tyr Tyr Asn Thr Val Ser Met Val Met Pro Ile Leu Gln Gln Phe
115 120 125
Phe Phe Ile Met Ala Leu Asn Gly Leu Thr Ala Glu Phe Gly Val Val
130 135 140
Leu Arg Thr Met Ser Leu Arg Gly Ser Ile Val Leu Arg Leu Thr Leu
145 150 155 160
Ser Val Leu Tyr Thr Phe Ile Ala Ala Leu Cys Met Thr Gly Tyr Ile
165 170 175
Trp Gly Phe Arg Glu Ala Trp Ala Val Thr Gly Gly Gln Phe Ala Leu
180 185 190
Thr Trp Met Ala Ile Trp Leu Val Met His Leu Asn Phe Leu Leu Ile
195 200 205
Asp Ala Val Thr Ser Val Leu Pro Met Lys Phe Met Pro Phe Ala Ile
210 215 220
Leu Thr Trp Ile Ile Ile Asn Val Ser Ser Thr Ile Gly Pro Phe Asp
225 230 235 240
Leu Ser Pro Gly Phe Tyr Arg Leu Gly Tyr Ala Leu Pro Ala Tyr Glu
245 250 255
Leu Tyr Gln Leu Leu Leu Asp Ile Trp Thr Glu Gly Cys Asn Pro Pro
260 265 270
Leu Tyr Arg Glu Leu Pro Ile Leu Phe Ala Trp Trp Val Val Gly Phe
275 280 285
Val Ala Phe Leu Ala Gly Met Arg Lys Arg Val Leu Ala Ala Arg Ala
290 295 300
Gly Tyr Val Glu Thr Arg Arg Thr Asp Lys Ala
305 310 315

<210> 28969
<211> 239
<212> PRT
<213> A.fumigatus

<400> 28969
Met Ser Arg Arg Pro Leu Trp Met Met Met Ala Ala Arg Asp Ala Pro
1 5 10 15
Ala Arg Arg Ala Ala Arg Arg Thr Met Asp Glu Ala Ser Ser Arg Ile

```
            20                  25                  30
Ala Trp Thr Ser Thr Trp Leu Thr Phe Ser Thr Asp Asn Val Ser Trp
        35                  40                  45
Met Asn Leu Leu Glu Pro Ser Thr Ser Leu Ala Ser Thr Asn Ala Ser
    50                  55                  60
Pro Asp Arg Lys Gly Gln Ser Met Pro Pro Gly Trp Asn Thr Leu Glu
65                  70                  75                  80
Ile Ser Ser Ala Phe Met Ser Asn Thr Ser Ile Arg Ser Ser Trp Thr
                85                  90                  95
Ile Ala Ser Arg Arg Ser Ser Pro Arg Tyr Lys Pro Asp Thr Leu Phe
            100                 105                 110
Ser Asn Ile Cys Glu Pro Gly Ser Thr Asp Ala Ala Ser Arg Ala Ser
        115                 120                 125
Ser Asn Gly Val Arg Gly Lys Thr Ser Ile Leu Leu Ser Arg Gln Pro
    130                 135                 140
His Ser Val Phe Ile Thr Met Ile Ser Ser Ser Arg Ala Leu Thr Pro
145                 150                 155                 160
Ser Arg Arg Thr Ser Ala Ser Phe Ser Thr Tyr Ala Ala Leu Val Pro
                165                 170                 175
Val Pro Thr Met Thr Ala Pro Ser Val Glu Thr Cys Trp Pro Glu Leu
            180                 185                 190
Tyr Ala Arg Val Lys Ser Val Pro Thr Leu Ser Phe Ala Arg Thr Val
        195                 200                 205
Thr Thr Thr Gly Ser Pro Ser Ser Ser Met Ala Ser Cys Asn Ile Thr
    210                 215                 220
His Gly Ser Arg Pro Thr Ala Ser Gly Ile Ser Gln Pro Leu Ser
225                 230                 235
```

<210> 28970
<211> 86
<212> PRT
<213> A.fumigatus

<400> 28970

```
Ser Thr Gln Met Pro Ala Gln Leu Tyr Leu Ile Asp Val Phe Gly Ser
1               5                   10                  15
Gln Ala Ala Ala Ser Ala Leu Gly Ala Asn Asn Leu Leu Arg Tyr Ile
            20                  25                  30
Phe Ser Thr Phe Leu Pro Leu Ala Gly Pro Ser Met Tyr Glu Ala Leu
        35                  40                  45
Asn Tyr Gly Trp Gly Asn Thr Leu Leu Gly Phe Leu Ala Leu Ala Phe
    50                  55                  60
Val Pro Gly Pro Leu Leu Phe Tyr Arg Tyr Gly Glu His Leu Arg Ala
65                  70                  75                  80
Arg Thr Ser Val Thr Leu
                85
```

<210> 28971
<211> 359
<212> PRT
<213> A.fumigatus

<400> 28971

```
Asp Lys Gly Trp Asp Ile Pro Asp Ala Val Gly Arg Asp Pro Cys Val
1               5                   10                  15
Met Leu Gln Glu Ala Ile Asp Glu Leu Gly Leu Pro Val Val Val Thr
```

```
            20                  25                  30
Val Leu Ala Asn Asp Ser Val Gly Thr Leu Leu Thr Arg Ala Tyr Ser
        35                  40                  45
Ser Gly Gln Gln Val Ser Thr Leu Gly Ala Val Ile Val Gly Thr Gly
    50                  55                  60
Thr Asn Ala Ala Tyr Val Glu Lys Leu Ala Asp Val Arg Arg Leu Gly
65                  70                  75                  80
Val Lys Ala Arg Glu Asp Glu Ile Met Val Met Asn Thr Glu Trp Gly
                85                  90                  95
Cys Leu Asp Asn Lys Met Glu Val Leu Pro Arg Thr Pro Phe Asp Asp
            100                 105                 110
Ala Leu Asp Ala Ala Ser Val Asp Pro Gly Ser Gln Met Phe Glu Lys
        115                 120                 125
Arg Val Ser Gly Leu Tyr Leu Gly Glu Leu Leu Arg Leu Ala Ile Val
    130                 135                 140
Gln Leu Leu Arg Ile Asp Val Phe Asp Met Lys Ala Glu Glu Ile Ser
145                 150                 155                 160
Lys Val Phe Gln Pro Gly Gly Ile Asp Cys Pro Phe Leu Ser Gly Leu
                165                 170                 175
Ala Leu Val Asp Ala Asn Asp Val Asp Gly Ser Ser Arg Phe Ile Gln
            180                 185                 190
Asp Thr Leu Ser Val Glu Asn Val Ser Gln Val Asp Val Gln Ala Ile
        195                 200                 205
Arg Leu Leu Ala Ser Ser Ile Val Arg Arg Ala Ala Arg Leu Ala Gly
    210                 215                 220
Ala Ser Leu Ala Ala Ile Ile Ile Gln Ser Gly Arg Leu Asp Ile Gln
225                 230                 235                 240
Tyr Gln His Ser Lys Gln Thr Ala Ser Leu Pro Ile Gly Arg Thr Asn
                245                 250                 255
Arg Phe Glu His Thr Val Thr Pro Arg Trp Arg Arg Leu Leu Ser Arg
            260                 265                 270
Leu Arg Leu Ser Ser Leu Pro Ser Arg His Leu Pro Arg His Thr His
        275                 280                 285
Leu Pro Thr Cys Leu Asp Glu Asp Ile Ile Asp Ile Gly Ala Asp Gly
    290                 295                 300
Ser Leu Ile Glu Phe Tyr Pro Asp Phe Glu Ala Glu Met Arg Gly Ala
305                 310                 315                 320
Met Arg Asp Val Pro Glu Ile Gly Glu Ala Gly Glu Gln Arg Ile Arg
                325                 330                 335
Ile Gly Leu Ala Lys Asp Gly Ser Gly Val Gly Ala Ala Leu Met Ala
            340                 345                 350
Gln Ala Ala Cys Gln Ser Glu
        355
```

<210> 28972
<211> 210
<212> PRT
<213> A.fumigatus

```
<400> 28972
Val Gly Gly Ala Asp Gly Phe Val Gly Ile Ala Leu Ala Gln Ala Tyr
1               5                   10                  15
Ala Asn Leu Thr Val Phe Val Gln Asp Ser Ile Asn Leu Lys Lys Glu
            20                  25                  30
Ala Asp Ala Lys Ile Pro Pro Ala Leu Lys Ser Arg Val Phe Phe Gln
        35                  40                  45
```

```
Pro His Ser Phe Phe Glu Pro Gln Ser Arg Leu Ala Gly Met Ala Asp
    50                  55                  60
Val Leu Leu Leu Arg His Ile Leu His Asp Trp Asp Asp Asn Asp Cys
65                  70                  75                  80
Leu Val Ile Leu Arg His Leu Ala Ala Val Leu Gln Pro Gly Ala Ser
                85                  90                  95
Ile Ile Val Ala Glu Gln Val Leu Gly Gln Ser Gly Thr Tyr Asp Trp
            100                 105                 110
Gln Thr Glu Arg Val Met Arg Ala Leu Asp Met Gln Val Met Thr Pro
        115                 120                 125
Phe Gly Ser Lys Glu Arg Thr Phe Asp Asp Trp Glu Thr Leu Phe Pro
    130                 135                 140
Gly Gly Arg Ser Asp Ile Ala Ser Gly Arg Asn Gly Ser Ala Cys Gly
145                 150                 155                 160
Lys Cys Gly His Thr Asp Gly Val Glu Glu Ser Cys Leu Ile Arg Phe
                165                 170                 175
Ile Leu Arg Ile Cys Leu Val Thr Ser Met Leu Phe Ile Pro Phe Arg
            180                 185                 190
Arg Lys Thr Val Ser Leu Glu Asn Ser Asp Leu Leu Ser Ile Pro Thr
        195                 200                 205
Ser Asn
    210

<210> 28973
<211> 115
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (110)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28973
Ser Val His Ser Ile His Phe Thr Met Lys Pro Gln Thr Ala Ala Phe
1               5                   10                  15
Leu Leu Ser Leu Leu Gly Ser Thr Leu Ala Ala Pro Ile Gln His Ala
            20                  25                  30
Asp Lys Gly Ser Asp Val Lys Pro Thr Pro Thr Gly Arg Gly Ala Pro
        35                  40                  45
Gly Gly Phe Phe Thr Gly Phe Pro Ser Gly Val Pro Ser Gly Leu Pro
    50                  55                  60
Ser Gly Phe Pro Gly Gly Pro Val Pro Gly Gly Phe Gly Gly Asp Gly
65                  70                  75                  80
Pro Asn Gly Pro Ile Pro Ser Gly Pro Val Pro Thr Gly Ala Ala Pro
                85                  90                  95
Ser Gly Phe Leu Ser Phe Gly Thr Gly Pro Ala Pro Phe Xaa Thr Arg
            100                 105                 110
Arg Pro Lys
        115

<210> 28974
<211> 230
<212> PRT
<213> A.fumigatus
```

<220>
<221> UNSURE
<222> (104)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28974
Ser Thr Arg Glu Ala Gly Phe Thr Lys Pro Gln Glu Ser Asp Thr Ala
1 5 10 15
Ala Tyr Ala Lys Tyr Asp Asn Asp Leu Phe Gln Thr Gly Arg Leu Val
20 25 30
Thr Cys Gly Leu Tyr Val Asn Ile Ile Leu Lys Asp Tyr Val Arg Thr
35 40 45
Ile Leu Asn Ile Asn Arg Thr Asp Ser Ile Trp Ser Leu Asp Pro Arg
50 55 60
Ser Glu Met Lys Asp Gly Leu Leu Gly Arg Ala Ala Ala Gln Ala Thr
65 70 75 80
Gly Asn Gln Val Ala Ala Glu Phe Asn Leu Val Tyr Arg Trp His Ser
85 90 95
Cys Ile Ser Gln Arg Asp Gln Xaa Trp Thr Glu Asp Met Tyr Gln Glu
100 105 110
Leu Phe Pro Gly Gln Asp Pro Ser Lys Ile Ser Leu Gln Asp Phe Leu
115 120 125
Arg Gly Leu Gly Arg Trp Glu Ala Lys Leu Pro Gly Glu Pro Arg Glu
130 135 140
Arg Pro Phe Ala Gly Leu Gln Arg Lys Ala Asp Gly Ser Tyr Asp Asp
145 150 155 160
Asn Asp Leu Val Lys Ile Phe Glu Glu Ser Val Glu Asp Cys Ala Gly
165 170 175
Ala Phe Gly Ala Leu His Val Pro Thr Val Phe Arg Ser Ile Glu Ala
180 185 190
Leu Gly Ile Gln Gln Ala Arg Ser Trp Asn Leu Ala Thr Leu Asn Glu
195 200 205
Phe Arg Lys Tyr Leu Asn Phe Ala Pro Tyr His Gln Pro Arg Gly Arg
210 215 220
Arg Thr Ala His Ala Leu
225 230

<210> 28975
<211> 238
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (58),(113),(121)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28975
Ile Leu Ala Gly Gln Gly Leu Ser Pro Cys Leu Pro Arg Leu Tyr Ala
1 5 10 15
Ser Ser Phe Ser Val Ser Ser Arg Leu Ala Leu Thr Asn Leu Ile Ala
20 25 30
Ala Ile Pro Asp His Trp Ala Asn Leu Tyr Ser Cys Pro Asn Ser Ser
35 40 45
Thr Asn Val Phe Thr Cys Gly Tyr Ala Xaa Trp Ala Thr Asp Val Cys
50 55 60

```
Ser Ala Asn Leu Gly Gln Trp Leu Trp Val Ser Gly Asp Val Glu Val
65                  70                  75                  80
Ala Lys Asn Gly Asn Thr Ser Pro Ser Ala Ser Ala Ser Ala Ser Thr
                85                  90                  95
Val Leu Asp Ile Val Thr Thr Thr Ser Ser Gly Ser Gly Leu Ser Thr
            100                 105                 110
Xaa Thr Pro Arg Gly Thr Ile Thr Xaa Glu Ile Val Thr Thr Thr Glu
        115                 120                 125
Ser Ala Thr Ala Thr Gly Ser Gly Thr Gly Thr Glu Thr Ser Ser Pro
    130                 135                 140
Arg Pro Val Asn Thr Ser Ile Ser Ala Arg Thr Leu Arg Ala Gly Thr
145                 150                 155                 160
Arg Gly Leu Glu Pro Gly Val Pro Leu Leu Val Val Ser Gly Leu Leu
                165                 170                 175
Ile Phe Phe Met Arg Met Arg Arg Arg Ala Pro Ala Ala Pro Ala Pro
            180                 185                 190
Pro Val Ser Glu Lys Val Tyr Pro Gly Ala Val Tyr Asp Pro Gly Ala
        195                 200                 205
Ala Glu Ile Ala Thr Gln Arg His Asn Met Val Thr Glu Leu Glu Gly
    210                 215                 220
Ser Gly Arg Asn Leu Pro Asp Arg Pro Glu Leu Tyr Gly Ser
225                 230                 235
```

<210> 28976
<211> 120
<212> PRT
<213> A.fumigatus

<400> 28976

```
Ile Asn Val Phe Lys Glu Phe Pro Arg His Ile Ser His Pro Arg Thr
1               5                   10                  15
Ser Asn Ala Val Ser Ser Ser Thr Met Ser Leu Ser Ala Ile Cys Leu
            20                  25                  30
Met Leu Leu Val Thr Leu Thr Pro Val Thr Ala Thr Cys Tyr Trp Pro
        35                  40                  45
Asn Gly Asp Thr Asp Asn Asn Tyr Thr Pro Cys Pro Asn Ser Lys Ser
    50                  55                  60
Cys Cys Leu Lys Gly Glu Ala Cys Leu Ser Asn Gly Leu Cys Tyr Gly
65                  70                  75                  80
Ala Lys Leu Asn Ile Ala Tyr Arg Gly Ala Cys Ser Asp Lys Ser Trp
                85                  90                  95
Pro Ala Lys Asp Cys Pro His Val Cys Leu Asp Cys Thr Arg Leu Arg
            100                 105                 110
Ser Pro Phe Pro Ala Val Trp Leu
        115                 120
```

<210> 28977
<211> 303
<212> PRT
<213> A.fumigatus

<400> 28977

```
Asn Pro Phe Ile Met Arg Arg His Gly Arg Ala Gly Gly Gly Thr Lys
1               5                   10                  15
Ala Val Thr Pro Val Ser Asp Thr Val Ser Leu Ile His Ser Phe Asp
            20                  25                  30
```

```
Ser Val Thr Asn Pro Asn Arg Pro Ala Arg Pro Ser Pro Leu Ala Ser
        35                  40                  45
Ser His Ile Gln Ala Leu Pro Leu Asp Leu Ile Asp Arg Leu Arg Ser
    50                  55                  60
Phe Pro Leu Phe Gln Ser Thr Pro Glu Ser Phe Leu Val Glu Val Ala
65                  70                  75                  80
Gln His Leu Arg Pro Gln Leu Ser Ala Pro Asn Asp Tyr Ile Leu Thr
                85                  90                  95
Glu Gly Asp Glu Ala Lys Ala Ile Tyr Trp Leu Val Arg Gly Ala Val
            100                 105                 110
Ser Ala Thr Ser Arg Asp Gly Glu Ser Ile Tyr Ala Asp Leu Glu Pro
        115                 120                 125
Gly Ala Phe Phe Gly Glu Ile Gly Val Leu Met Asp Arg Pro Arg Thr
    130                 135                 140
Ala Thr Ile Ile Ala Arg Thr Arg Cys Leu Leu Val Val Leu Ser Lys
145                 150                 155                 160
Glu Asp Phe Arg Asn Ile Leu Pro Arg Phe Pro Glu Val Glu Gln Ala
                165                 170                 175
Ile Arg Asp Glu Ala Gln Glu Arg Leu Met Ile Leu Glu Lys Lys Lys
            180                 185                 190
Lys Glu Thr Ser Thr Pro Ser Ala Asp Leu Thr Ser Pro Val Arg Arg
        195                 200                 205
Gly Ser Lys Arg Leu Arg Asp Ser Ser Ser Gly Asp Leu Ser Pro Ile
    210                 215                 220
Glu Arg Glu Gly Thr Ser Leu Lys Ala Gly Asn Lys Lys Arg Lys Ser
225                 230                 235                 240
Pro Ser Pro Gly Val Gly Val Ala Asp Ala Ser Ser Ser Ala Leu Ala
                245                 250                 255
Asn Gly Ser Val Asn Val Arg Leu Leu Leu Lys Glu Leu Pro Leu Phe
            260                 265                 270
Ser Ser Leu Pro Pro Asp Ile Leu His Phe Leu Gly Leu Asn Ala Gln
        275                 280                 285
Pro Arg Ser Tyr Pro Pro Phe Pro Asp Ile Ile Arg Pro Glu Ser
    290                 295                 300
```

<210> 28978
<211> 205
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (77),(98)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28978

```
Ser Cys Phe Arg Ile Ala Gly Tyr Lys Thr Thr Glu Thr Ser Leu Ser
1               5                   10                  15
Ala Leu Phe Tyr Arg Leu Leu Ser Thr Pro Gly Val Leu Lys Lys Leu
            20                  25                  30
Gln Ser Glu Leu Phe Arg Asn Phe Pro Ser Ile Asp Glu Ile Thr Gly
        35                  40                  45
Lys Lys Leu Leu Ser Leu Pro Tyr Leu Asn Gly Cys Val Asn Glu Ser
    50                  55                  60
Leu Arg Leu Thr Pro Pro Val Ala Gly Lys Phe Ala Xaa Arg Arg Ser
65                  70                  75                  80
```

```
Pro Gly Ala Ile Ile Glu Arg Phe Tyr Val Pro Lys Gly Thr Lys Val
                85                  90                  95
Phe Xaa Glu Thr Tyr Thr Met Gln Arg Ser Pro Gln Tyr Trp His Ala
            100                 105                 110
Pro Asp Glu Tyr Arg Pro Glu Arg Trp Val Glu Arg Gly Glu Gly Ser
        115                 120                 125
Pro Tyr Ala Gln Asp Val His Glu Ala Phe Lys Pro Phe Ser Ser Gly
    130                 135                 140
Pro Arg Ala Cys Leu Gly Arg Glu Met Ala Leu Gln Thr Leu Arg Leu
145                 150                 155                 160
Thr Thr Ala Leu Leu Val Tyr Arg Phe His Met Lys Ile Val Asp Glu
                165                 170                 175
Lys Arg Phe Val Trp Glu Gln Asp Thr Asp Ser Arg Met Ile Tyr Ser
            180                 185                 190
Gln Tyr Gln Ile Lys Ala Ile Leu Gln Asp Arg Leu Thr
        195                 200                 205

<210> 28979
<211> 182
<212> PRT
<213> A.fumigatus

<400> 28979
Tyr Cys Val Asn Thr Gly Tyr Ala Gly Cys Ser Val Leu Ser Ile Ile
1               5                   10                  15
Arg Lys Met Arg Glu Ile Ser Gln Tyr Gln Thr Pro Gly His Trp Leu
            20                  25                  30
Asp Met Asp Met Leu Glu Ile Gly Asp Gly Glu Met Thr Leu Tyr Gln
        35                  40                  45
Gln Gln Thr His Phe Ala Phe Trp Ala Ala Leu Lys Ser Pro Leu Ile
    50                  55                  60
Ile Gly Ala Asp Leu Ser Lys Leu Ser Asp Glu Ser Val Ala Val Leu
65                  70                  75                  80
Lys Asn Lys Asp Ile Ile Ala Val Asn Gln Asp Ser Leu Gly Gln Ala
                85                  90                  95
Val His Tyr Ile Glu Ser Ala Ser Lys Glu Gly Ala Trp Gln Val Trp
            100                 105                 110
Ala Gly Pro Val Asn Gly Gly Phe Val Val Leu Leu Leu Asn Glu Lys
        115                 120                 125
Ser Tyr Pro Gln Ala Leu Ser Val Ser Phe Ala Asp Leu Arg Leu Gly
    130                 135                 140
Leu Asp Gly Pro Val Gln Val Thr Glu Leu Trp Ser His Lys Ser Leu
145                 150                 155                 160
Gly Lys Val Asp Gly Tyr Lys Gly Val Leu Gln Pro Tyr Gln Thr Leu
                165                 170                 175
Val Phe Arg Leu Arg Phe
            180

<210> 28980
<211> 89
<212> PRT
<213> A.fumigatus

<400> 28980
Ala Thr Ser Leu Ala Ser Thr Ala Pro Phe Leu Met Ser Ala Thr Ser
1               5                   10                  15
```

```
Pro Gly Val Asp Ser Thr Lys Tyr Leu Lys Arg Arg Pro Gly Asp Phe
            20                  25                  30
Val His Pro Gly Ile Trp His Thr His Glu Asp Leu Glu Arg Ile Arg
        35                  40                  45
Thr Asn Val Ile Ser Lys Lys Asp Pro Trp Ala Ser Ala Tyr Glu Lys
    50                  55                  60
Phe Ser Ala Asp Glu Tyr Ser Gln Ala Asn Ser Arg Leu Pro Arg Pro
65                  70                  75                  80
Arg Ala Gly Arg Tyr Arg Ala Arg Lys
                85
```

<210> 28981
<211> 109
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (40)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28981

```
Asp Arg Tyr Ser Pro Glu Leu Gln Gln Arg Ile Arg Asp Leu Ala Lys
1               5                   10                  15
Tyr Pro Met Asn Lys His Glu Val Cys Glu Val Trp Thr Glu Ile Leu
            20                  25                  30
Lys Phe His Phe Pro Ile Ser Xaa Ile Gly Lys Pro Gly Asn Asn Glu
        35                  40                  45
Tyr Ala Thr Gln Ala Thr Pro Gly Asn Val Phe Pro Phe Val Gln Leu
    50                  55                  60
Ser Val Arg Pro Gln Leu Ser Thr Phe Glu Asn His Pro Val Pro Cys
65                  70                  75                  80
Phe Pro Thr Ala Glu Thr Ser Pro Glu Thr Arg His Lys Asp Arg Pro
                85                  90                  95
Ser Pro Pro Val Ala Lys Asp Arg Leu Asn Ile Ala Ala
            100                 105
```

<210> 28982
<211> 84
<212> PRT
<213> A.fumigatus

<400> 28982

```
Thr Arg Gln Asn Met Ile Leu Ala Leu His Ser Ser His Phe Asp Gly
1               5                   10                  15
Cys Ser Pro Val Phe Leu Cys Arg Glu Gln Pro Ser Leu Gly Gln Leu
            20                  25                  30
Gly Gln Trp Leu Ser Phe Tyr Ala Tyr Leu Arg Thr Pro Gly Ser Gly
        35                  40                  45
Tyr Ala Lys Thr Leu Arg Glu Tyr His Gly Trp Leu Ala Thr Pro Pro
    50                  55                  60
Cys Gln Ser Ser His Gly Ala Val Tyr Asp Glu Thr Val Tyr Ser Tyr
65                  70                  75                  80
Lys Gly Ser Arg
```

<210> 28983
<211> 82
<212> PRT
<213> A.fumigatus

<400> 28983
Pro Leu Cys Ala Asp Phe Arg Leu Cys Gly Glu Asp Cys Asn Pro Ile
1 5 10 15
Gly Asn Thr Gly Ala Arg Ala Leu Ala Lys Trp Leu Gln Gln Asn Gln
20 25 30
Thr Leu Gln Arg Leu Ser Leu Gln Ser Val Gly Leu Thr Asp Asp Gly
35 40 45
Ala Thr Ala Leu Ile Ser Ser Leu Arg Gly His Pro Ala Leu Glu Thr
50 55 60
Leu Asp Ile Ser Gln Ser Tyr Ser Thr Gln Asp Leu Asn Ala Arg Tyr
65 70 75 80
Val Phe

<210> 28984
<211> 75
<212> PRT
<213> A.fumigatus

<400> 28984
Ile Ala Thr Pro Phe Gln Gln Leu Leu Pro Thr Phe Tyr Gln Gln Asp
1 5 10 15
Val Ala Tyr His Tyr Gly Ala Asn Lys Pro Ser Thr Cys Ile Ser His
20 25 30
Glu Pro Val Asp Ile Gln Tyr Pro Cys Arg Leu Arg Cys Leu Phe Gly
35 40 45
His Pro Ala Thr Asn Ala Arg Met Gln Gly Asp Met Ser Met Gln Ser
50 55 60
Ser Gln Leu Ser Ser Asp Gln Ile Asn Ser Ser
65 70 75

<210> 28985
<211> 249
<212> PRT
<213> A.fumigatus

<400> 28985
Ser Cys Cys Ala Ser Ser Arg Cys Trp Val Pro Gly Met Gly Ser Ala
1 5 10 15
Thr Val His Asp Ala Ala Ile Ser Tyr Phe Leu Gly Leu Cys Ser Ala
20 25 30
Tyr Val Tyr Asn Met Arg Arg Cys Arg Met Tyr Leu Ala Glu Cys Arg
35 40 45
Thr Met Leu His Val Tyr Asp Leu Cys Arg Gln Ser Thr Met Gln Ser
50 55 60
Ser Tyr Gly Pro Thr Ser Pro Ile Ser Ser Ser Ser Ala Thr Ser Gln
65 70 75 80
Asp Arg Leu Ser Gly Pro Thr Glu Arg Pro Val Asp Met Ile Glu Gln
85 90 95
Glu Leu Ala Arg Arg Leu Phe Tyr Val Thr Leu Val Gly Tyr Arg Ser
100 105 110

```
Ile Gln Gln Leu Gly Ser Ala Asp Thr Pro Ile Tyr Leu Ala Pro Glu
        115                 120                 125
Thr Pro Thr Glu Arg Tyr Pro Pro Leu Pro Leu Glu Val Asp Asp Glu
    130                 135                 140
Phe Ile Phe Ser Thr His Val Glu Pro Gln Pro Thr Asn Arg Val Ser
145                 150                 155                 160
Gln Leu Val Gly Phe Asn Ala Asn Val Arg Val Tyr Asn Ser Tyr Asn
                165                 170                 175
Ala Leu Ser Ala Trp Glu Val Ala Phe Gly Ser Gly Arg Ile Val Asp
            180                 185                 190
Trp Gln Arg Gln Arg Ser Leu Leu Phe Glu Cys Leu Gln Asn Ser Lys
        195                 200                 205
Thr Ala Leu Ala Asn Val Pro Pro Glu Leu Ser Leu His Pro His Arg
    210                 215                 220
Asp Asp Ser Ala Asp Ala Ala Glu Asp Pro Trp Met Arg Glu Arg Arg
225                 230                 235                 240
His Ile Gln Tyr Glu Ile Gln Lys Ala
                245
```

<210> 28986
<211> 287
<212> PRT
<213> A.fumigatus

<400> 28986

```
Ser Asp Leu Tyr Arg Ser Asp Leu Ile Ser Ile Arg Thr Ala Arg Leu
1               5                   10                  15
Ile His Arg Leu Lys Cys Asp Thr Ser Gly Pro Pro Cys Arg Ser Cys
            20                  25                  30
Ala Ser Leu Asp Ile Pro Cys Thr Tyr Asp Arg Pro Ser Arg Arg Arg
        35                  40                  45
Gly Pro Pro Asn Arg His Ala Glu Ala Leu Lys Arg Leu Arg Leu Gly
    50                  55                  60
Thr Ser Pro Ser Ala Pro Thr Ala Asn Ser Pro Ser Pro Ser Asp Phe
65                  70                  75                  80
Ser Pro Pro Thr Leu Pro Pro Ile Ser Thr Val Asn Gln Asn Leu Thr
                85                  90                  95
Ser Ala Ser Asn Pro Ser Ser Val Glu Ser Ile Cys Pro Phe Pro Thr
            100                 105                 110
Ala Arg Leu Leu Val Asp Asp Phe Phe Thr Tyr Ile His Pro Leu Val
        115                 120                 125
Pro Ile Pro His Glu Pro Ser Phe Arg Val Ala Phe Glu Arg Arg Glu
    130                 135                 140
Asp Thr Thr Asn Pro Thr Phe Leu Ala Leu Leu Ala Ala Met Ile Gly
145                 150                 155                 160
Thr Leu Val Ala Ser Phe Pro Arg Arg Pro Lys Leu His Leu Lys Thr
                165                 170                 175
Glu Ala Glu Lys Ala Ala Phe Pro His Ser Leu Ala Leu Val Lys Arg
            180                 185                 190
Cys His Glu Val Ala Val Gln Ala Arg Gly Val Gly Tyr Leu Gly Trp
        195                 200                 205
Gly Ala Pro Gln Ser Met Met Leu Pro Leu Ala Thr Phe Trp Val Ser
    210                 215                 220
Ala Arg Leu Met Ser Thr Thr Cys Gly Asp Val Gly Cys Thr Leu Pro
225                 230                 235                 240
Ser Ala Val Arg Cys Cys Met Cys Thr Ile Phe Ala Ala Ser Arg Arg
```

```
                245                 250                 255
Cys Ser His Pro Met Gly Gln Gln Ala Arg Tyr Leu Arg Arg Arg Pro
            260                 265                 270
His His Arg Ile Asp Ser Val Asp Pro Leu Ser Ala Gln Trp Thr
        275                 280                 285

<210> 28987
<211> 475
<212> PRT
<213> A.fumigatus

<400> 28987
Met Val Phe Phe Pro Leu Ile Arg Gln Lys Glu Ala Met Arg Asp Lys
1               5                   10                  15
Arg Arg Cys Arg Val Leu Thr Ile Leu Val Pro Ser Arg Pro Gln Leu
            20                  25                  30
Cys Arg Ser Glu Ser Gln Gln Ser Ile Ala Ala Ser Asp Asp Tyr Tyr
        35                  40                  45
Ser Leu Ser Asp Arg Thr Thr Thr Ser Ser Ser Arg Ser Pro Ser Gly
    50                  55                  60
Glu Ser Arg Leu Thr Val Gln Arg Tyr Ala Thr Pro Asn Ser His Pro
65                  70                  75                  80
Val Ser Ser Thr Ser Ser Pro Ala Leu Ser Arg Thr His Leu Gly Ala
                85                  90                  95
Asn Met Ala Gly Ser Arg Ser Gln His Ser Ile Pro Glu Gln Ser Arg
            100                 105                 110
Asn Arg Asn Val Pro Pro Ser Gly Pro Asn Gln Ala Arg Phe Glu His
        115                 120                 125
Gly Arg Leu Ile Pro Val Ser Gly Met Ser Asn Glu Ser Ile Arg Gln
    130                 135                 140
Val Pro Asn Asp Arg Tyr Ala Asp Arg Ser Pro Thr Pro Gly Thr Asp
145                 150                 155                 160
Asp Leu Pro Tyr Ile Arg Phe Ala Ile Asn Gln Leu Thr Arg Glu Asp
                165                 170                 175
Glu Gln Pro Ser Leu Ser Arg Gln Ser Ser Ala Ala Ser Val Asp Tyr
            180                 185                 190
Pro Pro Gln Pro Leu Val Trp Asp Ala Ala Leu Gly Gln Phe Thr Arg
        195                 200                 205
Pro Ser Lys Pro Lys Gly Ser Ser Leu Arg Pro Pro Glu Glu Arg Leu
    210                 215                 220
His His Asp Cys Leu Pro Asp Arg Ser Pro Gln Asn Ser Val Asp Pro
225                 230                 235                 240
Glu Ala Phe Val Ala Val Asp Pro Pro Glu Asn Asn Leu Leu Tyr Pro
                245                 250                 255
Pro Leu Asn Phe Val Pro Ile Val Leu Arg Pro Trp Ala Leu Ala Leu
            260                 265                 270
Thr Ile Leu Ser Cys Leu Leu Met Ile Ala Ala Val Val Phe Cys Asn
        275                 280                 285
Val Trp Ser Gln Arg His Gln Gly Ile Trp Asp Tyr Asn Gly Leu Gly
    290                 295                 300
Gly Ser Arg Tyr Phe Val Val Gln Phe Leu Pro Gln Ile Leu Ala Ala
305                 310                 315                 320
Ile Ile Thr Ile Trp Thr Phe Val Ile Gln Ala Ala Val Tyr Arg Val
                325                 330                 335
Ile Pro Phe Ala Ile Met Ala Thr Gln Thr Leu Gln Asp Gln Val Ile
            340                 345                 350
```

```
Gln Lys Leu Pro Ile Leu Ser Arg Asn Phe Leu Leu Pro Asp Trp Ser
        355                 360                 365
Tyr Phe Arg His Gly Glu Pro Leu Val Gly Phe Ala Leu Leu Thr Ile
    370                 375                 380
Trp Ile Ser Asn Leu Ile Met Ile Pro Leu Leu Ser Cys Phe Phe Gln
385                 390                 395                 400
Ala Lys Trp His Leu Ile His Gly Glu Gly Gln Trp Arg Trp Asn Ala
                405                 410                 415
Val Leu Ala Val Gly Trp Thr Ile Val Ala Val Tyr Ala Leu Leu Ala
            420                 425                 430
Leu Gly Leu Met Thr Leu Leu Ile Arg Phe Met Arg Thr Arg Ser Gly
        435                 440                 445
Leu Met Trp Asp Pro Val Ser Leu Ala Asp Leu Ile Pro Val Ile Gln
    450                 455                 460
Arg Val Phe Thr Thr Gly Arg Lys Tyr Ala Ser
465                 470                 475
```

<210> 28988
<211> 76
<212> PRT
<213> A.fumigatus

<400> 28988

```
Pro Phe Ser Val Leu Arg Pro Cys Gly Glu Asp Ile Pro Tyr Val Ala
1               5                   10                  15
Met Arg Leu Leu Pro Ala Val Leu Gly Val Leu Thr Val Pro Leu Met
            20                  25                  30
Phe Leu Thr Leu Lys Ala Ser Gly Cys Arg Thr Ile Thr Ala Val Leu
        35                  40                  45
Gly Ala Gly Val Val Ile Phe Gly Lys Thr Asp Thr Asp Ile Phe Asp
    50                  55                  60
Gln Pro Met Val Ala Asp His Leu Gln Lys Met Val
65                  70                  75
```

<210> 28989
<211> 284
<212> PRT
<213> A.fumigatus

<400> 28989

```
Leu Leu Gln Arg Leu Trp Phe Lys His Phe Phe Ala Arg Val Phe Cys
1               5                   10                  15
Leu Ile Ile Val Pro Leu Gly Ile Tyr Cys Gly Met Phe Ala Ile His
            20                  25                  30
Phe Leu Cys Leu Val Asn Pro Gly Asp Gly Asp Gly Phe Met Ser Ser
        35                  40                  45
Glu Phe Gln Ala Thr Leu Asn Ser Lys Gly Met Gln Asp Val Pro Ala
    50                  55                  60
Asp Val Val Phe Gly Ser Arg Val Ser Ile Arg His Leu Asn Thr Gln
65                  70                  75                  80
Gly Gly Tyr Leu His Ser His Ala His Met Tyr Pro Thr Gly Ser Lys
                85                  90                  95
Gln Gln Gln Ile Thr Leu Tyr Pro His Lys Asp Glu Asn Asn Val Phe
            100                 105                 110
Ile Leu Glu Asn Gln Thr Gln Pro Leu Gly Pro Phe Gly Gln Val Glu
        115                 120                 125
```

```
Gly Pro Tyr Ala Trp Asp Asn Ile Thr Thr Glu Tyr Ile Gln Asp Gly
    130                 135                 140
Ala Val Val Arg Leu Tyr His Ala Met Thr His Arg Arg Leu His Ser
145                 150                 155                 160
His Asp Glu Arg Pro Pro Val Thr Asp Val Asp Trp Gln Phe Glu Val
                165                 170                 175
Ser Ala Tyr Gly Tyr Glu Gly Phe Pro Gly Asp Ala Asn Asp Leu Phe
            180                 185                 190
Arg Val Glu Ile Val Lys Ser Lys Ser Asp Gly Glu Glu Ala Lys Lys
        195                 200                 205
Arg Leu Arg Thr Ile Glu Ser Lys Phe Arg Leu Val His Val Met Thr
    210                 215                 220
Gly Cys Val Leu Phe Ser His Lys Val Lys Leu Pro Glu Trp Gly Phe
225                 230                 235                 240
Asp Gln Gln Glu Val Thr Cys Ala Arg Gly Gly Thr Leu Pro Asn Ser
                245                 250                 255
Leu Trp Tyr Ile Glu Ser Asn His His Pro Met Leu Pro Glu Asp Ala
            260                 265                 270
Glu Lys Val Asn Tyr Arg Asn Pro Gly Phe Phe Gly
        275                 280
```

<210> 28990
<211> 228
<212> PRT
<213> A.fumigatus

<400> 28990

```
Pro Ser Ala Glu Asn Gly Leu Ile Thr Gln Ser Arg Leu Ile Leu Leu
1               5                   10                  15
Asp Ser Pro Leu Val Phe Phe Thr Ala Leu Thr Ala Leu Ala Phe Thr
            20                  25                  30
Ser Phe Thr Asn Gln Gln Glu Leu Gly Pro Ser His Ala Phe Arg Gly
        35                  40                  45
Pro Trp Trp Phe Trp Leu Ala Ala Thr Gly Leu Ser Leu Gly Ala Thr
    50                  55                  60
Leu Ser Val Lys Trp Val Gly Leu Phe Thr Val Ala Trp Val Gly Ser
65                  70                  75                  80
Leu Thr Val Leu Gln Leu Trp Val Leu Trp Gly Asp Ala Gln Asn Val
                85                  90                  95
Thr Pro Val Cys Leu Arg Tyr Arg Leu Asp Leu Pro His Ser Thr Ser
            100                 105                 110
Lys Leu Ile Ala Pro Ala Leu Met Val Gln Thr Phe Leu Cys Pro Gly
        115                 120                 125
Phe Leu Ser His His Arg Ser Pro Trp His Leu Leu Trp Asn Val Arg
    130                 135                 140
Asn Ser Phe Pro Met Leu Gly Gln Pro Gly Arg Arg Arg Trp Ile His
145                 150                 155                 160
Val Leu Gly Ile Ser Gly His Ile Lys Leu Gln Gly Asn Ala Arg Cys
                165                 170                 175
Ser Cys Arg Cys Cys Phe Arg Phe Thr Cys Glu His Ser Ser Pro Lys
            180                 185                 190
His Ser Gly Trp Leu Pro Ser Leu Pro Cys Pro Tyr Val Ser His Arg
        195                 200                 205
Lys Gln Thr Thr Ala Asp His Ser Leu Ser Ser Gln Arg Arg Glu Gln
    210                 215                 220
Cys Leu His Ser
```

225

<210> 28991
<211> 170
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (167)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28991
Ala Val Ser Ile Leu His Arg Ser Ala Cys Leu Pro Ser Ser Ile Gln
1 5 10 15
Val Ala Ser Cys Asp Cys Gly Cys Gly His Ser Cys Ala Ile Thr Ser
20 25 30
Leu His Ser Ile Met Thr Phe Leu Ile Gly Thr Pro Leu Asn Trp Ala
35 40 45
Ile Thr Ala Thr Ala Gly Ser Gly Phe Leu Leu Phe Gly Tyr Asp Gln
50 55 60
Gly Val Met Ser Gly Leu Leu Thr Gly His Ala Phe Thr Arg Val Phe
65 70 75 80
Pro Glu Ile Asp Thr Thr Lys His Gly Ser Gly Ser Ala Ser Leu Gln
85 90 95
Gly Thr Val Val Ala Ile Tyr Glu Ile Gly Cys Phe Phe Gly Ala Ile
100 105 110
Ile Cys Met Ile Leu Gly Glu Arg Leu Gly Arg Arg Lys Cys Ile Ala
115 120 125
Ile Gly Ser Ile Val Leu Ser Ile Gly Ala Ala Leu Gln Ala Ser Ala
130 135 140
Tyr Ser Ile Pro Gln Met Ile Thr Gly Arg Ile Ile Ala Gly Leu Gly
145 150 155 160
Asn Gly Met Asn Thr Ser Xaa Ile Arg Glu
165 170

<210> 28992
<211> 96
<212> PRT
<213> A.fumigatus

<400> 28992
Val Lys Thr Thr Gly Gln Tyr Leu Ile Thr Gly Cys Lys Ser Asn Ser
1 5 10 15
Ser Leu Leu Leu Pro Ser Phe Pro Arg Leu Thr Arg Tyr Gln Tyr Ile
20 25 30
Met Thr Asp Met Thr Asn Gln Leu Leu Gln Ala Glu Pro Glu Val Glu
35 40 45
Lys Thr Trp Met Ala Gly Ala Leu Leu Gly Arg Leu Ser Thr Pro Val
50 55 60
Glu Phe Lys Ala Pro Ala Val Phe Leu Leu Ser Glu Gly Ser Ser Phe
65 70 75 80
Met Thr Gly Ala Asp Leu Arg Val Asp Gly Gly His Cys Ala Ser Ala
85 90 95

<210> 28993

<211> 189
<212> PRT
<213> A.fumigatus

<400> 28993
Arg Leu Thr Leu Ser Gln Asn Ser Ser Ser Lys Val Lys Glu Ile Thr
1 5 10 15
Thr Ser Pro Ser Gln Gly Asn Leu Gly Leu Asn Ser Leu Pro Phe Ser
20 25 30
Ser Leu Pro His Trp Cys Ala Leu His Ser Ser Leu His Arg Thr Asp
35 40 45
Trp Ser Ile Ser Lys Gln Tyr Lys Pro Cys Arg His Pro Ile Tyr Thr
50 55 60
Ser Gln Ile Ser Ser Arg Ala Phe Glu Arg Val Trp Gln Leu Gln Val
65 70 75 80
Ser Ile Met Pro Ser Lys Gly Cys His Ser Asn Ser Leu Pro Glu Ala
85 90 95
Arg Gly Leu Lys Tyr Asp Glu Ser Asp Met Ala Leu Phe His Ala Lys
100 105 110
Leu Ser Tyr His Ser Thr Ile Glu Glu Arg Met Ala Ser Lys Asp Thr
115 120 125
Asn Leu Ala Ser Ile Ser Glu His Gln Ala Arg Ile Leu Lys Arg Trp
130 135 140
Glu Met Leu Lys Gln Val Glu Lys Glu Met Ala Asp Lys Gly Lys Cys
145 150 155 160
Leu Ser Pro Ala Glu Lys Lys Gln Leu Ala Gln Tyr Glu Trp Arg Tyr
165 170 175
Lys Arg Leu Glu Glu Leu Ala Thr Lys Thr Thr Gly Gly
180 185

<210> 28994
<211> 82
<212> PRT
<213> A.fumigatus

<400> 28994
His Met Pro Gln Thr Phe Asn Ser Cys Gln Gly Leu Thr Leu Asp His
1 5 10 15
Val Met Leu Asp Leu Thr Met Pro Val Phe Ala His Gly Gln Leu Tyr
20 25 30
Thr Ser Leu Ser Arg Val Arg Arg Gly Ala Asp Ile Cys Ile Leu Arg
35 40 45
Asn Pro Cys Glu Asn Asp Lys Pro Thr Leu Ser Leu Ser Arg Pro Thr
50 55 60
Pro Ser His Met Ser Arg Pro Ser Thr Glu Ser Arg Arg Leu Pro Tyr
65 70 75 80
Ile Thr

<210> 28995
<211> 344
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE

<222> (49)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28995
Gln Val Arg Asn His Ile His Leu Phe Gly Gly Asp Gly Pro Asn Val
1 5 10 15
Thr Ile Ala Gly Glu Ser Ala Gly Ala Trp Ser Val Leu Ala His Leu
20 25 30
Arg Ser Asp Gln Pro Leu Phe Gln Arg Ala Ile Ile Gln Ser Ala Pro
35 40 45
Xaa Trp Thr Met Ile Leu Pro Glu Glu Ala Gln Leu Lys Phe Asn Lys
50 55 60
Leu Leu Gln Trp Ala Gly Val Pro Gln Gly Ala Thr Ala Asp Glu Lys
65 70 75 80
Ile Ala Ala Leu Arg Ser Val Ser Ala Glu Gln Leu Ile Ala Trp Asn
85 90 95
Asp Leu Leu Met Ser Pro Ile Trp Asp Pro Lys Trp Phe Val Gly His
100 105 110
Gly Ser Pro Thr Ser Pro Leu Asp Ser Ala Glu Pro Phe Pro Asn Trp
115 120 125
Val Gln Gly Ile Val Val Gly Thr Met Arg Asp Glu Leu Ser Ile Phe
130 135 140
Gly Leu Glu Arg Phe Trp Gln Thr Lys Ala Met Val Lys Ser Ser Leu
145 150 155 160
Asn His Ser Leu Ser Leu Pro Ser Asp Pro Asp Phe Ser Thr Glu Val
165 170 175
Leu Asn Glu Tyr Gly Ile Leu Glu Ala Gly Ser Asp Thr Glu Ala Val
180 185 190
Arg Gly Phe Ile Arg Val Ala Thr Asp Ala Cys Phe Ser Arg Leu Pro
195 200 205
Tyr Asn Leu Ala Arg Ala Cys Asp Ser Pro Asp Ser Pro Tyr Leu Tyr
210 215 220
Val Tyr Arg Phe Asp Gln Val Asp Glu Glu Arg Asn Ser Pro Leu Arg
225 230 235 240
Gly Lys Ala Phe His Val Leu Asp Asn Thr Tyr Leu Cys Arg Tyr Leu
245 250 255
Ala Val Ala Gly Pro Ala Ala Pro Arg Ser Cys Gln Ala Thr Ala Asp
260 265 270
Ala Phe Ser Arg Met Ile Leu Cys His Thr Tyr Gly Glu Ala Pro Trp
275 280 285
Glu Pro Tyr Asn Ile Arg Arg Leu Gln Asn Val Phe Asp Gly Thr Asp
290 295 300
Thr Arg Leu Glu Glu Val Arg Leu Asp Asp Gln Cys Trp Arg Lys Phe
305 310 315 320
Leu Thr Thr Glu Glu Arg Val Ser Ile Phe Gly Arg Leu Phe Ala Ala
325 330 335
Leu Met Asn Asn Gly Pro Lys His
340

<210> 28996
<211> 67
<212> PRT
<213> A.fumigatus

<400> 28996
Leu Phe Gly Glu Leu Leu Pro Ala Gly Cys Val Leu Met Thr Phe Ser

```
1               5                   10                  15
Gly Gly Ile Ala Leu Gly Tyr Asn Asp Thr Trp Pro Ala Pro Gly Glu
            20                  25                  30
Glu Tyr Phe Ile Ala Val Cys Arg Ser Thr Ser Ala Thr Gly Gly Phe
        35                  40                  45
Val Ser Arg Lys His Pro Thr Leu Ile Cys Leu Leu Ile Ser Glu Ala
    50                  55                  60
Asp Arg Glu
65
```

<210> 28997
<211> 102
<212> PRT
<213> A.fumigatus

<400> 28997

```
Leu Ser Thr Ser Arg Val Pro Asn Pro Ala Leu Gln Leu Ile Asn Leu
1               5                   10                  15
Leu Leu Asn Tyr Ser His Leu Arg Thr Gln Trp Ser Ser Ser Ser Thr
            20                  25                  30
Asp Arg Pro Gly Arg Arg Ala Arg Pro Ala Cys Ala Ser Pro Leu Ile
        35                  40                  45
Glu Lys Gly Val Asp Ala Glu Val Val Asn Val Asp Leu Ala Lys Gly
    50                  55                  60
Glu His Leu Ala Glu Ser Tyr Leu Glu Met Gln Pro Phe Gly Lys Val
65                  70                  75                  80
Pro Val Leu Gln Asp Thr Glu Thr Gly Val Gln Val Phe Gly Ala Phe
                85                  90                  95
Pro Ala Arg His Arg Thr
            100
```

<210> 28998
<211> 69
<212> PRT
<213> A.fumigatus

<400> 28998

```
Phe Cys Leu Arg Ser Arg Arg Thr Val Ser Arg Pro Arg Gly Lys Lys
1               5                   10                  15
Lys Asn Glu Leu Thr Ser Gly Arg Arg Gly Ile Leu Gln Asp Ser Ser
            20                  25                  30
Lys Gly Phe Val Leu Tyr Tyr His Tyr Ala Asp Thr Arg Ile Gly Lys
        35                  40                  45
Ala Val Glu Asp Tyr Gln Phe Gly Trp Asn Gln Leu Lys Trp Glu Asn
    50                  55                  60
Asp Trp Pro Ser Val
65
```

<210> 28999
<211> 222
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (222)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 28999

```
Trp Ser Leu Leu Gln Pro Arg Gly Tyr Pro Glu Asp Cys Gln Asp Gln
1               5                  10                  15
Cys Cys Leu Arg Arg Gln Glu Ala Pro Asp Arg Pro Glu Trp His Ser
            20                  25                  30
Gln Tyr Pro Arg Arg Gln Gln Pro Asp Pro Cys Ala Lys Gly Tyr Arg
        35                  40                  45
Trp Tyr Ser Ala Asp Gly Gln Ser Gln Ser Trp Trp Tyr Val Glu Leu
    50                  55                  60
Phe Phe Cys Glu Ile Arg Val Leu Ile Phe Gln Gly Pro Asn Ala Asp
65                  70                  75                  80
Phe Gly Ile Lys Tyr Asn Leu Cys Asn Gly Ala Pro Ala Pro Glu Ser
                85                  90                  95
Val Thr Asn Lys Ile Tyr Glu Thr Ser Lys Ser Leu Thr Ser Tyr Lys
            100                 105                 110
Ile Ala Glu Ile Pro Asp Val Asp Thr Ser Thr Ile Gly Thr Lys Thr
        115                 120                 125
Tyr Gly Pro Leu Glu Val Glu Ile Val His Ser Thr Ser Asp Tyr Leu
    130                 135                 140
Lys Met Leu Lys Glu Ile Phe Asp Ser Asp Leu Ile Lys Glu Phe Leu
145                 150                 155                 160
Ser Thr His Lys Asp Phe Lys Val Leu Phe Asp Gly Met His Arg Val
                165                 170                 175
Thr Gly Pro Leu Cys Val Asp Asn Leu Val Lys Glu Leu Gly Leu Ala
            180                 185                 190
Pro Arg Gln His His Glu Leu Gly Ser Gln Pro Leu Leu Gln Arg Arg
        195                 200                 205
Ala Pro Leu Thr Pro Thr Trp Ser Thr Pro Met Ser Trp Xaa
    210                 215                 220
```

<210> 29000
<211> 118
<212> PRT
<213> A.fumigatus

<400> 29000

```
Leu Ser Phe Asp Cys Ser Ser Gly Leu Arg Lys Lys Val Lys Val Phe
1               5                  10                  15
Gln Gln Pro His Tyr Ser Glu Ala Phe Val Thr Ser Ile Leu Leu Ser
            20                  25                  30
Ile Pro Glu Gly Ala Glu Gly Ala Phe Leu Val Ile Gly Gly Asp Gly
        35                  40                  45
Arg Tyr Tyr Asn Pro Glu Val Ile Gln Lys Ile Ala Lys Ile Ser Ala
    50                  55                  60
Ala Tyr Gly Val Lys Lys Leu Leu Ile Gly Gln Asn Gly Ile Leu Ser
65                  70                  75                  80
Thr Pro Ala Ala Ser Asn Leu Ile Arg Val Arg Lys Ala Thr Gly Gly
                85                  90                  95
Ile Leu Leu Thr Ala Ser His Asn Pro Gly Gly Thr Trp Ser Phe Ser
            100                 105                 110
Ser Val Lys Ser Glu Cys
        115
```

<210> 29001

<211> 74
<212> PRT
<213> A.fumigatus

<400> 29001
Phe Phe Lys Asp Pro Met Pro Ile Ser Val Ser Ser Thr Thr Cys Ala
1 5 10 15
Met Val Pro Pro Leu Pro Ser Pro Ser Pro Thr Arg Ser Thr Lys Pro
20 25 30
Pro Ser His Ser Leu Pro Ile Arg Ser Pro Lys Phe Pro Met Ser Thr
35 40 45
Pro Pro Pro Leu Ala Pro Arg Pro Met Val Pro Trp Arg Ser Arg Ser
50 55 60
Phe Thr Pro Pro Pro Ile Thr Ser Arg Cys
65 70

<210> 29002
<211> 165
<212> PRT
<213> A.fumigatus

<400> 29002
Glu Glu Gln Gly Thr Leu Ser Thr Asp Asn Glu Arg Ser Ser Ser Met
1 5 10 15
His Thr Ala Arg Arg Pro Ala Ala Ile Pro Leu Ala Cys Ile Leu Ala
20 25 30
Gln Pro Ser Phe Leu Leu Arg Leu Ser Thr Gly Ser Thr Gln Lys Gly
35 40 45
Gly Pro Arg Lys Tyr Trp Gly Gly Gln Ser Val Trp Asp Ile Leu Ser
50 55 60
Trp Leu Ser Ala Leu Asn Lys Ala Leu Ser Leu Gln Leu Trp Gln Thr
65 70 75 80
Asp Asp Asp Ile Ile Pro Phe Val Ala Cys Gly Trp Ile Asn Gly Tyr
85 90 95
Thr Glu Ser Arg Cys Ile Leu Ala Gln Ala Lys Ser Tyr Ala Leu Arg
100 105 110
Ala Ser Val Ser Cys Ser Gln Arg Asp Val Val Leu Ala Ser His Thr
115 120 125
Gln Thr Ser Thr Ser Asn Gln Arg Tyr Lys Cys Arg Asn Ile Thr Pro
130 135 140
Ser Asn Asp Gln Met Ser Met Val Gln Ser Ile Tyr Leu Lys Gly Asp
145 150 155 160
Asp Val Ile Leu Leu
165

<210> 29003
<211> 82
<212> PRT
<213> A.fumigatus

<400> 29003
Gly His Gln Tyr Ala Asn His Ser Thr Pro Asn Tyr Tyr Asp Glu Tyr
1 5 10 15
Thr Ser Asp Ala Arg Pro Ser Met Gln Val Gly Arg Ala Gly Arg Gly
20 25 30
Pro Asn Val Leu Gln Lys Asn Asn Arg Lys Phe Ala Asp Ala Tyr Glu

```
        35                  40                  45
Tyr Glu Arg Asp Pro Ser His His Ser Gly Ser Ser Gly Ala Ala Arg
    50                  55                  60
Lys Val Met Asp Phe Phe Arg Arg Arg Ala Lys Ser Arg Ala Gly Asp
65                  70                  75                  80
Asp Arg
```

<210> 29004
<211> 108
<212> PRT
<213> A.fumigatus

<400> 29004

```
Ala Asp Pro Leu Gln Thr Ile Lys Ser Gly Thr Ser Val Glu His Asn
1               5                  10                  15
Val Leu Tyr Glu Tyr Gln Phe Val Ser Thr Gln Asn Val Tyr Met Gly
            20                  25                  30
Gln Ile Gln Thr Glu Thr Ala Cys Val Phe His His Phe Leu Lys His
        35                  40                  45
Asn Pro Leu Val Ser Arg Leu Gln Met Leu Ile Arg Val Ser Gln Thr
    50                  55                  60
Gly Thr Thr Arg Ala Thr Pro Thr Leu Ser Ser Pro Ser Arg Arg Lys
65                  70                  75                  80
Pro Gln Ser Met Ile Gln Thr Leu Pro Pro Ala Ala Arg Ala Pro Ala
                85                  90                  95
Thr Glu Thr Ala Arg Ser Ala Gly Ala Ser Val Trp
            100                 105
```

<210> 29005
<211> 67
<212> PRT
<213> A.fumigatus

<400> 29005

```
Ile Thr Gly Cys Ser Thr Tyr Gly Gly Glu Gln Asn Cys Gln Asn Ser
1               5                  10                  15
Ile Phe Ser Ile Glu Gly Asp Ser Ala Ile Thr Val Tyr Asn Leu Asn
            20                  25                  30
Thr Leu Gly Thr Arg Ser Met Val Asp Arg Asp Gly Gln Ser Leu Ala
        35                  40                  45
Ser Phe Ser Asp Asn Ile Ser Val Phe Thr Asn Asn Ile Val Leu Phe
    50                  55                  60
Arg Ser Gln
65
```

<210> 29006
<211> 129
<212> PRT
<213> A.fumigatus

<400> 29006

```
Pro Thr Ser Asn His Gln Val Arg His Ile Gly Arg Thr Gln Arg Pro
1               5                  10                  15
Leu Arg Val Pro Val Arg Leu Asn Pro Glu Cys Val His Gly Pro Asp
            20                  25                  30
```

```
Pro Asn Arg Asp Arg Val Arg Leu Pro Pro Leu Pro Gln Thr Gln Ser
        35                  40                  45
Ser Arg Val Ser Thr Ser Asp Ala Asp Thr Ser Leu Ala Asn Arg Tyr
    50                  55                  60
Tyr Gln Ser Asn Pro Asn Ala Leu Ile Pro Phe Thr Pro Lys Ala Ala
65                  70                  75                  80
Ile His Asp Pro Asp Phe Ala Ser Ser Cys Lys Ser Ser Ser Asp Gly
                85                  90                  95
Asn Cys Glu Val Gly Trp Gly Leu Arg Val Val Asp Ser His Asp Leu
            100                 105                 110
Tyr Val Tyr Gly Ala Gly Leu Tyr Ser Phe Phe Asn Asn Tyr Asp Ala
        115                 120                 125
Gly
```

<210> 29007
<211> 66
<212> PRT
<213> A.fumigatus

<400> 29007

```
His Val Thr Ala Leu Thr Ile Ala Arg Gly Ile Ala Asp Ser Thr Val
1               5                   10                  15
Leu Ser Thr Gln Ala Asp Leu His Asn Asn Tyr Ser Asp Pro Ala Ile
            20                  25                  30
Thr Pro Cys Cys Thr Leu Thr Val Asn Leu Met Asp Glu Tyr Ile Gln
        35                  40                  45
Val Leu Ser Gly Glu Val Ala Ala Gly Lys Cys Ser Thr Ser Asn Thr
    50                  55                  60
Cys Arg
65
```

<210> 29008
<211> 153
<212> PRT
<213> A.fumigatus

<400> 29008

```
Lys Cys Leu Ala Val Ala Ser Gly Met Trp Leu Gly Lys Glu Gly Pro
1               5                   10                  15
Leu Val His Val Ala Cys Cys Cys Ala Asn Val Met Met Lys Phe Phe
            20                  25                  30
Asp Ser Leu Asn His Asn Glu Gly Met Trp Ser Ser Arg His Gln Arg
        35                  40                  45
Val Ile Leu Ser Ile Ile Ala Arg Lys Arg Glu Val Leu Ser Ala Ala
    50                  55                  60
Ala Ala Ala Gly Ile Ser Val Ala Phe Gly Ala Pro Ile Gly Gly Val
65                  70                  75                  80
Leu Phe Ser Leu Glu Val Cys Leu Ser Asp Leu Tyr Ser Ile Ser Pro
                85                  90                  95
Arg Leu Thr Asn Asp Ser Asn Cys Arg Thr Thr Phe Gln Ile Lys Pro
            100                 105                 110
Cys Gly Arg Val Leu Ser Val Gln Trp Leu Leu Leu Ser Leu Phe Arg
        115                 120                 125
Arg Leu Thr His Phe Glu Gln Glu Thr Leu Cys Ser Thr Lys Leu Ser
    130                 135                 140
```

```
Ile His Val Asp Gly Ile Ala Ser Lys
145                 150

<210> 29009
<211> 240
<212> PRT
<213> A.fumigatus

<400> 29009
Thr Val Ser Leu Arg Pro Leu Gln Pro Leu His Ile Leu Thr Gly Pro
1               5                  10                  15
Ile Cys Arg Ile Ser Phe Lys Arg Lys Gln Lys Arg Pro Ala Arg Phe
            20                  25                  30
Ser Phe Ser Arg Leu Phe Ser Gly Asp Glu Pro Glu Ser Thr Ile His
        35                  40                  45
Phe Arg Ala Ser Ala Thr Thr Asn Glu Pro Thr Pro Glu Val Asp Ser
    50                  55                  60
Ser Leu Ser Gln Leu Arg Ser Arg Asn Gly Asn Glu Asn Leu Asn Thr
65                  70                  75                  80
Ser Lys Ser Gly Gly Phe Leu Asp Trp Tyr Val Glu Gly Pro Gly Arg
                85                  90                  95
Arg Val Gly Tyr Asp Asp Leu Thr Ala Ile Asp Trp Ile Phe Glu Tyr
            100                 105                 110
Thr Lys Glu Arg Gln Arg Lys Arg Leu Leu Tyr Ser Lys Ala Pro Gly
        115                 120                 125
Leu Ser Gly Tyr Ala Arg Arg Leu Leu Glu Ala Ser Asn Val Trp Val
    130                 135                 140
Val Leu Ile Ala Thr Gly Val Leu Val Gly Ile Ile Ala Ala Cys Ile
145                 150                 155                 160
Asp Ile Thr Ser Asp Trp Leu Gly Asp Leu Lys Thr Gly Tyr Cys Lys
                165                 170                 175
Asn Gly Pro Gly Gly Gly Lys Phe Tyr Leu Asn Arg Ser Phe Cys Cys
            180                 185                 190
Trp Gly His Asp Gly Lys Ile Ser Val Leu Asn Asn Ala Arg Leu Gln
        195                 200                 205
Leu Thr Trp His Ile His Gln Thr Tyr Leu Ser Ala Trp Ile Gly His
    210                 215                 220
Leu Gly Val Lys Leu Leu Glu Ser Ala Leu Pro Ala Glu Ala Ile Arg
225                 230                 235                 240

<210> 29010
<211> 71
<212> PRT
<213> A.fumigatus

<400> 29010
Val Val Phe Ala Val Cys Ala Ser Phe Leu Val Arg Thr Tyr Ala Ile
1               5                  10                  15
Tyr Ala Arg His Ser Gly Ile Pro Glu Ile Lys Thr Val Leu Gly Gly
            20                  25                  30
Phe Val Ile Arg His Phe Met Gly Pro Trp Thr Leu Ala Ile Lys Ser
        35                  40                  45
Leu Gly Leu Val Gly Val Pro Cys Ile Leu Tyr Val Pro Phe Leu Gly
    50                  55                  60
Cys Leu Leu Ser Lys Ser Val
65                  70
```

<210> 29011
<211> 113
<212> PRT
<213> A.fumigatus

<400> 29011
Gln Leu Ser Tyr Tyr Phe Pro Asp Lys Thr Met Trp Gln Ser Phe Val
1 5 10 15
Cys Ala Met Val Ala Ala Val Thr Leu Gln Ala Leu Asn Pro Phe Arg
20 25 30
Thr Gly Asn Ile Val Leu Tyr Glu Val Lys Tyr Thr Arg Gly Trp His
35 40 45
Arg Phe Glu Met Met Pro Phe Ile Leu Leu Gly Ile Leu Gly Gly Leu
50 55 60
Tyr Gly Ala Phe Leu Ile Arg Leu Asn Met Lys Val Ala Lys Trp Arg
65 70 75 80
Arg Ser Arg Thr Trp Ser Arg Pro Ile Leu Glu Val Thr Val Ile Thr
85 90 95
Leu Leu Ser Val Leu Thr Thr Gly Arg Arg Arg Met Pro Ala Cys Ala
100 105 110
Gln

<210> 29012
<211> 249
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (210)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29012
Gln Ser Met Ser His Asn Asn Asp Glu Asp Tyr Phe Leu Pro Leu Glu
1 5 10 15
Asp Gln Arg Val Phe Gly Ala Gly Ile Arg Arg Lys Arg Val Gln Phe
20 25 30
Val Arg Ser Ser Glu His Glu Leu Asn Thr Thr Thr Thr Thr Thr Thr
35 40 45
Thr Arg Thr Thr Thr Pro Ser Thr Thr Ser Gly Leu Ser Pro Ala Asp
50 55 60
Lys Tyr Leu Ser Ile Val Leu Pro Lys Glu Lys Leu His Thr Gln Thr
65 70 75 80
Thr Glu Pro Ala Thr Thr Arg Asn Glu Thr Val Ser Ala Pro Pro Ser
85 90 95
Pro Glu Ala Val Pro Ala Pro Val Gln Arg Cys Glu Val Cys Asn Leu
100 105 110
Pro Leu Asp Gly Ser Lys Ala Gly Thr Asp Glu Glu Gly Ser Ala Arg
115 120 125
Pro His Glu Ala Ser Leu Ala His Gln Leu Cys Leu Ser His Ser His
130 135 140
Pro Pro Ser His Leu Asp Arg Ser Arg His Gly Leu Arg Tyr Leu Ser
145 150 155 160
Ala Tyr Gly Trp Asp Pro Asp Ser Arg Leu Gly Leu Gly Ala Pro Gly

```
                165                 170                 175
Arg Glu Gly Ile Arg Glu Pro Leu Lys Gly Arg Leu Lys Val Asp Thr
            180                 185                 190
Val Gly Leu Gly Ala Glu Val Glu Pro Ser Ala Asn Gly Lys Lys Lys
        195                 200                 205
Val Xaa Ala Ala Ala Ala Val Pro Ser Lys Val Gln Arg Leu Asn Ala
    210                 215                 220
Lys Gln Val Arg Lys Gly His Phe Asp Ala Lys Lys Ile Arg Glu Met
225                 230                 235                 240
Trp Arg Gly Asp Phe Leu Ser Glu Arg
                245
```

<210> 29013
<211> 220
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (161)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29013

```
Gly Gly Thr Ser Gly Ile Gly Ala Ser Val Ala Tyr Glu Leu Ala Leu
1               5                   10                  15
Arg Gly Ala Gln Ile Ile Leu Leu Thr His His Ser Pro Ser Asp Ile
            20                  25                  30
Phe Leu Ile Asp Tyr Ile Glu Asp Leu Arg Lys Ser Thr Gly Asn Gln
        35                  40                  45
Leu Ile Phe Ala Glu Gln Val Asp Leu Ser Ser Leu His Ser Ile Arg
    50                  55                  60
Thr Phe Ala Thr Lys Trp Ile Asp Asn Tyr Pro Pro Arg Arg Leu Asp
65                  70                  75                  80
Met Val Ile Leu Cys Ala Ser Ala Ala Leu Pro Ala Ser Ser Arg Gly
                85                  90                  95
Gln Leu Thr Thr Asp Gly Leu Asn Glu Glu Trp Gln Val Asn Tyr Leu
            100                 105                 110
Gly Asn Phe His Leu Leu Ser Ile Leu Ser Pro Ala Leu Lys Ala Gln
        115                 120                 125
Pro Ala His Arg Asp Val Arg Val Ile Phe Thr Thr Cys Ser Ser Tyr
    130                 135                 140
Ile Gly Ala Lys Leu Asp Met Lys Gln Leu Glu Ala Ala Thr Ser Gly
145                 150                 155                 160
Xaa Lys Pro Ala Gly Pro Thr Ala Ala Lys Lys Asn Gly Lys Pro Gln
                165                 170                 175
Lys Gln Ala Ser Thr Glu Lys Glu Ala Ser Leu Phe Gly Leu Ser Lys
            180                 185                 190
Leu Asp Met Met Ile Phe Ala Asn Ser Phe Gln Arg His Phe Asn Ser
        195                 200                 205
Cys Ser Pro Gln Gly Val Asp Gly Ala Thr Arg Ala
    210                 215                 220
```

<210> 29014
<211> 90
<212> PRT
<213> A.fumigatus

<400> 29014
Thr Cys Ser Leu Phe His Ser Phe Ile Leu Phe Phe Phe Phe Ile Phe
1 5 10 15
Ser His Ser Leu Ile Phe Ser Pro Gly Tyr Thr Met Pro Ile Pro Ile
20 25 30
Ile Val Gln Gly Ile Arg Glu Gly Ile Asp Ser Ile Pro Tyr Ala Tyr
35 40 45
Thr Val Leu Lys Ile Ala Pro Trp Val Leu Leu Val Ala Ala Leu Lys
50 55 60
Tyr Tyr Phe Gly Gly Ala Arg Asn Gly Ser Glu Arg Val Met His Ser
65 70 75 80
Lys Ile Ile Met Ile Thr Val Asn Leu Pro
85 90

<210> 29015
<211> 69
<212> PRT
<213> A.fumigatus

<400> 29015
Gly Thr Asp Ala Tyr Leu Pro Pro Arg Gly Glu Asp Pro Val Ser Pro
1 5 10 15
Ser Val Ala Gly Gln Ile Met Lys Val Lys Glu Leu Val Glu Val Gln
20 25 30
Glu Val Asp Arg Arg Leu Thr Lys Glu Glu Val Arg Ala Glu Arg Arg
35 40 45
Pro Asp Pro Gly Tyr Tyr Ile Glu Lys Ala Ser Ile Glu Glu Phe Ser
50 55 60
Glu Asn Arg Ser Ala
65

<210> 29016
<211> 69
<212> PRT
<213> A.fumigatus

<400> 29016
Leu Asn Asp Ile Ala Thr Ala Val Ala Phe Lys Ala Phe Lys Gln Ala
1 5 10 15
Thr Leu Asn Ala Phe Tyr Asn Lys Thr Asp Cys Ser Tyr Gln Thr Phe
20 25 30
Asp Glu Ile Ser Asn Ile Ala Pro Arg Gln Gln Lys Ile Glu Val Phe
35 40 45
Ile Phe Lys Lys Asn Leu Thr Ser Trp Tyr Lys Lys Met Leu Ala Gln
50 55 60
Asp Met Tyr Asp Thr
65

<210> 29017
<211> 294
<212> PRT
<213> A.fumigatus

<400> 29017
Asn Pro Asn Thr Val Leu Leu Val Gly Ser Ala Pro Asn Phe Pro His

```
1               5                   10                  15
Gly Ile Val Asp Asp Ile Pro Ala Leu Ser Arg Leu Ala Thr Lys Tyr
            20                  25                  30
Lys Ile Pro Leu His Val Asp Cys Cys Leu Gly Ser Phe Val Ile Ala
        35                  40                  45
Phe Leu Lys Lys Ala Gly Phe Pro Ser Pro Tyr Glu Glu Glu Gly Gly
    50                  55                  60
Phe Asp Phe Arg Leu Pro Gly Val Thr Ser Ile Ser Val Asp Thr His
65                  70                  75                  80
Lys Tyr Gly Phe Ala Pro Lys Gly Asn Ser Val Leu Leu Tyr Arg Asn
                85                  90                  95
Lys Thr Tyr Arg Ser Tyr Gln Tyr Phe Ile Tyr Pro Asp Trp Ser Gly
            100                 105                 110
Gly Val Tyr Ala Ser Pro Ser Val Ala Gly Ser Arg Pro Gly Ala Leu
        115                 120                 125
Ile Ala Gly Cys Trp Ala Ser Leu Met Ser Val Gly Glu Thr Gly Tyr
    130                 135                 140
Ile Asn Ser Cys Leu Glu Ile Ile Gly Ala Ala Lys Lys Phe Glu Ala
145                 150                 155                 160
Ser Ile Lys Glu His Pro Val Leu Ser Lys Asn Leu Gly Ile Val Gly
                165                 170                 175
Lys Pro Met Val Ser Val Val Ala Phe Gln Ser Gln Asn Gly Ala Val
            180                 185                 190
Asp Ile Tyr Asp Val Ala Asp Gly Leu Ser Ala Lys Gly Trp His Leu
        195                 200                 205
Asn Ala Leu Gln Ser Pro Pro Ala Ile His Val Ala Phe Thr Ile Pro
    210                 215                 220
Thr Ala Ala Ala Val Glu Lys Leu Thr Thr Asp Leu Val Glu Thr Val
225                 230                 235                 240
Glu Lys Glu Leu Glu Lys Ala Glu Glu Arg Lys Arg Gln Gly Lys Ser
                245                 250                 255
Tyr Val Leu Lys Arg Gly Asp Thr Ser Ala Leu Tyr Gly Val Ala Gly
            260                 265                 270
Ser Leu Pro Asp Lys Ser Ile Val Ser Arg Leu Ala Glu Gly Phe Leu
        275                 280                 285
Asp Thr Leu Tyr Lys Ala
    290
```

<210> 29018
<211> 617
<212> PRT
<213> A.fumigatus

<400> 29018

```
Gln Pro Ala Ala Gln Gln Asp Ser Asp Thr Ile Glu Ile Ile Pro Gln
1               5                   10                  15
Gln Gln Pro Gly Leu Pro Lys His Phe Lys Ser Asn Ala Ser Arg Phe
            20                  25                  30
Ser Phe Asp Met Asn Gly Val Glu Ser Ser Ala Gln Glu Lys Leu Leu
        35                  40                  45
Glu Glu Lys His Lys Glu Lys Glu Ala Ala Arg Arg Ala Lys Ala Gln
    50                  55                  60
Leu Glu Asp Arg Glu Tyr Ser Asp Val Glu Asp Asp Tyr Asp Asn Asp
65                  70                  75                  80
Leu Leu Asp Asp Phe Asp Gly Leu Glu Glu Arg Ile Pro Gly Val Asn
                85                  90                  95
```

```
Thr Asp Ala Glu Glu Asp Glu Phe Ser Gly Phe Ser Gly Pro Gly Ala
            100                 105                 110
Ala Leu Thr Thr Ser Trp His Ala Pro Gly Leu Ser Pro Val Val Ala
        115                 120                 125
Ser Pro Met Ser Ala Pro Gly Leu Gly Pro Ala Val Asp Ile Asn Leu
    130                 135                 140
Gln Leu Asp Gln Gly Gly Ala Pro His Val Ser Asp Ile Ser Val Thr
145                 150                 155                 160
Glu Asp Ala Val Ala Ala Phe Pro Pro Thr Thr Asn Leu Ser Glu Thr
                165                 170                 175
Ala Ala Val Gly Cys Ala Met Gln Ala Gly Ala Arg Ser Ser Thr Ser
            180                 185                 190
Gln Leu Ile Asp Glu Asp Asp Asp Leu Tyr Phe Asp Asp Gly Glu Phe
        195                 200                 205
Gly Asp Leu Ala Val Asp Ala Gly Gly Glu Thr Phe Asp Glu Ser Ile
    210                 215                 220
Phe Asp Asp Glu Ser Ser His Leu Tyr Ala Arg Lys Thr Ala Val Val
225                 230                 235                 240
Pro Ala Pro Pro Val Glu Pro Gly Thr Thr Asp Gln Met Glu Asp Lys
                245                 250                 255
Ser Arg Ser Gly Glu Ala Ser Glu Pro Pro Ser Leu Ser Pro Lys Leu
            260                 265                 270
Asp Gln Thr Asp Gly Leu Lys His Ala Pro Ser Ala Ala Ser Asp Phe
        275                 280                 285
Arg Asp Arg Ala Val Thr Arg Tyr Gly Gly Leu Asp Pro Glu Met Thr
    290                 295                 300
His Asn Leu Thr Thr Thr Lys Ser His Gly Gly Val Leu Ser Glu His
305                 310                 315                 320
Asn Leu Glu Val Leu His Asn Ala Leu Glu Lys Ala Ala Asn Glu Thr
                325                 330                 335
Ala His Met Asp Arg Phe Lys Arg Thr Thr Ser Ala Ser Glu Arg Ser
            340                 345                 350
Leu Gly Gln Asp Ser Thr Ala Arg Thr Asn Gln Thr Met Asp Ser Tyr
        355                 360                 365
Ser Gly Leu Val Ser Asp Asp Ser His Leu Ser Gln Ala Met Asp Ala
    370                 375                 380
Met Gly Phe Glu Glu Val Phe Asp Asp Phe Asn Tyr Asp Asp Asp Asp
385                 390                 395                 400
Ala Phe Tyr Asp Asp Pro Ile Ile Ala Ala Ala Asn Ala Glu Ala Leu
                405                 410                 415
Glu Asn Asp Asp Glu Gly Phe Tyr Gly Gln Glu Phe Gly Phe Tyr Ala
            420                 425                 430
His Ala His Gly Gly Cys Ser Ser Glu Leu Thr Asn Gly Gly Tyr Phe
        435                 440                 445
Gly Pro Arg Gly Val Glu Gly Ile Ser Arg Asn His Ser Ser Arg Gly
    450                 455                 460
Lys Phe Arg Glu Pro Ser Leu Thr Pro Ile Thr Glu Arg Ser Glu Trp
465                 470                 475                 480
Ser Thr Arg Asn Ser Val Ile Ser Leu Thr Ala His Gly Ala Ala His
                485                 490                 495
Ser Asn Ser Ala Ile Ser Gly Pro Gly Leu Ala Gln Leu Val Asp Met
            500                 505                 510
Gly Thr Met Asp Asp Glu Met Ser Leu Ser Ala Leu Leu Lys Leu Arg
        515                 520                 525
Arg Gly Ala Trp Gly Gly Ser Asn Gly Ser Leu Arg Ser Ser Ser Gly
    530                 535                 540
```

```
Ser Pro Pro Pro His His His Ser Ser Ser Asn Arg Ala Ser Phe Thr
545                 550                 555                 560
Ala Phe Ser Asp Val Ser Pro Thr Val Tyr Thr Val Pro Pro Asp Tyr
                565                 570                 575
Leu Phe Gly Gly Pro Ser Ala Ala Glu Ser Pro Thr Met Ile Pro Thr
            580                 585                 590
Asn Gly Asp Ala Thr His Gln Ser Leu Ser Gly Glu Ala Glu Ser Gln
        595                 600                 605
Ile Tyr Pro Glu Glu Thr Val Pro Lys
    610                 615
```

<210> 29019
<211> 72
<212> PRT
<213> A.fumigatus

<400> 29019

```
Gly Ile Leu Glu Phe Glu Val Val Gln Glu Cys Ala Tyr Lys Thr Lys
1               5                   10                  15
Asn Asp Asp Ser Leu Tyr Lys Ala Ala Thr Glu Gln Cys Ala Leu Gly
            20                  25                  30
Glu Ala Thr Lys Ala Met Lys Val Asp Phe Gly Leu Lys Asn Ala Ser
        35                  40                  45
Asn Leu Asn Phe Gly Ser Leu Ser Leu Ser Leu Ser Phe Thr Arg Leu
    50                  55                  60
Ser Gly Ile Ala Gly Glu Thr Thr
65                  70
```

<210> 29020
<211> 99
<212> PRT
<213> A.fumigatus

<400> 29020

```
Ser Ser Val Ser Val Leu Phe Cys Ser Tyr Glu Trp Phe Val Gln Ile
1               5                   10                  15
Ser Ser Asp Ile Val Ser Thr Tyr Leu Ser Leu Asn Thr Met Asp Asp
            20                  25                  30
Asn Asn Arg Ser Ala Val Asp Gln Gly Ile Asp Ala Ala Glu Pro Tyr
        35                  40                  45
Lys Ile Gly Val Glu Lys Glu Ala Lys Asp Val Ala Gln Glu Thr Glu
    50                  55                  60
Ser Pro Glu Ser Pro Gly Ser Gln Pro Asp Asn Ala Glu Tyr Val Lys
65                  70                  75                  80
Gly His Pro Val Ile Arg Lys Gly Glu Pro Pro Ser Thr Ala Leu Pro
                85                  90                  95
Ala Ile Val
```

<210> 29021
<211> 272
<212> PRT
<213> A.fumigatus

<400> 29021

```
Glu Thr Ile Glu His Glu Ser Ala Gly Ile Gly Lys Val Gly Val Val
```

```
1               5                   10                  15
Tyr Pro Pro Gly Lys Leu Gly Phe Lys Leu Thr Val Thr Ser Phe Asn
            20                  25                  30
Asp Leu Asp Ile Gln Asn Arg Leu Asp Ser Ile His Asp Ala Val Ser
        35                  40                  45
Ile Ile Arg Asp Ser Ser Gln Lys Leu His His Ser His Pro Asp Asp
    50                  55                  60
Lys Pro Leu Ala Gly Ser Glu Lys Gly Gln Pro Leu Ser Asn Phe Ser
65                  70                  75                  80
Gln Ser Leu Asp Ala Ile Asp Ala Leu Met Ala Gln Leu Thr Ala Met
                85                  90                  95
Lys Ile Arg Ile Glu Lys Gln Asp Asp Lys Thr Glu Ser Pro Met Asp
            100                 105                 110
Ser Trp Asp Asn Phe Glu Asp Val Lys Arg Ala Ser Leu Pro Leu Met
        115                 120                 125
Leu Leu Gln Ser Lys Val Arg Glu Ala Leu Gln Leu Leu Ser Thr Pro
    130                 135                 140
Gln Pro Gly His Glu Lys Leu Ala Asp Ile Asp Val Gln Trp Val Arg
145                 150                 155                 160
Thr Glu Leu Glu Ser Leu Leu Ala Ser Ser His Glu Lys Ala Ala Ala
                165                 170                 175
Val Ile Lys Ala Ser Ser Gln Lys Ser Asp Asp Val Thr Arg Gly Cys
            180                 185                 190
Arg Arg His Ser Ala Gly Ser Thr Leu Asp Lys Arg Arg Lys Arg Leu
        195                 200                 205
Gln Pro Thr Gln Gln Ile Val Ser Ser Gln Val Val Leu Gln Asp Ser
    210                 215                 220
Pro Ala Gly Lys Val Ser Ile Arg Val Gln Trp Thr Lys Asp Ala Asp
225                 230                 235                 240
Ser Lys Ser Ala Arg Ala Ser Asp Ile Leu Leu Leu Leu Ala Pro Asn
                245                 250                 255
Pro Gln Gly Gly Pro Arg Arg Ser Ser Cys Phe Ala Phe Glu Ala Pro
            260                 265                 270
```

<210> 29022
<211> 91
<212> PRT
<213> A.fumigatus

<400> 29022

```
Val Tyr Cys Leu Asp Lys Asn Ser Pro Gly Tyr Arg Thr Leu Gly Glu
1               5                   10                  15
Thr Gln Thr Gly Asn Leu Arg Leu Gly Gly Ile Leu Pro Asp Arg Ile
            20                  25                  30
Asn Leu Arg Met Arg Glu Leu Trp Ser Tyr Gln Asp Ser Ile Thr Ile
        35                  40                  45
Thr Glu Pro Thr Ile Thr Leu Asn Phe Tyr Thr Asp Gly Asp Leu Phe
    50                  55                  60
Thr His Ile Glu Ala Ala Gly Leu Leu Glu Asp Phe Tyr Glu Gly Arg
65                  70                  75                  80
Trp Ile Ala Ala Thr Pro Val Gln Pro Phe His
                85                  90
```

<210> 29023
<211> 248
<212> PRT

<213> A.fumigatus

<220>
<221> UNSURE
<222> (16),(25)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29023
Leu Ser Gln Phe Ser Ser Phe Pro Pro Phe Ser Ser Cys Leu Ile Xaa
1 5 10 15
Lys Thr Gly Arg Lys Lys Leu Lys Xaa Tyr Pro Pro Pro Pro Ser Pro
20 25 30
Arg Ala Lys Cys Lys Asp Pro Ile Ala Ala Leu Thr Glu Ser Gln Leu
35 40 45
Ala Ala Leu Asp Pro Thr Gly Glu Arg Arg Ala Leu Phe Asp Tyr Arg
50 55 60
Arg Asn Pro Arg Ser Val Lys Val Gly Asp Ile Leu Arg Val Thr Phe
65 70 75 80
Lys Asn Gly Asp Pro Phe Ser Gly Val Cys Leu Ser Ile Arg Leu Arg
85 90 95
Gly Ile Asp Thr Ser Phe Leu Leu Arg Asn Glu Leu Thr Arg Val Gly
100 105 110
Val Glu Met Ala Val Lys Val Phe Ser Pro Asn Val Glu Ser Val Glu
115 120 125
Ile Val Gln Arg Thr Glu Lys Arg Lys Arg Arg Ala Arg Leu Tyr Tyr
130 135 140
Met Arg Tyr Val Leu Ala Ser Gly Asp Arg His His Gln Glu Glu Cys
145 150 155 160
Ser Ser Cys Ala Val Lys Leu Lys Phe Cys Ser Leu Glu Phe Thr Gly
165 170 175
Ser Pro Ser Thr Ile Trp Glu Ala Ser Arg Thr Leu Cys Arg Thr Thr
180 185 190
Cys Gly Arg Ser Arg Ser Leu Leu Val Ser Val Gln Pro Val His Gly
195 200 205
Asp Arg Asn Gly Glu Leu Glu Gln Phe Leu Phe Cys Leu Tyr Tyr Asp
210 215 220
Phe Gly Glu Met Tyr Tyr Thr Thr Ile Leu Ala His Gly Tyr Ser Gly
225 230 235 240
Ile Asp Ser Phe Trp Arg Thr His
245

<210> 29024
<211> 61
<212> PRT
<213> A.fumigatus

<400> 29024
Ser Gln Ile Val Leu Gln Lys Arg Glu Ile Met Ile Gly Asp Arg Tyr
1 5 10 15
Ser Ile Leu Pro Phe Pro Arg Ala Cys Pro Ser Ala Met Ser Leu Gly
20 25 30
Lys Glu Ser Pro Ile Leu Pro Ser Asn Leu Ile Tyr Glu Thr Leu Cys
35 40 45
Tyr Pro Asp Lys Trp Thr Asp Gly Thr Ile Leu Gln Leu
50 55 60

<210> 29025
<211> 175
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (135)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29025
Asp Ala Thr Gln Tyr Val Tyr Gln Pro Ile Leu Phe Cys Gln Val Asn
1 5 10 15
Ser Arg Met Leu His Ile Gln Tyr Leu Ala His Val Asp Asp Ile Thr
20 25 30
Thr Phe Arg Pro Gly Ile Gly Asp Ile Ile Leu Pro Asn Leu Leu Tyr
35 40 45
Arg Thr Ser Cys Ser Val Leu Cys Ser Ile Leu Ser Thr Ser Asn Asn
50 55 60
Gln Thr Val Lys Gln Ser Ile Ser Thr Thr Gln Phe Asp Leu Ile His
65 70 75 80
Ser Thr Ile Gln Asn Asn Asn His Asn Gly Val His Gln Ala Gly Cys
85 90 95
Gln Leu Arg Gln Arg Glu Arg Ala Ala Gly Arg Ala Arg His Leu Gln
100 105 110
Gly Ser Gln Gln Ala Gly Arg Gln Gly Leu Arg Cys Ser His Trp His
115 120 125
Ser Val Ser Ser Leu Leu Xaa Tyr Lys Asn Leu Gln Gln Ser Leu Ile
130 135 140
Leu Cys Ser Ala Ser Ala Ala Lys Asp Ala Leu Thr Asp Lys Ala His
145 150 155 160
Glu Ser Lys His Asp Ala Lys Ala Glu Ala His Lys Gln Gln Ile
165 170 175

<210> 29026
<211> 238
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (191)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29026
Ser Gly His Ser Gln Pro Arg Thr His Arg Gly His Asp Ala Lys Phe
1 5 10 15
Pro Gly Met Ala Ile Thr Tyr Ala Leu Met Gln Arg Leu Glu Glu Leu
20 25 30
Ser Glu Lys Glu Pro Glu Arg Val Gln Ile Ile Lys Lys Ala Arg Val
35 40 45
Thr Lys Val Asn Lys Ser Gly Asp Thr Ile Thr Gly Val Thr Tyr Glu
50 55 60
Leu Asn Gly Glu Thr Lys Thr Ala Asp Gly Val Val Ile Leu Ala Thr
65 70 75 80
Gly Gly Tyr Ala Ala Asp Phe Gly Asp Gly Ser Leu Leu Lys Gln His

```
                85                  90                  95
Arg Pro Asp Thr Phe Gly Leu Ser Ser Thr Asn Gly Thr His Ala Thr
            100                 105                 110
Gly Asp Gly Gln Lys Met Leu Met Ala Ile Gly Ala Asn Gly Ile Asp
        115                 120                 125
Met Asp Lys Val Gln Val His Pro Thr Gly Leu Val Asp Pro Lys Asp
    130                 135                 140
Pro Thr Ala Lys Phe Lys Phe Leu Ala Ala Glu Ala Leu Arg Gly Glu
145                 150                 155                 160
Gly Gly Ile Leu Leu Asn Ser Asp Gly Gln Arg Phe Ser Asp Glu Leu
                165                 170                 175
Gly His Arg Asp Tyr Val Ser Gly Gln Met Trp Lys Glu Lys Xaa Lys
            180                 185                 190
Gly Lys Trp Pro Ile Arg Leu Val Leu Asn Ser Lys Gly Ser Asn Val
        195                 200                 205
Leu Glu Leu Pro His Pro Ser Leu Leu Trp Pro Trp Phe Asp Glu Lys
    210                 215                 220
Tyr Asp Arg Ala Arg Asn Trp Ala Lys Asp Asn Arg Cys Gly
225                 230                 235
```

<210> 29027
<211> 83
<212> PRT
<213> A.fumigatus

<400> 29027

```
Phe Glu Pro Ala Phe Phe Gly Gly Asn Ser Thr Lys Ala Thr Ser Gly
1               5                   10                  15
Ile Asn Gly Ala Leu Thr Arg Thr Gln Val Glu Leu Gly Ile Gln Asp
            20                  25                  30
Ser Val Lys Thr Phe Tyr Glu Asp Thr Leu Lys Ser Ala Arg Asp Lys
        35                  40                  45
Ala Arg Pro Glu Leu Ile Lys Val Leu Thr Tyr Lys Ser Ala Ala Ala
    50                  55                  60
Val Glu Trp Leu Gln Asp Val Phe Asn Leu Asp Leu Thr Leu Val Ser
65                  70                  75                  80
Arg Leu Gly
```

<210> 29028
<211> 68
<212> PRT
<213> A.fumigatus

<400> 29028

```
Ile Val Trp Thr Ala Leu Cys Ser Glu Gly Leu Gly Ala Asn Leu Gln
1               5                   10                  15
His Tyr Ser Pro Leu Ile Asp Glu Gln Val Gln Lys Thr Trp Asn Ile
            20                  25                  30
Pro Ala Ser Trp Lys Leu Asp Ala Gln Leu Val Phe Gly Thr Pro Thr
        35                  40                  45
Gly Asp Ala Gly Glu Lys Thr Phe Leu Pro Ile Glu Asp Arg Phe Lys
    50                  55                  60
Val Phe Gly Lys
65
```

<210> 29029
<211> 324
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (26)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29029

```
His Arg Ser Ser Gln His Gly Leu His Ile Pro Gln Trp Asn Gln Trp
1               5                   10                  15
Leu Val Ala Met Gly Arg Ile Leu Pro Xaa His Pro Leu Gly His Ser
            20                  25                  30
Arg Ile His Leu His Val His Leu Arg His Gly Asn Ser Arg Ala His
        35                  40                  45
His Ser His Val Pro Ile Pro Arg Ser Leu Leu His Pro Pro Arg Ala
    50                  55                  60
Gly Arg Asn Leu Ser Val Pro Pro Ser His Pro His Pro Thr Ile Pro
65                  70                  75                  80
Asn Thr Pro Leu Thr Ser Pro Gly Glu Thr Phe Gly Tyr Tyr Gly Arg
                85                  90                  95
Ala Trp Ser His Lys Glu Gly Arg Ala Ala Ile Gly Pro Trp Ala Leu
            100                 105                 110
Gln Glu Met Leu Ile Leu Cys Ala Pro Pro Phe Val Ala Ala Ser Ile
        115                 120                 125
Tyr Met Val Leu Gly Arg Ile Ile Cys Ala Phe Asp Ala Glu His His
    130                 135                 140
Ser Ser Ile Arg Thr Lys Trp Leu Thr Thr Ile Phe Val Leu Asn Asp
145                 150                 155                 160
Val Val Cys Phe Leu Thr Gln Leu Ala Gly Ala Gly Val Gln Ile Thr
                165                 170                 175
Gly Asp Pro His Val Met Ala Ile Gly Lys Lys Ala Val Leu Ala Gly
            180                 185                 190
Leu Ile Phe Ala Leu Val Val Phe Gly Val Phe Val Trp Val Ala Ala
        195                 200                 205
Ala Phe His Arg Arg Leu Asp Ala Glu Pro Thr Ala Val Val Arg Glu
    210                 215                 220
Cys Pro Arg Leu Arg Trp Lys Lys Tyr Met Trp Val Ile Tyr Val Ser
225                 230                 235                 240
Cys Gly Met Leu Met Val Arg Asn Leu Val Arg Thr Val Gln Phe Gly
                245                 250                 255
Ser Arg Lys Gly Ser Ala Leu Asn Thr Glu Glu Ala Phe Ile Tyr Val
            260                 265                 270
Phe Asp Ala Ala Leu Met Ala Gly Ser Ile Leu Val Leu Ile Val Trp
        275                 280                 285
His Pro Gly Arg Leu Val Arg Arg Ala Gln Lys Ala Thr Lys Ala Ser
    290                 295                 300
Gln Met Cys Val Gln Met Glu Asp Ala Pro Asp Ile Pro Leu Thr Gly
305                 310                 315                 320
Tyr Arg Glu Gly
```

<210> 29030
<211> 83

<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (25)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29030
Thr Asp Gln Ala Ser Met Asp Phe Thr Phe His Asn Gly Thr Asn Gly
1 5 10 15
Ser Ser Pro Trp Val Glu Phe Tyr Xaa Tyr Thr Pro Ser Ala Thr Ala
20 25 30
Gly Tyr Thr Phe Met Ser Ile Phe Gly Met Ala Thr Val Ala His Ile
35 40 45
Ile Leu Met Phe Pro Tyr Arg Ala Ala Tyr Phe Ile Pro Leu Val Leu
50 55 60
Gly Gly Ile Cys Pro Phe Pro Arg Leu Ile Pro Ile Pro Arg Tyr Gln
65 70 75 80
Ile His Arg

<210> 29031
<211> 65
<212> PRT
<213> A.fumigatus

<400> 29031
Leu Arg Gly Ser Ser Ala Pro Trp Ala Arg Trp Asn Ser Arg Ala Lys
1 5 10 15
Lys Ile Pro Asn Glu Glu Arg Lys Thr Thr Pro Tyr Met Thr Lys Tyr
20 25 30
Glu Arg Ala Arg Val Leu Gly Thr Arg Ala Leu Gln Ile Arg Phe Val
35 40 45
Ile Cys Asp Met Trp His Met Lys Thr Val Glu Leu Thr Phe Val Thr
50 55 60
Val
65

<210> 29032
<211> 96
<212> PRT
<213> A.fumigatus

<400> 29032
Arg Ala Gln Asp Asn Ser Val His Asp Gln Ile Arg Lys Gly Ser Ser
1 5 10 15
Ser Gly Tyr Gln Ser Phe Ala Asp Gln Val Arg His Leu Arg His Val
20 25 30
Ala Tyr Glu Asp Arg Arg Thr Asp Ile Cys His Ser Met Asn Ala Pro
35 40 45
Val Leu Val Asp Leu Glu Gly Glu Thr Asp Pro Leu Gln Ile Ala Ile
50 55 60
Lys Glu Leu Asn Gln Lys Lys Ile Pro Leu Ile Val Arg Arg Tyr Leu
65 70 75 80
Pro Asp Gly Thr Leu Val Ile Pro Ser Pro Arg Val Trp Thr His Val

85 90 95

<210> 29033
<211> 249
<212> PRT
<213> A.fumigatus

<400> 29033
Cys Glu Asn Asn Asp Pro Ser Leu Thr Asn His Gly Val Gly Ala Gly
1 5 10 15
Thr Ser Pro Tyr Leu Val Ala Val Lys Arg Ser Gly Ile Pro Val Leu
20 25 30
Pro Val Val Val Thr Ala Leu Ile Phe Leu Ser Ser Val Ala Ser Gly
35 40 45
Arg Ser Phe Leu Phe Thr Ser Ser Arg Thr Leu His Ser Leu Ala Glu
50 55 60
Ala Gly His Ala Pro Glu Leu Phe Arg Arg Arg Asn Arg Trp Asp Val
65 70 75 80
Pro Tyr Val Ala Val Ile Thr Ser Ala Phe Phe Ser Ser Leu Ala Tyr
85 90 95
Phe Ser Ala Met Ile Ser Ser Ser Ile Val Phe Asn Ser Leu Met Tyr
100 105 110
Phe Ile Thr Thr Cys Gly Cys Ile Ser Trp Val Gly Thr Cys Val Val
115 120 125
Tyr Leu His Phe Arg Arg Gln Thr Glu Ala Leu Gly Phe Thr Ser Val
130 135 140
His Arg Ala Arg Ile Gln Pro Tyr Gly Val Tyr Phe Gly Ile Val Thr
145 150 155 160
Cys Thr Leu Leu Pro Ile Val Asn Thr Phe Ile Ile Ala Thr Pro Ser
165 170 175
Gln Leu Ala Ala Ser Lys Leu Leu Pro Val Tyr Phe Gly Ile Ser Ser
180 185 190
Phe Phe Leu Leu Tyr Ile Gly His Arg Val Gly Tyr Ala Val Ile Arg
195 200 205
Arg Arg Thr Arg Met Lys Lys Ser Ser Ile Glu Glu Pro Gly Asp Trp
210 215 220
Ser Ile Glu Leu Pro Pro Thr Thr Ser Asn Gly Arg Thr Gly Gly Ala
225 230 235 240
Asp Ser Ser Leu His Asn Thr Ala Leu
245

<210> 29034
<211> 100
<212> PRT
<213> A.fumigatus

<400> 29034
Ala Arg Val Ser Ala Asn Asp Tyr Ser Ser Arg Val Asp Glu Tyr Lys
1 5 10 15
Gln Asp Ala Gln Pro Thr Glu Arg Val Ile Asp Glu Tyr Phe Pro Pro
20 25 30
Pro Leu Ala Phe Pro Phe Cys Pro Ser Leu Trp Glu Ala Phe Asn Leu
35 40 45
Thr Tyr Ser Arg Leu Glu Asn Pro Leu Ala Arg Ile Pro Lys Asp Arg
50 55 60
Leu Leu Arg Asp Val Glu Glu Tyr Ala Gln Ser Tyr Asp Leu Asn Asp

65 70 75 80
Ile Leu Pro Glu Leu Lys Lys Gly Val Phe Thr Thr Ala Trp Ala Asp
85 90 95
Gln Ser Phe Asn
100

<210> 29035
<211> 61
<212> PRT
<213> A.fumigatus

<400> 29035
Lys Pro Phe Tyr Glu Leu Ala Asn Trp Ser Met Ala Ser Val Lys Val
1 5 10 15
Phe Lys Asp Leu Ser Gly Thr Leu Thr Ser Gly Phe Ser Arg Leu Pro
20 25 30
Leu Pro Phe Pro Cys His Val Val Pro Ser Asn Asp Leu Arg Lys Val
35 40 45
Arg Arg Gln Pro Ile Ser Leu Ala Gln Gln Val Arg Lys
50 55 60

<210> 29036
<211> 162
<212> PRT
<213> A.fumigatus

<400> 29036
Ser Ile Ser Ile Val Ser Ser Arg Lys Asp Asp Ser Gly Asn Cys Ile
1 5 10 15
Ala Leu Ser Glu Phe Gly Asp Ala Arg Thr Asn Ser Ser Pro Gln Val
20 25 30
Asp Ile Asp Arg Ser Glu Asp Gln Gly Arg Thr Val Val Lys Pro Gly
35 40 45
Leu Asp Arg Glu Leu Asp Arg Met Lys Asp Thr Tyr Asp Gly Leu Asn
50 55 60
Asp Leu Leu Lys Glu Val Ala Thr Glu Ile Ala Ala Thr Ile Pro Glu
65 70 75 80
Ser Leu Asp Ile Asp Val Asn Val Ile Tyr Phe Pro Gln Leu Gly Phe
85 90 95
Asn Ile Ala Val Pro Leu Asn Asp Met Gly Glu Ala Ala Tyr Ser Gly
100 105 110
Thr Ala Asp Asp Trp Glu Leu Ile Phe Val Thr Glu Asn Arg Ala Tyr
115 120 125
Phe Lys Asp Phe Arg Met Arg Glu Met Asp Gln Ser Leu Gly Asp Ile
130 135 140
Tyr Gly Leu Ile Cys Gly Ile Pro Gln Arg Ile Ser Phe Ala Val Thr
145 150 155 160
Met Thr

<210> 29037
<211> 162
<212> PRT
<213> A.fumigatus

<400> 29037

```
Lys Arg Val Asp Lys Thr Thr Ile Glu Lys Arg Ser Arg Pro Ala Trp
1               5                  10                  15
Glu Lys Ala Phe Met Phe Ala Lys Leu Phe Gly Glu Gln Leu Glu Asp
            20                  25                  30
Leu Gly Leu Pro Glu Asn Gln Asn Pro Ala Ala His Trp Gln Lys Met
        35                  40                  45
Val Ala Leu His Ser Arg Glu Val Leu Ser Ala Met Ser Gly Pro Leu
    50                  55                  60
Arg Lys Leu Lys Asp Ala Lys Gln Thr Glu Arg Ala Pro Arg Pro Asn
65                  70                  75                  80
Leu Ser Arg Asp Asp Phe Asp Phe Val Asp His Asp Ser Ser Asp Pro
                85                  90                  95
Ile Glu Glu His Glu Ile Phe Ala Ala Lys Lys Thr Thr Arg Glu Glu
            100                 105                 110
Leu Asp Ile Leu Arg Ser Glu Val Arg Asp Leu Lys Glu Met Val Tyr
        115                 120                 125
Lys Leu Arg Pro Arg Phe Arg Arg Asn Arg Val Ala Ser Thr Asp Asn
    130                 135                 140
Gly Ile Glu Thr Pro Glu Gly Thr Gln Asp Asn Leu Gln Ser Ala Thr
145                 150                 155                 160
Val His
```

<210> 29038
<211> 308
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (63),(99)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29038

```
Trp Leu Ser Gly Leu Asp Pro Pro Arg Lys Lys Leu Pro Ser Lys His
1               5                  10                  15
Lys Gly Cys Phe Lys Thr Glu Leu Ile Asp Gln Thr Tyr Pro Glu Ile
            20                  25                  30
Leu Arg Phe Asn Leu Ser Ser Thr Val Leu Glu Leu Arg Ser Trp Glu
        35                  40                  45
Ile Asp Asp Leu Val His Phe Asp Leu Met Thr Leu Gln Ala Xaa Glu
    50                  55                  60
Thr Leu Met Arg Ala Leu Glu Glu Leu Asn Tyr Leu Ala Cys Leu Asp
65                  70                  75                  80
Asp Asp Gly Asn Leu Thr Pro Leu Gly Arg Leu Ala Ser Glu Phe Pro
                85                  90                  95
Leu Asp Xaa Ala Leu Ala Val Met Leu Ile Ser Ser Pro Glu Phe Tyr
            100                 105                 110
Cys Ser Asn Glu Ile Leu Ser Ile Thr Ala Leu Leu Ser Val Pro Gln
        115                 120                 125
Ile Phe Val Arg Pro Ala Ser Gln Arg Lys Arg Ala Asp Glu Met Lys
    130                 135                 140
Asn Leu Phe Ala His Pro Asp Gly Asp His Leu Thr Leu Leu Asn Ala
145                 150                 155                 160
Tyr His Ala Phe Lys Ser Pro Glu Ala Gln Glu Asn Pro Lys Gln Trp
                165                 170                 175
```

```
Cys His Asp His Phe Leu Ser Leu Arg Ser Leu Gln Ser Ala Asp Asn
            180                 185                 190
Val Arg Met Gln Leu Leu Arg Ile Met Glu Arg Glu Glu Leu Glu Met
        195                 200                 205
Ile Ser Thr Pro Phe Glu Asp Lys Lys Tyr Tyr Glu Asn Ile Arg Arg
    210                 215                 220
Ala Leu Cys Ala Gly Phe Phe Met Gln Val Ala Lys Lys Glu Pro Gln
225                 230                 235                 240
Gly Lys Ser Val Tyr Thr Thr Val Lys Asp Asn Gln Asn Val Leu Leu
                245                 250                 255
His Pro Ser Thr Val Leu Gly Tyr Asp Ala Glu Trp Val Leu Tyr Asn
            260                 265                 270
Glu Phe Val Leu Thr Thr Lys Asn Tyr Ile Arg Thr Val Thr Ala Val
        275                 280                 285
Lys Pro Glu Trp Leu Leu Val Cys His Ser Arg Pro Ser Thr Met Ile
    290                 295                 300
Lys Tyr Tyr Asp
305
```

<210> 29039
<211> 104
<212> PRT
<213> A.fumigatus

<400> 29039

```
Leu Thr Asn Ala Leu Glu Met Asp Gly Met Thr Ser Lys Lys Asn Val
1               5                   10                  15
Phe Val Ile Gly Ala Thr Asn Arg Pro Glu Gln Leu Asp Ala Ala Leu
            20                  25                  30
Val Arg Pro Gly Arg Leu Asp Thr Leu Val Tyr Val Pro Leu Pro Asp
        35                  40                  45
Gln Ala Ser Arg Glu Ser Ile Leu Arg Ala Gln Leu Arg Lys Thr Pro
    50                  55                  60
Val Ala Pro Asp Val Asp Ile Pro Phe Ile Ala Ser Lys Thr His Gly
65                  70                  75                  80
Phe Ser Gly Ala Asp Leu Gly Phe Val Thr Gln Arg Ala Val Lys Leu
                85                  90                  95
Ala Ile Lys Glu Ser Ile Gly Arg
            100
```

<210> 29040
<211> 410
<212> PRT
<213> A.fumigatus

<400> 29040

```
Ser Phe Thr Arg Ile Ala Pro Cys Gly Glu Asp Pro Leu Arg His Pro
1               5                   10                  15
Gln Leu Phe Lys Ser Ile Gly Ile Lys Pro Pro Arg Gly Ile Leu Met
            20                  25                  30
Tyr Gly Pro Pro Gly Thr Gly Lys Thr Leu Met Ala Arg Ala Val Ala
        35                  40                  45
Asn Glu Thr Gly Ala Phe Phe Phe Leu Ile Asn Gly Pro Glu Ile Met
    50                  55                  60
Ser Lys Met Ala Gly Glu Ser Glu Ser Asn Leu Arg Lys Ala Phe Glu
65                  70                  75                  80
```

```
Glu Ala Glu Lys Asn Ser Pro Ala Ile Ile Phe Ile Asp Glu Ile Asp
                85                  90                  95
Ser Ile Ala Pro Lys Arg Glu Lys Thr Asn Gly Glu Val Glu Arg Arg
            100                 105                 110
Val Val Ser Gln Leu Leu Thr Leu Met Asp Gly Met Lys Ala Arg Ser
        115                 120                 125
Asn Val Val Val Met Ala Ala Thr Asn Arg Pro Asn Ser Ile Asp Pro
    130                 135                 140
Ala Leu Arg Arg Phe Gly Arg Phe Asp Arg Glu Val Asp Ile Gly Ile
145                 150                 155                 160
Pro Asp Pro Thr Gly Arg Leu Glu Ile Leu Ser Ile His Thr Lys Asn
                165                 170                 175
Met Lys Leu Ala Glu Asp Val Asp Leu Glu Thr Ile Ala Ala Glu Thr
            180                 185                 190
His Gly Tyr Val Gly Ser Asp Leu Ala Ser Leu Cys Ser Glu Ala Ala
        195                 200                 205
Met Gln Gln Ile Arg Glu Lys Met Asp Leu Ile Asp Leu Asp Glu Asp
    210                 215                 220
Thr Ile Asp Ala Glu Val Leu Asp Ser Leu Gly Val Thr Met Glu Asn
225                 230                 235                 240
Phe Arg Tyr Ala Leu Gly Val Ser Asn Pro Ser Ala Leu Arg Glu Val
                245                 250                 255
Ala Val Val Glu Val Pro Asn Val Arg Trp Glu Asp Ile Gly Gly Leu
            260                 265                 270
Glu Glu Val Lys Arg Glu Leu Ile Glu Ser Val Gln Tyr Pro Val Asp
        275                 280                 285
His Pro Glu Lys Phe Gln Lys Phe Gly Leu Ser Pro Ser Arg Gly Val
    290                 295                 300
Leu Phe Tyr Gly Pro Pro Gly Thr Gly Lys Thr Met Leu Ala Lys Ala
305                 310                 315                 320
Val Ala Asn Glu Cys Ala Ala Asn Phe Ile Ser Val Lys Gly Pro Glu
                325                 330                 335
Leu Leu Ser Met Trp Phe Gly Glu Ser Glu Ser Asn Ile Arg Asp Ile
            340                 345                 350
Phe Asp Lys Ala Arg Ala Ala Ala Pro Cys Val Val Phe Leu Asp Glu
        355                 360                 365
Leu Asp Ser Ile Ala Lys Ser Arg Gly Gly Ser Val Gly Asp Ala Gly
    370                 375                 380
Gly Ala Ser Asp Arg Val Val Asn Gln Leu Leu Thr Gly Arg Phe Asp
385                 390                 395                 400
Lys Thr Leu Arg Tyr Leu Asn Thr Cys Asp
                405                 410
```

<210> 29041
<211> 93
<212> PRT
<213> A.fumigatus

<400> 29041

```
Arg Arg Gln Lys Gln Arg Glu Gly Ala Gly Glu Asp Ile Lys Met Asp
1               5                   10                  15
Asp Glu Gly Glu Glu Glu Ala Arg Val Pro Gln Leu Thr Arg Ala His
            20                  25                  30
Leu Arg Glu Ala Lys Lys Ser Ala Arg Arg Ser Val Ser Asp Val Glu
        35                  40                  45
Ile Arg Arg Tyr Glu Ala Phe Ala Gln Ser Leu Lys Asn Ser Gly Gly
```

```
    50                  55                  60
Ser Ser Phe Phe Arg Phe Pro Ser Ser Gly Glu Ile Gln Asn Asn Asp
65                  70                  75                  80
Thr Phe Gly Asp Ala Gly Asn Asp Asp Ser Leu Tyr Asp
                85                  90
```

<210> 29042
<211> 74
<212> PRT
<213> A.fumigatus

<400> 29042

```
Ile Ser Gln Gly Phe Val Lys Pro Thr Ser Lys Lys Leu Val Asp His
1               5                   10                  15
Thr Val Arg Cys Thr Thr Ser Val Thr Asp Gly Ala Thr Thr Gly Leu
            20                  25                  30
Gly Asp Arg Ile Gln Leu Val Lys Glu Asn Asp Ala Arg Arg Ser Ser
        35                  40                  45
Thr Gly Leu Val Glu Asn Val Pro Asp Val Ala Leu Arg Leu Thr Glu
    50                  55                  60
Pro His Ala Gln Lys Leu Arg Ser Leu Asp
65                  70
```

<210> 29043
<211> 330
<212> PRT
<213> A.fumigatus

<400> 29043

```
Asp Glu Val Gly Ser Thr Leu Val Arg His Gly Leu Gly Lys His Gly
1               5                   10                  15
Leu Thr Ser Thr Arg Arg Thr Ile Glu Gln Asn Thr Thr Gly Trp Arg
            20                  25                  30
Lys Ala Glu Leu Leu Glu Leu Phe Gly Val Ile His Arg Val Leu Asp
        35                  40                  45
Ala Leu Asp Glu Leu Ala Leu Asp Leu Leu Gln Thr Thr Asn Ile Leu
    50                  55                  60
Pro Thr Asp Ile Gly Asn Leu Asp Asn Ser Asn Leu Ala Lys Ser Arg
65                  70                  75                  80
Gly Val Gly Asn Ala Glu Gly Val Thr Glu Val Leu His Cys Asn Thr
                85                  90                  95
Lys Gly Val Lys His Leu Cys Val Asp Ser Val Leu Val Lys Ile Asp
            100                 105                 110
Gln Ile His Leu Leu Thr Asn Leu Leu His Ser Gly Leu Arg Ala Glu
        115                 120                 125
Arg Gly Lys Ile Gly Thr Asp Ile Ala Val Ser Leu Gly Arg Asn Gly
    130                 135                 140
Leu Gln Ile Asp Val Leu Ser Lys Phe His Val Leu Gly Val Asn Gly
145                 150                 155                 160
Gln Asp Leu Glu Thr Ala Ser Gly Val Trp Asp Thr Asp Ile His Phe
                165                 170                 175
Thr Val Glu Thr Ala Glu Thr Thr Lys Gly Arg Val Asp Gly Val Gly
            180                 185                 190
Ala Val Ser Ser Ser His Asp Asp Asp Val Gly Thr Ser Leu His Ala
        195                 200                 205
Val His Gln Ser Gln Glu Leu Arg Asp Asp Thr Ala Leu Asp Leu Ser
```

```
    210                 215                 220
Val Gly Leu Leu Thr Leu Arg Arg Asp Gly Val Asp Phe Val Asn Glu
225                 230                 235                 240
Asp Asn Gly Gly Arg Val Phe Leu Ser Leu Leu Glu Arg Leu Ala Gln
                245                 250                 255
Ile Arg Leu Gly Phe Thr Gly His Leu Gly His Asp Phe Gly Thr Ile
            260                 265                 270
Asp Gln Glu Glu Glu Gly Thr Ser Leu Val Arg His Gly Thr Ser His
        275                 280                 285
Gln Cys Leu Thr Gly Thr Arg Gly Thr Val His Gln Asn Thr Thr Gly
    290                 295                 300
Trp Leu Asp Thr Asp Gly Leu Glu Gln Leu Arg Met Thr Gln Arg Val
305                 310                 315                 320
Phe Thr Thr Gly Arg Asp Pro Arg Lys Ala
                325                 330
```

<210> 29044
<211> 140
<212> PRT
<213> A.fumigatus

<400> 29044

```
Leu Pro Gln Gln Leu Leu His Ser Ser Phe Arg Ile Ser Ser Ser Cys
1               5                   10                  15
Arg Ser His Arg Gln Thr Ile Pro Ala Leu Ala Arg Ser Pro Pro Ser
            20                  25                  30
Thr Pro Thr Pro Thr Thr Pro Asn Pro Ser Ser Thr Ser Thr Ser Ala
        35                  40                  45
Thr Ser Pro Ala Arg Gln Ala Ser Pro Gly Phe Trp Arg Cys Leu Pro
    50                  55                  60
Pro Arg Cys Pro Gln Lys Arg Pro Lys Thr Ala Ser Ser Pro Pro Ser
65                  70                  75                  80
Arg Ala Arg Ala Gln Leu Arg Val Gln Val Gln Ser Gly Asp Thr Thr
                85                  90                  95
Arg Arg Lys Met Arg Pro Pro Arg Pro Phe Leu Pro Ser Gly Asn Gly
            100                 105                 110
Ser Thr Thr Cys Ser Leu Ser Arg Ala Arg Arg Arg Lys Phe Gly Gly
        115                 120                 125
His Arg Ala Gly Arg Ile Ala Gly Arg Arg Ser Arg
    130                 135                 140
```

<210> 29045
<211> 113
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (20)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29045

```
Leu Leu Met Ser Cys Leu Val Phe Leu Leu Leu Ile Val Leu Leu Pro
1               5                   10                  15
Val Phe Val Xaa Leu His Leu Leu Val Ala Pro Tyr Thr Lys Val Glu
            20                  25                  30
```

```
Glu Ser Phe His Ile Gln Ala Ile His Asp Ile Leu Lys Tyr Gly Ile
        35                  40                  45
Pro Thr Gly Asp Val Ser Gly Ile Leu Ala Arg Tyr Asp His Ser Thr
    50                  55                  60
Phe Pro Gly Ala Val Pro Arg Thr Phe Val Gly Ala Val Val Leu Ser
65                  70                  75                  80
Gly Leu Ser Gln Pro Phe Ile Trp Leu Asn Glu Ser Ile Asp Lys Gln
                85                  90                  95
Ala Leu Gly Met Leu Phe Leu Ala Cys Ala Leu Ile Arg Glu Ser Ile
            100                 105                 110
Ser
```

<210> 29046
<211> 490
<212> PRT
<213> A.fumigatus

<400> 29046

```
Phe Ala Asn Leu Leu Ala Asp Val Ile Leu His Val Ala Arg Gly Ile
1               5                   10                  15
Leu Gly Leu Phe Asn Ser Val Ser Leu Ile Ser Phe Ala Leu Gly Val
            20                  25                  30
Arg Arg Ala Phe Gly Lys Thr Thr Ala Ile Trp Tyr Leu Leu Phe Gln
        35                  40                  45
Ala Ser Gln Phe His Ile Ile Tyr Tyr Ala Ser Arg Thr Leu Ser Asn
    50                  55                  60
Met Phe Ala Phe Gly Ile Thr Thr Leu Ala Met Arg Ala Leu Leu Pro
65                  70                  75                  80
Glu Pro Val Ala Pro Ala Val Tyr Arg Lys Arg Cys Arg Val Gly Leu
                85                  90                  95
Phe Leu Leu Thr Ile Ala Gly Ile Ile Phe Arg Ser Glu Leu Ala Leu
            100                 105                 110
Leu Leu Ala Ala His Thr Leu Cys Leu Phe Ser Thr Gly Arg Ile Arg
        115                 120                 125
Ile Val Gln Glu Ile Ile Pro Ala Gly Ala Leu Gly Leu Val Val Gly
    130                 135                 140
Leu Ala Ile Thr Val Ser Val Asp Ser Phe Phe Trp Gln Gln Phe Pro
145                 150                 155                 160
Leu Trp Pro Glu Leu Ala Ala Phe Lys Phe Asn Val Leu Ala Gly Gln
                165                 170                 175
Ala Ser Ala Trp Gly Thr His Pro Trp His Phe Tyr Phe Ser Ser Ala
            180                 185                 190
Ile Pro Arg Leu Leu Leu Asn Pro Leu Thr Tyr Leu Leu Ala Leu Pro
        195                 200                 205
Phe Ala Leu Thr His Pro Ser Thr Arg Ser Ser Thr Ala Tyr Ile Ile
    210                 215                 220
Ile Pro Ser Leu Val Phe Val Val Ile Tyr Ser Ala Gln Pro His Lys
225                 230                 235                 240
Glu Trp Arg Phe Ile Ala Tyr Ile Ile Pro Pro Leu Thr Ala Ala Ala
                245                 250                 255
Ala Gln Gly Ala Ala Tyr Ile Trp Thr His Arg Ala Lys Ser Ile Ile
            260                 265                 270
Tyr Arg Leu Leu Ser Leu Ala Leu Ile Ala Ser Thr Ala Ala Ser Phe
        275                 280                 285
Phe Leu Ser Asn Phe Val Leu Leu Pro Val Ser Ser Ala Asn Tyr Pro
```

```
    290                 295                 300
Gly Ala Arg Ala Leu Thr Thr Leu His Thr His Ala Asn Asn Thr Lys
305                 310                 315                 320
Pro Val Ile Asn Val Tyr Leu Gly Asn Leu Ala Cys Gln Thr Gly Val
                325                 330                 335
Thr Arg Phe Leu Glu Met Pro Pro Pro Gln Met Pro Ala Lys Thr Ala
            340                 345                 350
Gln Asn Ser Glu Leu Ala Thr Val Glu Ser Ala Gly Ser Ala Pro Gly
        355                 360                 365
Ser Gly Ser Val Trp Arg Tyr Asp Lys Thr Glu Asp Glu Thr Thr Lys
    370                 375                 380
Ala Phe Pro Pro Phe Trp Lys Arg Phe Asp Tyr Val Leu Ile Glu Pro
385                 390                 395                 400
Ser Glu Glu Lys Lys Val Arg Arg Ala Ser Gly Arg Pro His Ser Trp
                405                 410                 415
Glu Glu Val Glu Val Ile His Gly Phe Ala Gly Leu Arg Val Leu Arg
            420                 425                 430
Pro Asp Asp Glu Ala Thr Gly Gln Leu Glu Glu Arg Val Phe Ser Ile
        435                 440                 445
Val Leu Gly Pro Glu Gly Ala Arg Tyr Trp Thr Met Val Arg Asp Tyr
    450                 455                 460
Ala Arg Lys His Val Thr Arg Gly Trp Trp Ala Glu Leu Lys Met Glu
465                 470                 475                 480
Pro Lys Ile Lys Ile Leu Arg Arg Ile Arg
                485                 490
```

<210> 29047
<211> 372
<212> PRT
<213> A.fumigatus

<400> 29047

```
Tyr Ala Ser Ser Leu Cys Ile Asp Phe Leu Asp His Tyr Phe Asp Leu
1               5                   10                  15
Leu Ser Tyr Val His Asn Arg Gln Thr Arg Tyr Ser Gln Phe Arg Ala
            20                  25                  30
Ala Tyr Pro Asp Pro Pro Ala Thr Pro Ile Asp Asp Tyr Glu Pro Ala
        35                  40                  45
Leu Leu Lys Tyr Leu Gly Arg Glu Arg Ala His Leu Arg Lys Arg Arg
    50                  55                  60
Thr Arg Leu Arg Gln His Asp Phe Gln Ile Leu Thr Gln Val Gly Gln
65                  70                  75                  80
Gly Gly Tyr Gly Gln Val Tyr Leu Ala Gln Lys Lys Asp Thr Arg Glu
                85                  90                  95
Val Cys Ala Leu Lys Val Met Ser Lys Lys Leu Leu Phe Lys Leu Asp
            100                 105                 110
Glu Ile Arg His Ile Leu Thr Glu Arg Asp Ile Leu Thr Ala Ala Lys
        115                 120                 125
Ser Glu Trp Leu Val Lys Leu Leu Tyr Ala Phe Gln Asp Asp Glu Gln
    130                 135                 140
Ile Tyr Leu Ala Met Glu Tyr Val Pro Gly Gly Asp Phe Arg Thr Leu
145                 150                 155                 160
Leu Asn Asn Thr Gly Val Leu His Asn Arg His Ala Arg Phe Tyr Ile
                165                 170                 175
Ala Glu Met Phe Ser Cys Ile Asp Ala Leu His Ala Leu Gly Tyr Ile
            180                 185                 190
```

```
His Arg Asp Leu Lys Pro Glu Asn Phe Leu Ile Asp Ser Thr Gly His
        195                 200                 205
Val Lys Leu Thr Asp Phe Gly Leu Ala Ala Gly Met Leu Asn Pro Gly
    210                 215                 220
Lys Ile Glu Ser Met Arg Val Lys Leu Glu Glu Val Gly Asn Thr Pro
225                 230                 235                 240
Val Pro Phe Gly Arg Pro Met Glu Gln Arg Thr Ala Ala Glu Arg Arg
                245                 250                 255
Gln Gly Tyr Arg Ser Leu Arg Glu Arg Gln Val Asn Tyr Ala Lys Ser
            260                 265                 270
Ile Val Gly Ser Pro Asp Tyr Met Ala Pro Glu Val Leu Lys Gly Glu
        275                 280                 285
Glu Tyr Asp Phe Thr Val Asp Tyr Trp Ser Leu Gly Cys Met Leu Phe
    290                 295                 300
Glu Ala Leu Ala Gly Tyr Pro Pro Phe Ala Gly Ala Thr Val Asp Glu
305                 310                 315                 320
Thr Trp Gln Asn Leu Lys Asn Trp Gln Lys Val Leu Pro Glu Pro Val
                325                 330                 335
Tyr Glu Asp Pro Asn Tyr Phe Leu Ser Arg Arg Thr Trp Gly Leu Ile
            340                 345                 350
Thr Lys Leu Val Ala Ala Lys Glu Asn Arg Ala Gln Asn Leu Pro Gly
        355                 360                 365
Asp Pro Cys Ala
    370
```

<210> 29048
<211> 69
<212> PRT
<213> A.fumigatus

<400> 29048

```
Arg Arg Ser Met Leu Ile Gly Ala Ile Tyr Gln Leu Thr Gln Leu Glu
1               5                   10                  15
His Ile Ile Lys Arg Pro Asp Thr Tyr Ile Gly Ser Val Glu Arg Thr
            20                  25                  30
Thr Gln Phe Met Trp Val Tyr Asp Ser Glu Thr Glu Gly Met Lys Tyr
        35                  40                  45
Lys Glu Val Ser Tyr Val Pro Gly Leu Tyr Gln Asn Phe Asp Glu Asn
    50                  55                  60
Arg Arg Gln Arg Cys
65
```

<210> 29049
<211> 130
<212> PRT
<213> A.fumigatus

<400> 29049

```
Lys Pro Arg Ala Lys Ala Ala Pro Lys Lys Ala Ala Pro Lys Lys Leu
1               5                   10                  15
Thr Gln Thr Lys Leu Thr Ala Lys Pro Ala Ala Lys Ala Thr Ala Ser
            20                  25                  30
Lys Lys Arg Ser Lys Pro Asp Ser Glu Asp Asp Leu Ser Asp Asp Met
        35                  40                  45
Gly Met Ser Asp Asp Asp Ser Asp Ser Ser Leu Ser Gln Thr Pro Pro
    50                  55                  60
```

```
Lys Lys Val Lys Lys Ala Pro Ala Ser Lys Lys Gly Gly Ser Asn Pro
65                  70                  75                  80
Leu Ala Asp Val Glu Asn Glu Ser Phe Gly Gly Asp Ile Gly Asp Gln
                85                  90                  95
Pro Ala Thr Ser Thr Asn Ala Ser Glu Lys Tyr Gln Lys Val Ser Leu
            100                 105                 110
Leu Leu Thr Leu Arg His Ser Phe Cys Thr Pro Val Cys Arg Gly Glu
        115                 120                 125
Ala Cys
    130
```

<210> 29050
<211> 66
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (15),(50)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29050

```
Ser Met His Thr Val Pro Val Leu Ser Ile Thr Arg Thr Leu Xaa Met
1               5                   10                  15
Ala Gln Lys Val Met Lys Leu Phe His Ile Gln Pro Arg Tyr Ser Pro
            20                  25                  30
Gly Lys Ala Gly Cys Ser Ser Leu Met Leu Gln Tyr Gly Ile Gln Ala
        35                  40                  45
Ala Xaa Ala Ala Thr Ser Tyr Ser Lys Phe Phe Phe Ser Tyr His Thr
    50                  55                  60
Ile Ala
65
```

<210> 29051
<211> 274
<212> PRT
<213> A.fumigatus

<400> 29051

```
Ala Ser Gly Ser Lys Ser Val Ser Ile Leu Gly Ser Arg Phe Thr Asn
1               5                   10                  15
Val Met Ala Ser Gln Glu Met Phe Pro Glu Leu Gly Gln Ser Pro Ala
            20                  25                  30
Pro Gly Ile Lys Ser Arg Gly Val Ser Arg Ser Pro His Pro His Gln
        35                  40                  45
Gln Gln Gln Gln Gln Gln His Gln Gln His Gln Gly Gln Phe Thr Gly
    50                  55                  60
Thr Val Thr Gly Leu Asp Leu Asp Ser Ser Ile Ala Thr Ala Ser Ser
65                  70                  75                  80
Phe Ala Asn Ser Ser Phe Asp Pro Asn Ser Asn Asn Val Ser Pro Ser
                85                  90                  95
Ala Glu Ser Tyr Gly Tyr Thr Ala Ala Gly Tyr Leu Ser Gly Thr Pro
            100                 105                 110
Ala Ser Gln Thr Asp Gln Asn Tyr Ala Asn Ser Leu Gln Ile Pro Gln
        115                 120                 125
Ser Tyr Gly Thr Gly Leu Val Pro Gln Phe Asn Glu Ser Arg Gly Leu
```

```
    130                 135                 140
Pro Ile Gln Gln Gln Ser Gln Gln Gln His His Gln Gln Pro Ser Leu
145                 150                 155                 160
Asp Asp Asn Phe Ser Asp Leu Leu Asn Ser Asn Ala Thr Glu Tyr Asp
                165                 170                 175
Phe Asn Thr Val Tyr Gln Thr His Ser Pro Ser Ser Asn Thr Ala Pro
            180                 185                 190
Glu Tyr Asp Ser Ser Leu Leu Leu Asp Pro Gln Val His Gln Gln Ser
        195                 200                 205
His Pro Thr Gln Ile Pro Ser Ser His Ser Ser Thr Ser Pro Gln Ile
    210                 215                 220
Ser Pro Leu Glu Gln Gln Gln His Ser Ser Pro Gly Pro Met Ser Thr
225                 230                 235                 240
Gln Gly Ser Thr Thr Val Ala Tyr Tyr Thr Pro Gln His Ser Arg His
                245                 250                 255
Ala Ser Leu Asp Pro Ala Thr Ser Ser Pro Arg Gly Trp Lys Glu Pro
            260                 265                 270
Arg His
```

<210> 29052
<211> 103
<212> PRT
<213> A.fumigatus

<400> 29052

```
Phe Ala Arg Cys Thr Pro Lys Ser Arg Asn Ser Lys Phe His Pro Ala
1               5                   10                  15
Leu Ile Ala Ala Asp Ala Phe Leu Phe Trp Pro Ser Phe Ser Pro His
            20                  25                  30
Pro His Trp Leu Ser Ser Leu Arg Ser Leu Ile Pro Leu Ser Pro Phe
        35                  40                  45
Thr Ala Pro Leu Phe Pro Pro Ile Gln Thr Tyr Tyr Gly Gly Ala Ser
    50                  55                  60
Leu Ser Thr Pro Pro Pro Pro Arg Ala Arg Ser Leu Val Pro Val Phe
65                  70                  75                  80
Thr Thr Ile Phe Ile Ala Lys Pro Gln Gly Pro Asn Leu Cys Leu Phe
                85                  90                  95
Trp Asp His Val Ser Pro Thr
            100
```

<210> 29053
<211> 159
<212> PRT
<213> A.fumigatus

<400> 29053

```
His His Arg Gly Ser Phe Gln Pro Arg Gly Glu Asp His Glu Arg Ile
1               5                   10                  15
Ser Ile Gln Ala Ala Leu Leu Ile Ser Gly Val Thr Pro Leu Val Ile
            20                  25                  30
Ile Ala Val Tyr Thr Leu Phe Ile Asp Gly Leu Phe Ser His His Lys
        35                  40                  45
Pro Tyr Asn Pro Ala Ser Gly Lys Arg Lys Leu Thr Gly Pro Tyr Arg
    50                  55                  60
Trp Lys Asp Arg Leu Trp Glu Phe Asn Cys Gly Phe Leu Gly Leu Leu
```

```
65                  70                  75                  80
Leu Ser Gln Gly Leu Ala Phe Leu Ile Thr Gln Val Leu Lys Thr Ala
                85                  90                  95
Cys Gly Lys Pro Arg Pro Asp Leu Ile Asp Arg Cys Lys Pro Arg Pro
            100                 105                 110
Gly Ser Glu Asp Leu Ile Pro Gly Leu Ser Asn Ser Thr Ile Cys Thr
        115                 120                 125
Gly Asp Pro Ala Ile Ile Lys Asp Gly Phe Arg Ser Trp Pro Ser Gly
    130                 135                 140
Lys Phe Tyr Pro Gly Leu Leu Ile Phe Val Leu Gly Tyr Ala Asp
145                 150                 155
```

<210> 29054
<211> 234
<212> PRT
<213> A.fumigatus

<400> 29054

```
Ser Arg Asn Ile Ala Ser Phe Ala Gly Leu Phe Tyr Leu Thr Leu Trp
1               5                   10                  15
Leu Cys Gly Lys Leu His Phe Met Asp Asn Arg Gly Glu Val Trp Lys
            20                  25                  30
Ala Ile Ile Val Ile Ile Pro Cys Leu Ala Ala Thr Leu Ile Ala Val
        35                  40                  45
Ser Arg Ile Met Asp Ala Arg His His Pro Phe Asp Val Ile Ser Gly
    50                  55                  60
Ser Leu Leu Gly Ile Ile Cys Ala Tyr Ile Ser Tyr Arg Gln Tyr Phe
65                  70                  75                  80
Pro Pro Ile Ser Glu Pro Trp Lys Lys Gly Arg Ala Tyr Pro Ile Arg
                85                  90                  95
Ser Trp Gly Thr Asp Pro Val Ala Pro Ser Lys Thr Ser Pro Leu Ser
            100                 105                 110
Asp Cys Ala Ser Thr Ser Ala Leu Arg Asn Pro Gly Glu Asp Arg Ile
        115                 120                 125
Asn Ala Ser Ser Ala Pro Glu Met Gly Pro Ala Arg Ile Ser Pro Thr
    130                 135                 140
Tyr Met Gly Ser Ala Asn Pro Tyr Thr Ser Asn Leu Arg Asn Arg Arg
145                 150                 155                 160
Ser His Asp Asn Asp Gly Asp Trp Ser Ser Ser Ser Glu Asp Leu Ala
                165                 170                 175
Asp Gly Tyr Glu Met Gln His Gly Tyr Ala Arg Thr Gln Asn Pro Ala
            180                 185                 190
Ile Gly Gly Leu Pro Arg Tyr Glu Ala Asp Thr Ser Tyr His Ser Gln
        195                 200                 205
Thr Gln Asn Val Leu Pro Gly Val Thr Ala Ala His Val Pro Pro Asp
    210                 215                 220
Pro Ile Ala Thr Arg Pro Ala Arg Asp Ser
225                 230
```

<210> 29055
<211> 60
<212> PRT
<213> A.fumigatus

<400> 29055

```
Val Leu Leu Leu Arg Ala Asn Thr Ala Thr Thr Phe Leu Asn Ile Ile
```

```
1               5                   10                  15
Tyr Cys Thr Cys Val Tyr Leu Pro Gln Arg Lys Gly Trp Asp Val Gly
            20                  25                  30
Ala Gln Asn Ile Leu Arg Pro Phe Phe Leu Leu Val Leu His Gln His
        35                  40                  45
Gly Thr Arg Ile Met Ile Ser Leu Leu Val Asn Gly
    50                  55                  60
```

<210> 29056
<211> 192
<212> PRT
<213> A.fumigatus

<400> 29056

```
Tyr Phe Leu Phe Ala Ser Thr Asn Pro Ala Met Ala Ser Thr Gly Gly
1               5                   10                  15
Gly Asn Ser Ala Phe Arg Asn Tyr Asn Asn Glu Leu Ala His Val Glu
            20                  25                  30
Asp Ala Arg Glu Arg Arg Arg Gln Ala Leu Ala Glu Ile Asp Asn Ala
        35                  40                  45
Lys Phe Ser Trp Tyr His Val Arg Ala Val Val Val Ala Gly Val Gly
    50                  55                  60
Phe Phe Thr Asp Ser Tyr Asp Ile Phe Ala Ile Asn Leu Ala Ser Ser
65                  70                  75                  80
Met Leu Gly Val Val Phe Trp Gln Asp Ala Lys Ser Ser Pro Gly Lys
                85                  90                  95
Ile Pro Ser Ser Ala Asp Thr Ala Ile Lys Val Ser Thr Ser Gly Gly
            100                 105                 110
Thr Val Ile Gly Gln Leu Phe Phe Gly Trp Leu Ala Asp Arg Ile Gly
        115                 120                 125
Arg Lys Arg Met Tyr Gly Ile Glu Leu Met Val Ile Ile Met Ala Thr
    130                 135                 140
Leu Ala Gln Ala Leu Ser Ser Asp Ser Arg Ala Ile Ser Ile Val Gly
145                 150                 155                 160
Ile Leu Ile Phe Trp Arg Val Ile Met Gly Ile Gly Ile Gly Gly Asp
                165                 170                 175
Tyr Pro Leu Ser Ser Ile Ile Thr Ser Glu Trp Ser Ser Pro Arg Gly
            180                 185                 190
```

<210> 29057
<211> 67
<212> PRT
<213> A.fumigatus

<400> 29057

```
Gly Ser Ile Cys Tyr Leu Ser Ile Ala Ile Tyr Leu Ile Ala Ile Ile
1               5                   10                  15
Phe Ser Pro Leu Leu Asp Leu Ala Arg Leu Gly Thr Phe Lys Pro Phe
            20                  25                  30
Lys Leu Ile Thr Phe Leu Asp Leu Pro Ser Pro Gly Trp Lys Leu Tyr
        35                  40                  45
Leu Leu Lys Leu Tyr Thr Asn Tyr Thr Ser Ile Ser Phe Leu Thr Thr
    50                  55                  60
Pro Val Ser
65
```

<210> 29058
<211> 72
<212> PRT
<213> A.fumigatus

<400> 29058
Gly Cys Thr Asp Tyr Leu Tyr Leu Asp Lys Tyr Ser Glu Ser Arg Gly
1 5 10 15
Asp Tyr Gln Leu Ala Thr Ala Thr Val Pro Leu Pro Gly Val Pro Thr
20 25 30
Tyr Tyr Ile Ser Val Thr Lys Ala Pro Pro His Arg Ser Ala Leu Arg
35 40 45
Val Ser His Ser Glu Thr Thr Asn His Thr Lys Ser Thr Ile Phe Gln
50 55 60
Tyr Phe Asp Tyr Leu Lys Leu Phe
65 70

<210> 29059
<211> 70
<212> PRT
<213> A.fumigatus

<400> 29059
Ala His Phe Ser Pro Val Val Lys Thr Phe Lys Arg Glu Met His Met
1 5 10 15
Cys Asn Thr Ala Gly Leu Pro Phe Cys Pro Val Arg Arg Cys Ala Ser
20 25 30
Gly Ser Asp Ile Ser Leu Pro Gln Ala Gly Ala Ala Val Arg Leu Asp
35 40 45
Phe Pro Ser Ser His Pro Ser Asp Asn Ser Asp Arg Met Gln Gly Ile
50 55 60
Tyr Thr Leu Ser Arg Met
65 70

<210> 29060
<211> 220
<212> PRT
<213> A.fumigatus

<400> 29060
Leu Pro Lys Leu Asn Arg Ile Met Ser Asn Met Ser Thr Asn Arg Pro
1 5 10 15
Phe Leu Ser Asn Phe Leu Ala Ala Phe Arg Ala Gln Ser Thr Tyr Lys
20 25 30
Ala Ser Thr Ala Gly Ser Gln Ser Ala Ala Gly Pro Ser Ser Ser Leu
35 40 45
Ser Ala Ala Gln Ile Ser Gln Gly Ala Arg Ala Ile Ala Thr Lys Thr
50 55 60
Gly Ala Gly Ser Asn Ala Ser Thr Ser Ala Glu Gln Ser Ser Ser Ser
65 70 75 80
Thr Thr Thr Ala Val His Ala Ala Ser Asn His His Tyr His His His
85 90 95
Ser Ser Ser Ala Ala Ala Ala Ser Ser His Ala Arg Pro His Ser His
100 105 110
Pro Arg Pro Ser Leu Asn Gln Thr Ser Pro Ser Thr Glu Ser Pro Ala
115 120 125

```
Ser Ser Ile Ser Thr Pro Leu Ala Pro Ser Ser Pro Pro Thr Pro Ala
    130                 135                 140
Ser Ser Asn Pro Ile Pro Ile Ala Asp Gly Pro Asp Arg Gln Arg Arg
145                 150                 155                 160
Gly Ser Asp Ser Ser Ser Gly Ser Gly Gly Phe Arg Asp Ala Leu Gly
                165                 170                 175
Pro Glu Lys Trp Tyr Ile Gly Gly Arg Thr Ala Thr Gly Glu Glu Arg
            180                 185                 190
Phe Tyr Arg Leu Gly Met Val Thr Lys Gly Gly Gly Arg Leu Gly Gly
        195                 200                 205
Ser Gly Arg Val Gly Ser Ile Asp Gln Leu Ser Leu
    210                 215                 220
```

<210> 29061
<211> 86
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (26)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 29061
Ala Thr Thr Leu Val Ser Val Leu Cys Thr Thr Thr His Thr Met Arg
1               5                   10                  15
Ser Gly Lys Lys Ser Arg Arg Val Thr Xaa Met Ser Leu Phe Leu Phe
            20                  25                  30
Arg Cys Asn Pro His Thr Met Ser Ala Pro Pro Ile His Gln Gly Leu
        35                  40                  45
Gln Thr Leu Gly Asp Ser Arg Asp Thr Trp Asp Ser Ile Asn Asn Glu
    50                  55                  60
Thr Ser Phe Asp Ala Ser Asn Gly Glu Phe Glu His Trp Ile Asn Ser
65                  70                  75                  80
Gln Ala Ser Gly Tyr Ala
                85
```

<210> 29062
<211> 282
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (282)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 29062
Lys Cys Ser Leu Trp Glu Thr Arg Thr Ser Gly Glu His Arg Pro Gln
1               5                   10                  15
Arg Gly Ala Pro Arg Arg Glu Leu Pro Lys Lys Asn Gly Lys Val Ala
            20                  25                  30
Arg Pro Met Asn Ser Phe Met Leu Tyr Arg Ser Ala Tyr Ala Glu Arg
        35                  40                  45
Thr Lys Glu Trp Phe Ala Gln Asn Asn His Gln Val Val Ser Glu Val
    50                  55                  60
```

```
Ala Gly Asp Ser Trp Arg Ile Glu Thr Pro Glu Ile Arg Glu Lys Tyr
65                  70                  75                  80
Glu Val Leu Ala Asn Val Glu Lys Ala Asn His Leu Lys Ala His Pro
                85                  90                  95
Gly Tyr Lys Phe Ser Pro Ser Lys Glu Lys Lys Lys Arg Ser Glu Thr
            100                 105                 110
Asp Asp Asp Gln Leu Thr Val Asp Gly Gly Glu Met Thr Ser Gly Ser
        115                 120                 125
Ser Pro Ala Phe Leu Gln Val Arg Ala Val Gly Ser Ser Glu Val Asp
    130                 135                 140
Ser Asn Gly Trp Ala Ser Arg Asp Ser Thr Pro Phe Asp Phe Pro Glu
145                 150                 155                 160
His Gly Leu Pro Thr Thr Thr Tyr Tyr Asp Ser Ser Trp Gln Thr Ser
                165                 170                 175
His Pro Ser Met Ser Ala Pro Lys Pro Phe Ser Tyr Leu Gln Gln Pro
            180                 185                 190
Ile His Pro Asn Leu Ile Gly Pro Pro Thr Glu Asp Ser Arg Phe Lys
        195                 200                 205
His Val Gly Leu Gln Asn Ile Gln Phe Thr Ser Ser Thr Ala Leu Ala
    210                 215                 220
Gly Leu Pro Gly Ala Ala His His Asp Leu Leu Gln Pro Gln Asn Asn
225                 230                 235                 240
Phe Gly Ala Gly Pro Asp Gly Gln Leu Asp Pro Gln Leu Leu Ser Leu
                245                 250                 255
Ser Asp His Ser Gly Gln Arg Ala Met Tyr Asn His Ser His Tyr Ala
            260                 265                 270
Ile Trp Gln Glu Val Pro Thr Ser Asn Xaa
        275                 280
```

<210> 29063
<211> 126
<212> PRT
<213> A.fumigatus

<400> 29063

```
Ile Val Leu Arg Ser Pro Ser Leu Pro Phe Arg Ala Ser His Thr Ala
1               5                   10                  15
Thr Arg His Gln Phe Thr Val Ala Arg Arg Gly Lys Val Ala Pro Ile
            20                  25                  30
Phe Tyr Arg Pro Lys Glu Asn Pro Tyr Met Leu Asp Leu Pro Pro Lys
        35                  40                  45
Arg Ser Arg Asp Val Leu Lys Ala Pro Ala Ala Asp Thr Ser Glu Ala
    50                  55                  60
Lys Thr Ile Ser Phe Ala Cys Lys Thr Asp Gln Lys Gly Lys Thr Ala
65                  70                  75                  80
Pro Val Asp Cys Thr Val Leu Phe Glu Gly Ile Gln Asn Asn Asp Leu
                85                  90                  95
Glu Ile Pro Lys Val Gln Ser Ala Ile Tyr Ala Ser Met Pro Arg Val
            100                 105                 110
Ala Val Phe Thr His Val Arg Arg Pro Asp Pro Ala Leu Met
        115                 120                 125
```

<210> 29064
<211> 218
<212> PRT
<213> A.fumigatus

<400> 29064
Asp Ile Ser Pro Arg Asp Cys Gly Cys Ala Leu Lys Gln Ile Leu Thr
1 5 10 15
Asp Gly Phe His Lys Gly Arg Thr Ala Ser Glu Gly Gly Gln Thr Pro
20 25 30
Arg Ser Ala Thr Met Asn Gln Met Asn Val Thr Gly Met Asn Pro Gly
35 40 45
Ala Gly Gly Pro Val Gly Gly Val Pro Met Met Asn Asn Gly Ser Thr
50 55 60
Ala Pro Arg Asn Asp Gly Asn Val Asn Asn Ile Pro Glu Thr Met Ile
65 70 75 80
Asn Asn Leu Asn Thr Tyr Ile Tyr Asp Tyr Phe Leu Lys Arg Gly Tyr
85 90 95
His Glu Cys Ala Arg Ala Leu Val Lys Asp Glu Ser Ile Lys Leu Asn
100 105 110
Thr Glu Pro Pro Thr Lys Thr Ser Pro Gly His Arg Arg Glu Asp Met
115 120 125
Asn Gly Val Glu Gly Asp Ala Ile Met Thr Asp Ser Lys Asp Gly Asp
130 135 140
Lys Ile Lys Ile Pro Asp Asp Leu Pro Arg Pro Asn Leu Ala Ser Glu
145 150 155 160
Ser Gln Gln Ser Ser Phe Leu Leu Asp Trp Phe Ser Leu Phe Trp Asp
165 170 175
Phe Phe Trp Ala Gln Arg Lys Lys Gly Asn Ser Asn Asp Val Arg Gln
180 185 190
Tyr Leu Gln His Thr Gln Val Ile Pro His Leu Ser Cys Cys Gly Trp
195 200 205
Asn Gly Pro Asn Trp Tyr Ser Gly Arg Ile
210 215

<210> 29065
<211> 67
<212> PRT
<213> A.fumigatus

<400> 29065
Val Arg Phe Leu Ser Leu Pro Tyr Gly Cys His Ile Ala Ile Gln Thr
1 5 10 15
Asp Val Val Glu Gln Asn Val Asp Trp Ile Ser Lys Val Leu Tyr Ser
20 25 30
Leu Ser Cys Val Gly Leu Asp Leu Pro Asp Leu Gly Ser Asn Asn His
35 40 45
Asp Lys Gly His Ser Ser Tyr Phe Phe Arg Val Arg Gly Cys Ser Pro
50 55 60
Pro Arg Thr
65

<210> 29066
<211> 96
<212> PRT
<213> A.fumigatus

<400> 29066
Thr Thr Ser Trp Leu Ile Phe Met Gln Glu Asn Ser Ile Pro Arg Leu
1 5 10 15

```
Ser Glu Asn Glu Ser Glu Arg Leu Gly Ser Arg Lys Met Ala Ile Pro
            20                  25                  30
Arg Leu Thr Glu Gly Thr Glu Ser Ala Phe Thr Ser Pro Gly Arg Phe
        35                  40                  45
His Arg Arg His Val Arg Arg Ala Cys Glu Ser Cys Arg Gln Arg Lys
    50                  55                  60
Thr Lys Cys Thr Gly Asp Lys Ser Gly Cys Arg Asn Cys Arg Glu Ala
65                  70                  75                  80
Gly Ile Ile Cys Cys Tyr Thr Asp Gly Lys Arg Glu Lys Ser Lys Arg
                85                  90                  95
```

<210> 29067
<211> 190
<212> PRT
<213> A.fumigatus

<400> 29067

```
His Thr Ser Ala Thr His Tyr Arg Asp Ser Pro Tyr Asn Met Ala Tyr
1               5                   10                  15
Glu Leu Ser Thr Leu Gln Leu Ser Cys Val Ala Phe Val Ala Phe Met
            20                  25                  30
Ala Val Leu Val Phe Arg Thr Arg Thr Arg Asn Leu Lys Gln Asn Val
        35                  40                  45
Pro Pro Gly Pro Arg Pro Leu Pro Ile Ile Gly Asn Phe Phe Asp Leu
    50                  55                  60
Pro Pro Lys Gly Gln Pro Glu Tyr Leu His Trp Phe Lys His Lys Asp
65                  70                  75                  80
Ala Tyr Gly Pro Val Ser Ser Ile Asn Val Met Gly Thr Thr Leu Val
                85                  90                  95
Ile Phe His Asp Lys Asp Ala Ala His Ala Val Met Gly Lys Lys Ala
            100                 105                 110
Gln Lys Thr Ser Ala Arg Pro Gln Leu Asn Phe Ala Gln Leu Cys Gly
        115                 120                 125
Phe Glu Asn Phe Leu Ile Thr His Gln Tyr Asn Asp Lys Tyr Arg Leu
    130                 135                 140
His Arg Lys Met Val His Gln Glu Ile Gly Thr Lys Gly Leu Ser Ala
145                 150                 155                 160
Gly Phe Arg Pro Val Gln Glu Gln Glu Ser Ile Arg Phe Ile Leu Gln
                165                 170                 175
Thr Phe Asn Arg Pro Asp Asp Ile Leu Gln His Leu Lys Thr
            180                 185                 190
```

<210> 29068
<211> 258
<212> PRT
<213> A.fumigatus

<400> 29068

```
Val Pro Tyr Asp Val Val Ile Cys Leu Leu His Cys Leu Met Gly Cys
1               5                   10                  15
Arg Leu Ala Ala Ala Ile Val Leu Lys Ile Thr Tyr Gly Tyr Ser Ile
            20                  25                  30
Glu Arg Lys Gly Gln Asp Pro Leu Val Glu Leu Ile Glu His Ala Met
        35                  40                  45
Glu Asn Leu Ser Gln Ala Phe Val Pro Leu Ala Trp Ala Val Asp Ser
    50                  55                  60
```

```
Val Pro Ala Ile Lys Tyr Leu Pro Asp Trp Phe Pro Gly Met Ser Tyr
65                  70                  75                  80
Arg Lys Thr Ala Arg Lys Trp Arg Ala Ile Asn Glu Ala Ala Ala Glu
                85                  90                  95
Leu Pro Tyr Asp Phe Val Lys Arg Gln Met Ala His Lys Ala His Gln
            100                 105                 110
Pro Ser Tyr Val Ser Asn Leu Leu Glu Lys His Met Ile Lys Ser Glu
        115                 120                 125
Asp Asn Lys Ile Asn Val Ser Ala Ala Asp Glu Glu Ala Ile Lys Trp
    130                 135                 140
Thr Ala Val Ser Leu Tyr Ala Ala Gly Ser Asp Ser Thr Val Ala Ile
145                 150                 155                 160
Ile His Ser Val Ile Cys Gly Leu Val Met Phe Pro Glu Val Val Thr
                165                 170                 175
Arg Ala Gln Glu Glu Ile Asp Arg Val Val Gly Ser Asp Arg Leu Pro
            180                 185                 190
Asn Phe Asp Asp Arg Thr Asn Leu Pro Tyr Val Asp Gly Ile Ile Lys
        195                 200                 205
Glu Ala Trp Arg Trp Asn Pro Val Gly Pro Met Gly Leu Thr His Lys
    210                 215                 220
Ser Glu Glu Asp Leu Val Cys Gly Glu Tyr Leu Ile Pro Lys Gly Ser
225                 230                 235                 240
Tyr Leu Leu Pro Phe Leu Trp Trp Phe Leu Asn Glu Pro Lys Lys Val
                245                 250                 255
Pro Arg
```

<210> 29069
<211> 202
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (199)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29069

```
Tyr Ser Gly Leu Thr Pro Ile Ala Leu Ser Gly Ser Pro Ala Asn Leu
1               5                   10                  15
Tyr Ala Ile Ser Ala Val Leu Asn Thr His Asp Arg Leu Met Gly Leu
            20                  25                  30
Asp Leu Pro His Gly Gly His Leu Ser His Gly Tyr Gln Thr Pro Thr
        35                  40                  45
Lys Lys Ile Ser Phe Ile Ser Lys Tyr Phe Glu Thr Leu Pro Tyr Arg
    50                  55                  60
Leu Asp Glu Ser Thr Gly Leu Ile Asp Tyr Asp Gly Ala Glu Lys Leu
65                  70                  75                  80
Ala Leu Leu Tyr Arg Pro Lys Leu Ile Ile Ala Gly Thr Ser Ala Tyr
                85                  90                  95
Ser Arg Leu Ile Asp Tyr Pro Arg Met Arg Gln Ile Ala Asp Ala Ala
            100                 105                 110
Gly Ala Tyr Leu Leu Ser Asp Met Ala His Ile Ser Gly Leu Val Ala
        115                 120                 125
Ala Gly Val Leu Pro Ser Pro Phe Pro His Ser Asp Ile Val Thr Thr
    130                 135                 140
```

```
Thr Thr His Lys Ser Leu Arg Gly Pro Arg Gly Ala Met Ile Phe Tyr
145                 150                 155                 160
Pro Lys Gly Val Arg Arg Thr Asp Lys Lys Gly Asn Lys Glu Met Tyr
                165                 170                 175
Asp Leu Glu Asn Leu Ile Asn Ala Ser Val Phe Pro Gly Val Phe Thr
            180                 185                 190
Thr Gly Leu Glu Gly Cys Xaa Ala Thr Pro
        195                 200
```

<210> 29070
<211> 89
<212> PRT
<213> A.fumigatus

<400> 29070

```
Arg Val His Met Ile Ala Glu Ala Gly Lys Pro His Asn Leu Val Cys
1               5                   10                  15
Ser Glu Cys Arg Ser Pro Asp Asp Leu Met Leu Cys Glu Thr Cys Cys
            20                  25                  30
Arg Ser Tyr His Ala Arg Cys Leu Pro Asp Pro Ala Arg Pro Ala Ser
        35                  40                  45
Thr Gly Asn Phe Tyr Cys Pro Ser Cys Arg Asp Lys Arg Trp Asp Leu
    50                  55                  60
Thr Pro Pro Leu Ile Asn Ser Leu Ala Ala Ser Pro Gly Ser Leu Gly
65                  70                  75                  80
Ala Ala His Leu Phe His Pro Arg Leu
                85
```

<210> 29071
<211> 195
<212> PRT
<213> A.fumigatus

<400> 29071

```
Tyr Arg Arg Arg His Asn Asp Ser Val Val Val Phe Asp Arg Asp Ser
1               5                   10                  15
Gln Gln Leu Val Leu Arg Asn Ala Ser Asp Ser His Ala Gly Leu Glu
            20                  25                  30
Leu Thr Asp Cys Pro Tyr Cys His Arg Pro Leu Arg Glu Ser Asn Ala
        35                  40                  45
Gly Gln Glu Gly His His Ala Ser Pro Gln Pro Glu Phe Val Asn Pro
    50                  55                  60
Asp Tyr Phe Arg Met Leu His Asn Ser Leu Pro Ser Ser Ala Asp Ser
65                  70                  75                  80
Ser Thr Pro Pro Ser Pro Arg Arg Arg Leu Val Gln Pro Ala Leu Ala
                85                  90                  95
Asp Gly Ser Thr Ser Glu Pro Thr Pro Ser Ile Ser Gly Thr Gln Gly
            100                 105                 110
Ile Ser Ser Ala Ala Phe Thr Gln Asn Tyr Phe Lys Lys Phe Phe Val
        115                 120                 125
Glu Glu Arg Ile Leu Gly Lys Gly Gly Lys Gly Val Val Leu Leu Val
    130                 135                 140
Lys His Val Leu Asp Gly Val Ser Leu Gly His Tyr Ala Cys Lys Arg
145                 150                 155                 160
Val Pro Val Gly Asp Asp His Glu Trp Leu Glu Lys Val Leu Gly Glu
                165                 170                 175
```

```
Val Gln Leu Leu His Leu Gln Pro Val Ala Ala Arg Tyr Arg Ala Glu
            180                 185                 190
Pro Arg Cys
        195

<210> 29072
<211> 66
<212> PRT
<213> A.fumigatus

<400> 29072
Ile Gly Arg Asp Thr Arg Gln His Phe Phe Gln Leu Gly His Arg Asp
1               5                   10                  15
Asn Ala Met Val Thr Glu Leu Met Leu Asn Ala Ser Arg Ser Asp Ile
            20                  25                  30
Ile Asp Thr His Thr Leu Tyr Lys Trp Lys Leu Thr Lys Gln Met Ser
        35                  40                  45
Tyr Phe Arg Leu Leu Tyr Leu Gly Lys Asp Cys Arg Ser Gln Met Gly
    50                  55                  60
Ser Thr
65

<210> 29073
<211> 67
<212> PRT
<213> A.fumigatus

<400> 29073
Ser Phe Asn Pro Ala Ala Gln Gly Asn Tyr Leu Pro Leu Ser Leu Thr
1               5                   10                  15
Tyr Met Arg Gly Arg Lys Cys Lys Gly Gln Phe Asn Val Tyr Met Asn
            20                  25                  30
Leu Leu Tyr Pro Ala Ser Leu Asn Asp Ile Leu Cys Pro Glu Tyr Leu
        35                  40                  45
Glu Thr Thr Ser Gln Ser His Ile Gly Asn Ile His Ile Ser Asp Ile
    50                  55                  60
Ser Arg Thr
65

<210> 29074
<211> 339
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (41),(42)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29074
Asp Arg Val Leu Arg Ser Phe Ile Gly Cys Tyr Val Ile Ile Cys Pro
1               5                   10                  15
Leu Ala Lys Gly Gly Asp Arg Trp Ile Leu Asn Phe Arg Trp Pro Leu
            20                  25                  30
Ile Tyr Ser Lys Glu Thr Cys Arg Xaa Xaa Gly Thr Leu Arg Lys Leu
        35                  40                  45
```

```
Arg Gln Ser Asn Met Ser Leu Phe Arg Lys Tyr Arg Ala Ala Thr Ala
    50                  55                  60
Gln Val Arg Ser Phe Ser Ser Ser Thr Cys Arg Arg Val Gly Pro Glu
65                  70                  75                  80
Ser Pro Asn Phe Val Asp Val Pro Gln Thr Ile Gln Pro Asp Leu Arg
                85                  90                  95
Val Lys Pro Arg Val Lys Gly Thr Leu Pro Val Pro Arg Glu Leu Phe
            100                 105                 110
Pro Ala Arg Arg Val Asp Lys Pro Ser Glu Glu Tyr Ile Ala Ala Ala
        115                 120                 125
Thr Pro Leu Pro Leu Lys Asp Ile Lys Ile Asp Pro Asn Asp Pro His
    130                 135                 140
Ala Glu Tyr Lys Asp Trp Lys Arg Arg Met Ala Asp Met Arg Arg Gln
145                 150                 155                 160
Asn Leu Arg Glu Gly Leu Leu Glu Leu His Ser Arg Lys Gln Arg Thr
                165                 170                 175
Asp Lys Leu Met Ala Tyr Arg Ser Ile Gln Arg Gln Arg Arg Arg Glu
            180                 185                 190
Gln Val Leu Arg Gln Pro Glu Arg Asp Asp Glu Arg Leu Thr Arg Pro
        195                 200                 205
Ser Ile Val Gln Glu Met Leu Pro Lys Arg Thr Pro Val Leu Pro Asp
    210                 215                 220
Pro Asp Arg Glu Glu Arg Leu Ala Gln Ala Arg Ala Lys Leu Glu Ser
225                 230                 235                 240
Lys Lys Val Arg Asp Glu Leu Glu Arg Gln Asp Ser Leu Gln Thr Leu
                245                 250                 255
Tyr Met Asn Ala Arg Thr Phe Ile Thr Thr Glu Ala Gln Leu Ala Ala
            260                 265                 270
Glu Ile Glu Lys Val Phe Pro Asp Gly Glu Asn Glu Ala Trp Arg Ser
        275                 280                 285
Asp His Gln Gln Gly Glu Asn Ile Trp Asn Leu Gly Val Pro Pro Thr
    290                 295                 300
Val Gln Asn Ile Val Asn Asp Ser Lys Lys Ser Glu Ala Ala Arg Trp
305                 310                 315                 320
Asp Leu Ile Gln Gly Arg Val Lys Lys Leu Gly Glu Gln Ile Thr Gly
                325                 330                 335
Gly Lys Ile
```

<210> 29075
<211> 220
<212> PRT
<213> A.fumigatus

<400> 29075

```
Gly Ala Val Thr Tyr Ser Asp Ser Met Glu Gln Thr Phe Asp Leu Pro
1               5                   10                  15
Asp Ser Thr Asp Trp Leu Glu Thr Pro Leu Ser Leu Val Ser Pro Leu
            20                  25                  30
Glu Ser Ser Leu Arg Cys Gln Val Cys Lys Asp Phe Phe Asp Asn Pro
        35                  40                  45
Val Ile Thr Ser Cys Ser His Thr Phe Cys Ser Leu Cys Ile Arg Arg
    50                  55                  60
Cys Leu Ser Thr Glu Gly Lys Cys Pro Ala Cys Arg Ser Ser Asp Gln
65                  70                  75                  80
Glu Leu Lys Leu Arg Arg Asn Trp Ala Val Gln Glu Leu Val Glu Ala
```

```
                85                  90                  95
Phe Gln Asn Ala Arg Pro Ser Met Leu Glu Leu Ala Arg Lys Ala Ala
            100                 105                 110
Asn Ser Arg Leu Asp Gly Gly Tyr Val Thr Gly Gln Pro Ala Ala Lys
        115                 120                 125
Lys Arg Lys Val Asp Gln Glu Asp Gly Pro Asp Ala Ser Gly Ser Glu
    130                 135                 140
Gly Ile Arg Thr Arg Ser Gln Ser Arg Arg Gly Asn Ser Gln Ala Glu
145                 150                 155                 160
Pro Val Val Val Asp Ala Ile Glu Asp Asp Gln Asp Arg Glu Tyr Ile
                165                 170                 175
Pro Gly Thr Leu Phe Thr Pro Leu Lys Gln Val Arg Leu Gly Val Arg
            180                 185                 190
Arg Ala Met Ala Pro Asn Met Asn Val Phe Lys Arg Thr Val Trp Leu
        195                 200                 205
His Ala Leu Ile Gly Gly Arg Arg Met Glu Asn Glu
    210                 215                 220

<210> 29076
<211> 333
<212> PRT
<213> A.fumigatus

<400> 29076
Pro Ser Met Arg Phe Ser Thr Val Leu Ser Ala Leu Leu Leu Ser Ser
1               5                   10                  15
Thr Ala Leu Ala Thr Pro Ala Gln Val Ser Ser Pro Val Asp Ala Ser
            20                  25                  30
Ser Gln Gly Ser Val Ala Asp Glu Gln Ser Val Ala Gln Thr Thr Ala
        35                  40                  45
Val Ala Glu Ala Thr Pro Val Ala Gln Gln Ser Pro Ser Pro Asn Gln
    50                  55                  60
Gln Asn Ala Asn Ala Ala Asn Gln Glu Gln Ser Ala Asn Val Asn Thr
65                  70                  75                  80
Gln Ala Ala Pro Ala Pro Pro Thr Ser Ser Gly Pro Gln Pro Thr Glu
                85                  90                  95
Asn Ala Glu Pro Ser Pro Ser Pro Ser Ala Ser Gln Lys Asp Ser Asn
            100                 105                 110
Pro Leu Asn Ile Leu Ser Asn Leu Val Pro Thr Asn Thr Ala Gly Glu
        115                 120                 125
Gln Ala Gln Ser Val Ser Thr Ala Ile Thr Pro Thr Ala Ala Ser Ala
    130                 135                 140
Glu Ser Ser Ser Asn Ser Glu Thr Ala Thr Lys Ala Ala Ala Pro Thr
145                 150                 155                 160
Ala Ala Gly Ser Thr Gly Ser Gly Ser Ser Ser Gly Gly Ala Ser Asp
                165                 170                 175
Gly Phe Ser Gly Asn Ile Phe Gln Asp Leu Gln Asn Leu Leu Gln Gly
            180                 185                 190
Val Ser Gly Leu Leu Ser Pro Thr Leu Leu Lys Asp Ile Glu Ser Phe
        195                 200                 205
Phe His His Phe Ala Tyr Leu Phe Asp Asp Lys Thr Thr Asp Gln Thr
    210                 215                 220
Lys Ser Leu Ile Asp Thr Gly Tyr Asn Leu Leu Thr Pro Glu Leu Thr
225                 230                 235                 240
Lys Glu Val Leu Gly Leu Leu Ser Asn Ala Asn Ala Leu Leu Thr Pro
                245                 250                 255
```

```
Ser Phe Val Asn Glu Thr Gln Glu Leu Ile Gly Ala Val Gly Pro Leu
            260                 265                 270
Leu Thr Pro Gln Leu Phe Lys Gln Ile Ser Thr Leu Leu Asn Asn Gly
        275                 280                 285
Asn Asn Leu Leu Thr Ala Asp Phe Val Lys Glu Val Asn Gly Leu Ile
    290                 295                 300
Gly Asn Ala Asn Thr Leu Leu Thr Pro Asp Phe Val Lys Glu Thr Arg
305                 310                 315                 320
Val Phe Thr Thr Gly Leu Glu Gly Ser Ala Val Asp Leu
                325                 330
```

<210> 29077
<211> 114
<212> PRT
<213> A.fumigatus

<400> 29077

```
Glu Thr Arg Thr Ile Thr Glu Thr Asp Ser His Arg Tyr Asp Arg Thr
1               5                   10                  15
Pro Pro Cys Ser Ala Ile Lys Ala Val Thr Gln Cys Ser Gln Phe Phe
            20                  25                  30
His Glu Val Ser Leu Asp Lys Leu Glu Ser Gly Thr Thr Tyr Tyr Tyr
        35                  40                  45
Gln Ile Pro Ala Ala Asn Gly Thr Thr Gln Ser Glu Val Leu Ser Phe
    50                  55                  60
Lys Thr Ala His Arg Ala Gly Asp Arg Arg Pro Phe Ser Val Ala Val
65                  70                  75                  80
Leu Asn Asp Met Gly Tyr Thr Asn Ala Gly Gly Ser Phe Lys Gln Leu
                85                  90                  95
Val Lys Ala Ala Asn Glu Gly Thr Ala Phe Ala Trp His Gly Gly Asp
            100                 105                 110
Leu Arg
```

<210> 29078
<211> 160
<212> PRT
<213> A.fumigatus

<400> 29078

```
Tyr Phe Leu Pro Ser Ile Asn Leu Ser Thr Val Thr Lys Asn Asn Asp
1               5                   10                  15
Gln Ile Ser Tyr Ala Asp Asp Trp Tyr Ser Gly Ile Leu Pro Cys Ala
            20                  25                  30
Asp Asp Trp Pro Val Cys Tyr Asn Gly Thr Ser Thr Glu Leu Pro Gly
        35                  40                  45
Gly Gly Pro Val Pro Asp Glu Tyr Arg Lys Pro Leu Pro Ala Gly Glu
    50                  55                  60
Ile Pro Asn Gln Gly Gly Pro Gln Gly Gly Asp Met Ser Val Leu Tyr
65                  70                  75                  80
Glu Ser Asn Trp Asp Leu Trp Gln Gln Trp Leu Gly Asn Val Thr Arg
                85                  90                  95
Lys Ile Pro Tyr Met Val Leu Pro Gly Asn His Glu Ala Ala Cys Ala
            100                 105                 110
Glu Phe Asp Gly Pro Gly Asn Val Leu Thr Ala Tyr Leu Asn Asn Gly
        115                 120                 125
```

```
Val Ser Asn Gly Thr Ala Pro Lys Ala Asn Leu Thr Tyr Tyr Thr Cys
    130                 135                 140
Pro Pro Ser Gln Arg Tyr Asp Pro Pro Pro Ala Val Ser Arg Thr Ser
145                 150                 155                 160

<210> 29079
<211> 184
<212> PRT
<213> A.fumigatus

<400> 29079
Pro Thr Thr His Ala Leu Arg Pro Asn Gly Met Ile His Pro Pro Leu
1               5                   10                  15
Ser Pro Ala Pro Ala Asn Pro Asp Arg Asn Phe Thr Ala Tyr Gln His
            20                  25                  30
Arg Phe Arg Met Pro Gly Pro Glu Thr Gly Gly Val Gly Asn Phe Trp
        35                  40                  45
Tyr Ser Phe Asp Tyr Gly Leu Ala His Phe Ile Ser Met Asp Gly Glu
    50                  55                  60
Thr Asp Phe Ala Asn Ser Pro Gln Trp Pro Phe Ala Ala Asp Ile Lys
65                  70                  75                  80
Gly Asn Glu Thr His Pro Thr Ala Ser Glu Thr His Ile Thr Asp Ser
                85                  90                  95
Gly Pro Phe Gly Ala Val Asp Gly Ser Tyr Lys Glu Thr Lys Ser Tyr
            100                 105                 110
Ala Gln Tyr Lys Trp Leu Lys Lys Asp Leu Ala Ser Val Asp Arg Lys
        115                 120                 125
Lys Thr Pro Trp Val Phe Val Met Ser His Arg Pro Met Tyr Ser Ser
    130                 135                 140
Ala Tyr Ser Ser Tyr Gln Lys Asn Leu Arg Ala Ala Phe Glu Arg Leu
145                 150                 155                 160
Phe Leu Gln Phe Gly Val Asp Ala Tyr Leu Ser Gly Tyr Gly Ala Cys
                165                 170                 175
Phe Leu Arg Arg Glu Arg Arg Tyr
            180

<210> 29080
<211> 75
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (3)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29080
His Pro Xaa Val Lys Pro Ala Thr Ala Asn Pro Lys Asn Asn Val Asn
1               5                   10                  15
Val Ile Ser Leu Ser Tyr Leu Pro Asp Gly Met His Val His Phe Gln
            20                  25                  30
Thr Pro Phe Gly Leu Gly Val Arg Pro Ser Val Lys Trp Gly Lys Asp
        35                  40                  45
Pro Lys His Phe Asp Arg Val Ala His Gly Tyr Thr His Thr Tyr Val
    50                  55                  60
Leu Ala Ser Glu Leu Gly Asn Pro Asn His Asn
```

65 70 75

<210> 29081
<211> 113
<212> PRT
<213> A.fumigatus

<400> 29081
Cys Ser His Ile His Trp Tyr Glu Arg Leu Tyr Pro Leu Gly Ala Asn
1 5 10 15
Gly Thr Ile Asp Ser Ala Ser Ile Val Asn Asn His Thr Tyr Arg Thr
20 25 30
Asn Pro Gly Lys Ser Ile Thr His Ile Ile Asn Gly Met Ala Gly Asn
35 40 45
Ile Glu Ser His Ser Glu Phe Gly Lys Gly Gln Gly Leu Gln Asn Ile
50 55 60
Thr Ala Leu Leu Asp Thr Thr His Phe Gly Ile Ser Lys Leu Thr Val
65 70 75 80
Leu Ser Glu Lys Glu Val Lys Trp Glu Phe Ile Arg Gly Asp Gly Ser
85 90 95
Val Gly Asp Tyr Leu Thr Leu Arg Lys Glu Lys Thr Gln Ser Lys Glu
100 105 110
Lys

<210> 29082
<211> 235
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (3),(14),(23),(26),(31)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29082
Phe Arg Xaa Glu Asp Val His Arg His Asn Ile Thr Phe Xaa Gln Arg
1 5 10 15
Pro Leu Ser Leu Ser Phe Xaa Tyr Val Xaa Gln Ala Pro Ile Xaa Pro
20 25 30
Gln Thr Gln Gln Leu Thr Pro Ala Tyr Asp Ser Gly Asp Met Ala Leu
35 40 45
Gly Pro Ala Leu Thr Phe Phe Thr Leu Phe Asp Lys Leu Val Ile Val
50 55 60
Pro Gln Gly Thr Phe Ser Ser Asn Ala Ala Ser Lys Arg Ser Val Ser
65 70 75 80
Glu Arg Asp Val Met Ala Glu Ser Phe His Arg Lys Gln Ala Val Gln
85 90 95
Ala Gly Asp Arg Pro Trp Phe Cys Trp Trp Asn Gly Thr Met Met Glu
100 105 110
Phe Phe Leu Tyr Thr Asn Gln Thr Ser Lys His Ala Arg Gln Thr Ser
115 120 125
Thr Ala Ser Ser Ala Pro Thr Glu Thr Ser Pro Pro Gln Asn Gly Lys
130 135 140
Arg Gly Leu Ala Pro Leu Asp Ser Leu Phe Asp Tyr Pro Arg Arg Ile
145 150 155 160

```
Lys Ile Gln Glu Lys Arg Asn His Pro Gly Ser Arg Pro Pro Tyr Cys
                165                 170                 175
Gln Gln Met Lys Val Leu Asp Asp Gly Ser Ile Ala Thr Ala Ser Pro
            180                 185                 190
Glu Thr Ile Glu Ile Lys Glu Val Glu Pro Thr Pro Thr Thr Thr Leu
        195                 200                 205
Lys Gly Ser Gly Ser Ala Thr Gln Thr Tyr Thr Ala Lys Ala Gln Tyr
    210                 215                 220
Glu Ser Val Cys Tyr Cys Ala Ser Leu Thr Asp
225                 230                 235

<210> 29083
<211> 441
<212> PRT
<213> A.fumigatus

<400> 29083
Thr Thr Glu Gln Pro Glu Leu Glu Ala Met Ile Ser Asp Ile Ala Met
1               5                   10                  15
Arg Ile Asn Ser Met His Ser Thr Leu Ala His Gln Pro Leu Val Phe
            20                  25                  30
Leu Lys Gln Asp Leu Ala Phe Pro Gln Tyr Leu Ala Leu Ile Ser Val
        35                  40                  45
Ala Asp Ala Leu Met Ile Thr Ser Leu Arg Glu Gly Met Asn Leu Thr
    50                  55                  60
Ser His Glu Phe Val Tyr Cys Gln Asp Gly Lys Tyr Gly Asn Lys Lys
65                  70                  75                  80
Tyr Gly Ser Leu Ile Leu Ser Glu Phe Thr Gly Ser Ala Ser Val Phe
                85                  90                  95
Gly Asn His Ala Leu Leu Val Asn Pro Trp Asp Tyr Arg Gln Cys Ala
            100                 105                 110
Glu Ala Val His Thr Ala Leu Thr Arg Ser Glu Ala Asp Arg Gln Arg
        115                 120                 125
Val Trp Glu Gln Leu Arg Arg Ala Val Leu Gln Asn Ser Thr Gly Asn
    130                 135                 140
Trp Val Lys Ser Phe Asn Glu Arg Leu Gln Arg Val Trp Asn Glu Gln
145                 150                 155                 160
Ser Ser Arg Glu Ile Met Ala Val Pro Arg Leu Pro Val Asn Lys Val
                165                 170                 175
Glu Glu Met Tyr Arg Lys Ala Ala Arg Arg Leu Ile Ile Val Asp Tyr
            180                 185                 190
Glu Gly Thr Leu Ala Ser Trp Gly Ser Pro Lys Ser Ile Ile Val Thr
        195                 200                 205
Thr Pro Gln Arg Ala Ile Val Thr Leu Thr Asp Leu Thr Glu Asp Ser
    210                 215                 220
Lys Asn Val Val Tyr Val Met Ser Ser Arg Met Pro Glu Glu Met Glu
225                 230                 235                 240
Arg Leu Phe Arg Arg Val Pro Gly Leu Gly Leu Ile Ala Glu Asn Gly
                245                 250                 255
Cys Phe Val Arg Glu Pro Asn Thr Glu Glu Trp Leu Lys Leu Thr Asn
            260                 265                 270
Lys Glu Arg Thr Asp Ala Trp Lys Glu Gly Val Ser Gln Ile Leu Ser
        275                 280                 285
Tyr Tyr Gln Glu Arg Ala Glu Gly Ser Trp Ile Glu Lys Arg His Cys
    290                 295                 300
Ser Leu Val Phe His Tyr Gly Ser Ala Glu Asp Asn Glu Ala Ala Ser
```

```
305                 310                 315                 320
Arg Leu Ala Ser Glu Cys Ala Gly His Ile Asn Asp Ala Cys Ala Ser
                325                 330                 335
Gln Gly Val His Ala Val Leu Ile Asp Arg Ala Leu Val Val Gly Pro
            340                 345                 350
Ala Asn Thr Asn Lys Ala Ser Ala Ala Glu Leu Val Trp Arg Asp Cys
        355                 360                 365
Leu Asn Ala Ser Gln Lys Asp Glu Gln Ile Ala Arg Pro Asp Phe Leu
    370                 375                 380
Leu Ala Ile Gly Asp Gly Arg Asp Asp Glu Pro Val Phe Arg Trp Ala
385                 390                 395                 400
Asn Lys Leu Glu Ser Ala Lys Ala Val Gly Tyr Ala Met Thr Val Thr
                405                 410                 415
Leu Gly Ser Arg Ser Thr Glu Ala Lys Ala Thr Leu Thr Gln Gly Val
            420                 425                 430
Thr Gly Lys Leu Phe Val Val Pro Tyr
        435                 440
```

<210> 29084
<211> 199
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (196)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29084

```
Thr Gly Ile Pro Pro Ile Ala Ser Pro Leu Met Gly His Leu Leu Gln
1               5                   10                  15
His Gly Arg Ala Thr Val Arg Arg Leu Ser Arg Arg Thr Ser Arg Ser
            20                  25                  30
Gln Arg Leu Gln Leu Arg His His Ser Lys Ala Ser Pro Asn Pro Val
        35                  40                  45
Pro Glu Lys Asn Ser Thr Ser Ala Asn Ala Ser Arg Ser Gly Ala Thr
    50                  55                  60
Pro Ser Cys Thr Ser Pro Cys Ser Pro Asn Thr Ser Ser Pro Thr Asn
65                  70                  75                  80
Thr Pro Leu Ala Ala Ser Thr Pro Ala Arg Ser Ser Pro Arg Thr Phe
                85                  90                  95
Phe Gln Ala Ile Gln Ala Gly Pro Ile Gly Arg Leu Ala Asp Ser Tyr
            100                 105                 110
Ala Arg Val Gln Gln Arg Arg Pro Tyr Ala Thr Gln Val Val Ser Ser
        115                 120                 125
Ile Val Val Tyr Leu Cys Gly Asp Leu Ser Ala Gln Leu Leu Phe Pro
    130                 135                 140
Ser Glu Ser Pro Ala Gln Thr Ser Arg Val Ala Ser Glu Glu Lys Pro
145                 150                 155                 160
Ala Asp Ser Ala Glu Asp Gly Glu Gly Lys Ala Ala Ser Ser Gly Gly
                165                 170                 175
Tyr Asp Pro Leu Arg Thr Met Arg His Leu Thr Val Gly Val Gly Ser
            180                 185                 190
Ala Ile Pro Xaa Leu His Trp
        195
```

<210> 29085
<211> 64
<212> PRT
<213> A.fumigatus

<400> 29085
Ala Gln Leu Ser Cys Leu Ser Leu Ser Arg His Leu Leu Leu Tyr Ile
1 5 10 15
Tyr Ser Lys Lys Tyr Gly Arg Leu Asn Ala Ile Arg Met Gln Leu Val
20 25 30
Tyr Gln Arg Thr Gly Ile Phe Gly Leu Pro His Ala Pro Pro Ser Leu
35 40 45
Phe Ser Cys Gln Ile Arg Pro Leu His Glu Lys Ser Ile Ser Lys Arg
50 55 60

<210> 29086
<211> 60
<212> PRT
<213> A.fumigatus

<400> 29086
Arg Val Phe Arg Gly Leu Gly Ala Leu Val Ala Gln Lys Tyr Ala Ala
1 5 10 15
Glu Gly Cys Asn Val Ala Ile Asn Tyr Leu Ser Ser Lys Asp Val Ala
20 25 30
Glu Glu Leu Ala Ser Ser Leu Arg Thr Gln Tyr Gly Val Asn Ala Val
35 40 45
Thr Val Gln Gly Val Ser His Ala Arg Leu Leu Trp
50 55 60

<210> 29087
<211> 284
<212> PRT
<213> A.fumigatus

<400> 29087
Glu Asn Thr Ser Leu Ser Phe Leu Leu Ala Ala Cys Ser Arg Pro Thr
1 5 10 15
Phe Gln Leu Gly Thr Gly Ala Leu Ser Ile Ser Gln Asn Phe Arg Val
20 25 30
Arg Lys Trp Arg Arg Lys Asn Ser Pro Thr His Leu Leu Val Val Leu
35 40 45
Gly Ser Gly Gly His Thr Ala Glu Met Phe Ser Met Leu Arg Arg Met
50 55 60
Lys Leu Asp Pro Ser Thr Tyr Thr Tyr Arg Thr Tyr Val Val Ser Ser
65 70 75 80
Gly Asp Asn Phe Ser Ala Ala Arg Ala Val Glu Phe Glu Thr Glu Trp
85 90 95
Leu Lys Gln Ser Pro Lys Leu Ser Phe Pro Ala Asn Gly Ser Asn Ser
100 105 110
Thr Glu Ser Tyr Ala Val Val Thr Val Pro Arg Ala Arg Arg Val His
115 120 125
Gln Ser Tyr Leu Thr Ala Pro Leu Ser Thr Leu Gln Cys Phe Tyr Ala
130 135 140
Cys Phe Leu Val Leu Cys Gly Arg His Pro Glu Gln Lys Ser Pro Leu
145 150 155 160

```
Pro Thr Thr Asn Ser Pro Tyr Pro Asp Val Ile Leu Thr Asn Gly Pro
                165                 170                 175
Ala Thr Ala Val Cys Met Val Leu Ala Ala Lys Ser Leu Arg Leu Phe
            180                 185                 190
His Tyr Leu Lys Ser Leu Phe Tyr Ile Lys Asp His Gln Asp Arg Asp
        195                 200                 205
Ser Ser Arg Ser Ser Gln Val Lys Arg Ser Glu Asp Ala Pro Ala Pro
    210                 215                 220
Val His Phe Gln Leu Arg Thr Ile Tyr Val Glu Ser Trp Ala Arg Val
225                 230                 235                 240
Thr Thr Phe Ser Leu Ser Gly Lys Leu Leu Leu Pro Phe Ala Asp Arg
                245                 250                 255
Phe Leu Val Gln Trp Pro Asp Leu Ala Gly Lys Gln Ala Trp Arg Gly
            260                 265                 270
Met Arg Glu Thr Glu Tyr Ala Gly Thr Leu Val Asp
        275                 280

<210> 29088
<211> 71
<212> PRT
<213> A.fumigatus

<400> 29088
Arg Leu Val Gly Gln Thr Ser Thr Pro Ser Val Leu Phe His Asn Asn
1               5                   10                  15
Leu Ser Leu Gly Asn Leu Leu Leu Ser Ala His Ile Asn Val Gln Thr
            20                  25                  30
Arg Pro Thr Ser Asn Ser Arg Thr Ile Leu Ser Ile Ser Gln Asn Arg
        35                  40                  45
Thr Gly Leu Asp Leu Asn Ile Thr Asp Leu His Arg Ser Gln Gly His
    50                  55                  60
Thr Met Leu Leu Thr Leu Val
65                  70

<210> 29089
<211> 400
<212> PRT
<213> A.fumigatus

<400> 29089
Gln Leu Leu Phe Thr Ser Asp Gly Ile Gln Arg Asp Ile His Arg Tyr
1               5                   10                  15
His Ser Met Ala Lys Glu Ser Asp Ala Pro Pro Ser Tyr Pro Met Thr
            20                  25                  30
Pro Arg Arg Pro Asn Glu His Thr Gln Arg Pro Leu Ser Gln Gln Leu
        35                  40                  45
Glu Phe Gly Lys Pro Ser Pro Leu Gly Pro Tyr Gln Arg Pro Asn Pro
    50                  55                  60
Pro His Gln Gln Gln Pro Asn His Pro Phe Asn Ile Pro Lys Pro Asn
65                  70                  75                  80
Arg Ala Arg Pro Glu His His Arg Pro Ala Pro Gln Ser Arg Ser Tyr
                85                  90                  95
Asn Ala Pro His Pro Gly Ile Ser His Gln Gly His Arg Pro Thr Gly
            100                 105                 110
Gly Ser Ser Ser Leu Val Ala Ser Thr Pro Lys Arg Ser Glu Pro Phe
        115                 120                 125
```

```
Asp Pro Phe Lys Pro Val Arg Pro Ser Ala Tyr Asn Asn Tyr Arg Asn
    130                 135                 140
Ser Arg Pro Val Asn Asn Asp Val Val Glu Ile Arg Arg Pro Glu Asn
145                 150                 155                 160
Val Thr Phe Thr Thr Pro Arg Ala Pro Lys Thr Phe Tyr Ala Ser Ser
                165                 170                 175
Ala Ile Lys Met Asp Lys Ala Ser Lys Asn Leu Ser Asn Phe Val Asp
            180                 185                 190
Leu Thr Arg Glu Gly Gly Phe Thr Pro Ser Thr Arg Pro Arg Asn Ala
        195                 200                 205
Gly Phe Gly Ser Met Asp Ala Asn Gly Tyr Val Asp Pro Val Lys Ala
    210                 215                 220
Asn Glu Asn Ile Lys Ala Leu Leu Glu Gly Ala Phe Thr Ser Asp Asp
225                 230                 235                 240
Asp Lys Gln Gly Ser Arg Ala Lys Asn Arg Lys Lys Ser Lys Asn Arg
                245                 250                 255
Arg Lys Lys Lys Lys Glu Ala Lys Glu Lys Lys Lys Gln Gly Thr Ser
            260                 265                 270
Glu Ile Asp Asp Leu Ala Ser Gln Leu Glu Glu Val Thr Val Asn Glu
        275                 280                 285
Ser Ser Ala Ala Thr Glu Lys Ser Glu Leu Asp Glu Leu Lys Ala Glu
    290                 295                 300
Gly Asn Val Gly Glu Thr Lys Asp Asp Glu Lys Ser Ser Glu Asp Glu
305                 310                 315                 320
Val Glu Asp Asp Glu Asn Asp Tyr Glu Glu Asp Asp Glu Glu Val Glu
                325                 330                 335
Glu Gly Glu Asp Glu Glu Glu Asp Asp Gly Thr Val Glu Gly Leu Lys
            340                 345                 350
Val Lys Leu Leu Pro His Gln Arg Glu Gly Val Asn Trp Met Cys Asp
        355                 360                 365
Lys Glu Arg Gly Ser Gly Asn Ala Lys Gly Val Leu Pro Lys Gly His
    370                 375                 380
Ser Ser Ser Pro Arg Ala Gly Arg Thr Ala Gln Ala Leu Pro Pro His
385                 390                 395                 400
```

<210> 29090
<211> 83
<212> PRT
<213> A.fumigatus

<400> 29090

```
Ala Gln Ala Val Leu Leu Cys Phe Leu Lys Tyr Ile Leu Leu Ile Asn
1               5                   10                  15
Met Ser Glu Cys Gln Cys Val Thr Glu Gly Leu Leu Tyr Ile Ala Ser
            20                  25                  30
Ala Pro Phe Thr Thr Phe His Lys Ala Gln Pro Val Ser Asn Gln Ser
        35                  40                  45
Asn Ile Gly Leu Thr Ser Gly Leu Asp Ser Leu Leu Gly Ser Leu Leu
    50                  55                  60
Ala Val Glu Thr Glu Gly Trp Thr Gly Pro Phe Ser Ile Arg Ser Arg
65                  70                  75                  80
Pro Asn Asp
```

<210> 29091
<211> 136

<212> PRT
<213> A.fumigatus

<400> 29091
Ala Gln Phe Arg Lys Glu Thr Glu His Met Phe Tyr His Gly Phe Glu
1 5 10 15
Asn Tyr Met Lys Tyr Ala Phe Pro Glu Asp Glu Leu Arg Pro Leu Ser
20 25 30
Cys Arg Pro Leu Val Arg Asp Arg Asp Asn Pro Ser Asn Ala Glu Leu
35 40 45
Asn Asp Val Leu Gly Asn Tyr Ser Leu Thr Leu Ile Asp Ser Leu Ser
50 55 60
Ser Leu Ala Ile Leu Ser Ser Ser Pro Asp Glu Gly Glu Arg Ala Trp
65 70 75 80
Asn His Phe Gln Asp Gly Val Arg Asp Phe Val Lys Leu Tyr Gly Asp
85 90 95
Gly Ser Asp Gly Pro Ala Gly Gln Gly Glu Arg Ala Arg Gly Phe Asp
100 105 110
Leu Asp Ser Lys Val Gln Val Phe Glu Thr Val Ile Arg Gly Leu Gly
115 120 125
Thr Arg Leu Leu Phe Cys Gln Cys
130 135

<210> 29092
<211> 267
<212> PRT
<213> A.fumigatus

<400> 29092
Val Glu Tyr Thr Leu Ser Asn Ser Leu Gln Tyr Ile Ala Leu Ser Asn
1 5 10 15
Leu Gln Ala Ala Asn Phe Gln Val Met Tyr Gln Leu Lys Leu Leu Val
20 25 30
Gly Ser Ile Cys Gly Leu Val Leu Leu Lys Arg Ala Ile Pro Leu Arg
35 40 45
Lys Trp Gly Phe Leu Ile Leu Leu Leu Val Gly Val Tyr Leu Val Gln
50 55 60
Met Pro Asp Gly Ala Thr Asp Glu Ile Ser Leu Asp His Glu Ala Val
65 70 75 80
His His Ser Phe Pro Arg Ser Phe Ala Glu Trp Lys Ala Val Ile Gly
85 90 95
Lys Arg Ala Asn Leu His Lys Arg Ser Ala Thr Tyr Glu Gly Ile Glu
100 105 110
Glu Asp Leu Leu Thr Ala Met Pro Arg Leu Asn Ser Thr Val Gly Leu
115 120 125
Leu Ala Thr Ile Gly Ala Cys Val Ala Ser Gly Leu Ala Gly Val Tyr
130 135 140
Phe Glu Lys Val Leu Lys Asp Ser Val Asn Ser Thr Ser Leu Trp Val
145 150 155 160
Arg Asn Val Gln Leu Ser Val Tyr Ser Leu Phe Pro Ala Leu Phe Ile
165 170 175
Gly Val Val Phe Leu Asp Gly Glu Lys Val Ala Ala Asn Gly Phe Phe
180 185 190
Glu Gly Tyr Asn Trp Val Val Trp Ser Thr Ile Met Val Gln Ala Ile
195 200 205
Gly Gly Ile Thr Thr Ser Phe Cys Ile Ser His Ala Tyr Lys Asp Ala

```
    210                 215                 220
Arg Asn Val Ala Thr Ala Ile Ser Ile Val Leu Ser Thr Leu Gly Ser
225                 230                 235                 240
Met Trp Leu Phe Gly Phe Glu Leu Thr Gly Asn Val Cys Ile Ser Leu
                245                 250                 255
Asn His Glu Leu Leu His Met Val Thr Asp Val
            260                 265
```

<210> 29093
<211> 68
<212> PRT
<213> A.fumigatus

<400> 29093

```
Ser Ile Val Pro Ile Tyr Ile Ile Asp Ile Leu Arg Asn Ile Tyr Ile
1               5                   10                  15
Gly Thr Ser Tyr Ser Tyr Ile Ser Tyr Ser Thr Ala Leu Val Ala Phe
            20                  25                  30
Phe Leu Ile Pro Phe Leu Thr Tyr Ser Ser Ile Tyr Ser Ser Ile Ile
        35                  40                  45
Asp Thr Ser Asn Asn Ile Leu Arg Arg Ser Tyr Ser Val Leu Tyr Ile
    50                  55                  60
Ile Ser Ile Thr
65
```

<210> 29094
<211> 92
<212> PRT
<213> A.fumigatus

<400> 29094

```
Leu Asn Gln Ala Phe Glu Lys Leu Asp Gln Glu Lys Asn Asn Thr Pro
1               5                   10                  15
Glu Lys Ala Ser Pro Ser His Gly Ala Thr Val Lys Glu Ala Thr Pro
            20                  25                  30
Thr Ser Gln Pro Ile Pro Ser Gly Thr Arg Thr Thr Val Gln Thr Pro
        35                  40                  45
Ala Ser Ala Ser Ser Ser Thr Ala Ala Ala Pro Lys Lys Lys Gln Ser
    50                  55                  60
Ser Thr Asn Met Leu Ser His Ile Pro Ile Ile Gly Gly Val Leu Gly
65                  70                  75                  80
Gly Gly Glu Gly Leu Gly Ser Leu Leu Pro Ser Arg
                85                  90
```

<210> 29095
<211> 101
<212> PRT
<213> A.fumigatus

<400> 29095

```
Ser Glu Tyr His His Phe Ser Ser Lys Met Ala Arg Phe Asn Leu Ser
1               5                   10                  15
Phe Leu Ala Leu Cys Phe Phe Leu Ala Leu Val Val Ser Ala Leu Pro
            20                  25                  30
Ala Lys Pro Gly Asp Asp Asp Leu Asp Ala Gly Asp Ala Val Ala Ala
        35                  40                  45
```

```
Ala Leu Ser Ala Leu Lys Val Arg Ile Ser Ala Pro Asn Ile Ile Leu
    50                  55                  60
Cys Lys Leu Phe Lys Ser Asp Ala Gln Thr Asn Ser Ile Arg Pro Leu
65                  70                  75                  80
Arg Ser Trp Thr Arg Arg Arg Thr Thr Pro Gln Lys Arg Pro Arg Leu
                85                  90                  95
Leu Met Glu Pro Leu
            100
```

<210> 29096
<211> 60
<212> PRT
<213> A.fumigatus

<400> 29096

```
Asp Thr Gly Thr Ser Ser Gln Glu Glu Tyr Thr Pro Arg Ser Arg Leu
1               5                   10                  15
Gln Lys Trp Phe Tyr Glu Thr Thr Gln Asn Gly Met Val Gly Tyr Ala
            20                  25                  30
Tyr Ile Ser Thr Cys Glu Pro Ala Tyr Phe Gly Ala Thr Gly Ser Ile
        35                  40                  45
Cys Gly Gln Pro Lys Gln Asp Glu Asp Lys Lys Gly
    50                  55                  60
```

<210> 29097
<211> 264
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (56)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29097

```
Ser His Tyr Arg Cys Val Leu Val Asn Gln Leu Phe Ser Leu Lys Ser
1               5                   10                  15
Leu Pro Trp Ile Ala Phe Ser Asn Lys Leu Gly Tyr Leu Ser Glu Gly
            20                  25                  30
Lys Asp Thr Asp Gly Ile Leu Ser Ile Leu Gln Ser Lys Phe Met Phe
        35                  40                  45
Ala Cys Tyr Ile Ser Thr Thr Xaa Ile Val Gly Trp Leu Val Asn Phe
    50                  55                  60
Val Ala Gly Phe Ile Gly Pro Arg Leu Asp Ser Ile Phe Pro Lys Ala
65                  70                  75                  80
Ala Gln Glu Leu Gln Ser Arg Arg His Asn Glu Lys Ala Ser His Arg
                85                  90                  95
Asp Phe Leu Ala His Phe Met Asp Ala Ser Gln Lys Asn Pro Glu Thr
            100                 105                 110
Leu Glu Glu Arg Gly Val Leu Gly Ala Thr Ile Ser Thr Ile Phe Ala
        115                 120                 125
Gly Thr Asp Thr Thr Gly Thr Ser Leu Thr Phe Phe Met Tyr Tyr Leu
    130                 135                 140
Ile Lys His Pro Ala Ala Leu Ala Arg Leu Arg Glu Glu Leu Asp Ser
145                 150                 155                 160
Ala Val Arg Ser Gly Asn Leu Ser Tyr Pro Pro Lys Trp Ala Glu Val
```

```
                165                 170                 175
Ser Thr Leu Lys Tyr Leu Gln Ala Val Phe Lys Glu Thr Leu Arg Leu
            180                 185                 190
His Ser Thr Ala Arg Met Ser Leu Tyr Arg Val Val Gly Pro Glu Gly
        195                 200                 205
Leu Asp Leu Cys Gly Glu Arg Leu Pro Ser Gly Thr Asn Leu Gly Cys
    210                 215                 220
Phe Gly Tyr Thr Ala His Arg Asn Glu Pro Ile Tyr Gly Arg Asp Ala
225                 230                 235                 240
Ala Leu Phe Arg Pro Glu Arg Trp Ile Glu Ala Ser Asn Asp Ala Leu
                245                 250                 255
Leu Ser Met Glu Arg Ala Ser Leu
            260
```

<210> 29098
<211> 80
<212> PRT
<213> A.fumigatus

<400> 29098

```
Val Leu Asn Glu Asn Thr Glu Pro Ala Thr Ala Ala Arg Trp Asn Phe
1               5                   10                  15
Ile Asn Phe Gln Thr Pro Ser Tyr Ser Ala Val Met Met Glu Tyr Thr
            20                  25                  30
Thr Pro Pro Ser Tyr Gly Ser Thr Val Val Asn Val Arg Gly Ile Val
        35                  40                  45
Lys Asp Asp Glu Ile Ile Tyr Ala Gly Ala Thr Asn Ser Ala Thr His
    50                  55                  60
Thr Ala Ser Gly His Asp Ala Asp Ser His Trp Pro Ala Pro Thr Ser
65                  70                  75                  80
```

<210> 29099
<211> 86
<212> PRT
<213> A.fumigatus

<400> 29099

```
Cys Ile Val Ser Thr Val Leu Ile Asp His Ala Leu Ile Ser Leu Ala
1               5                   10                  15
Ser Val Ala Gly Thr Gln Glu Pro Ile Tyr Gly Pro Glu Ala Ile Gln
            20                  25                  30
Ser Val Ala Gln Gln Ala Gln Gln Thr Pro Tyr Thr Glu Leu Thr Lys
        35                  40                  45
Asp Asp Leu Arg Trp Arg Ala Tyr Gln Tyr Thr Asn Val Glu Thr Glu
    50                  55                  60
Thr Phe Tyr Val Met Ala Asp Asn Gly Thr Val Val Met Val Gln Val
65                  70                  75                  80
Ile Tyr Ser Asn Ile Ala
                85
```

<210> 29100
<211> 155
<212> PRT
<213> A.fumigatus

<400> 29100

```
His Leu Cys Arg Gly Ile His Thr Thr Ala Gln Phe Asn Ser Lys Ile
1               5                  10                  15
Phe Asn Leu Lys Gly Asp Gln Pro His Ile Trp His Ser Asp Pro Leu
            20                  25                  30
Tyr Asn Phe Met Phe Asp Glu Asn Met Leu Ser Phe Gly Ala Asp Asn
        35                  40                  45
Leu Ala Leu Thr Leu Asn Glu Glu Gly Thr Ala Tyr Thr Ile Lys Ser
    50                  55                  60
Ala Val Asn Glu Asp Ser Leu Val Asn Leu Thr Phe Thr Arg Thr Ala
65                  70                  75                  80
Pro Gly Phe Val Val Gly Lys Asp Gly Thr Ser Tyr Phe Gly Thr Asp
                85                  90                  95
Pro Ala Asn Pro Trp Gly Ser Met Met His Ala Phe Trp Pro Arg Cys
            100                 105                 110
Arg Val Glu Gly Thr Ile Thr Thr Lys Glu Lys Thr Tyr Asp Leu Thr
        115                 120                 125
Gly Arg Gly Met Phe Ile His Ala Ile Gln Gly Met Lys Pro His His
    130                 135                 140
Ala Gly Gly Phe Pro Ser Pro Ser Ile Lys Cys
145                 150                 155
```

<210> 29101
<211> 93
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (20),(65),(66),(76)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29101

```
Glu Phe Asn Ala Arg Thr Ala His Ile Asn Pro Gly Val Pro Ile Pro
1               5                  10                  15
Ala Arg Val Xaa Val Arg Pro Asp Arg Ser Phe Thr Phe Asp Ile Arg
            20                  25                  30
Thr Pro Thr Thr Thr Tyr Leu Leu Leu Gln Ala Ala Asn Val Glu Pro
        35                  40                  45
Arg Lys Asn Arg Ile Arg Gly Ser His Glu Asn Arg Pro Arg Asp His
    50                  55                  60
Xaa Xaa Lys Cys Pro Leu Lys His Val Val Pro Xaa Ser Pro Lys Ile
65                  70                  75                  80
Gln Pro Phe Arg Glu Arg Asp Tyr Arg Gly Val Glu Phe
                85                  90
```

<210> 29102
<211> 178
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (129),(174),(175)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29102

```
Ile Arg Thr Lys Leu Gly Pro Gln Ile Val Gly Arg Ser Leu His Leu
1               5                  10                  15
Cys Ile Gln Thr Tyr His Ile Phe Val Ser Leu Gln Thr His Leu Thr
            20                  25                  30
Met Ala Lys Lys Ala Leu Ala Lys Asp Gln Ile Val Lys Leu Ile Val
        35                  40                  45
Gly Ala Gly Gln Ala Ser Pro Ser Pro Pro Val Gly Pro Ala Leu Gly
    50                  55                  60
Ser Lys Gly Val Lys Ser Met Asp Phe Cys Lys Val Arg Ser Ser Leu
65                  70                  75                  80
Gln His Leu Phe Ser Ala Leu Arg Arg Ile Trp Thr Glu Arg Leu Ser
                85                  90                  95
Ser Ile Ile Leu Leu Asn His Tyr Ala Pro Gln Tyr Arg Ser Ser Met
            100                 105                 110
Pro Glu Pro Arg Thr Ser Thr Pro Glu Ser Pro Phe Pro His Glu Ser
        115                 120                 125
Xaa Phe Val Leu Thr Asp Pro Leu Leu Ser Ile Phe Glu Pro Pro Arg
    130                 135                 140
Arg His Ile Ser Ser Cys Arg Leu Arg Thr Trp Ser Leu Ala Arg Thr
145                 150                 155                 160
Ala Ser Gly Gly Ala Met Arg Thr Gly His Glu Ile Ile Xaa Xaa Ser
                165                 170                 175
Val Pro
```

<210> 29103
<211> 85
<212> PRT
<213> A.fumigatus

<400> 29103

```
Arg Val Val Phe Leu Val Tyr His Met Ala Asp Ala Ile Gln Glu Ser
1               5                  10                  15
Pro Lys Ser Tyr Leu Ser Lys Glu Ile Pro Gln Phe Leu Ala Ala Tyr
            20                  25                  30
Arg Ala Leu His Gln Ala Ala Leu Thr Ile Phe Ile Val Ser Phe Ile
        35                  40                  45
Ile Phe Phe Val Leu Leu Leu Leu Glu Ala Thr Gly Lys Val Asp Asn
    50                  55                  60
Phe Phe Glu Val His Asn Ala Arg Val Arg Gln Ile Gln Leu Cys Gln
65                  70                  75                  80
Gln Val Ala Leu Ile
                85
```

<210> 29104
<211> 64
<212> PRT
<213> A.fumigatus

<400> 29104

```
Trp Cys Ser Ser Leu Thr Val Phe Tyr Cys Leu Phe Thr Ile His Cys
1               5                  10                  15
Leu Ser Pro Pro Ala Arg Ala Ile Leu Thr Pro Leu Pro Ser Asp Val
            20                  25                  30
Leu Leu Ser Thr Leu Lys His Leu Ser His Ile Lys Phe Ser Leu Glu
        35                  40                  45
```

```
Phe Gln Met Glu Leu Ser Leu Pro Phe Pro Ala Glu Val Thr Asn Ala
    50                  55                  60

<210> 29105
<211> 71
<212> PRT
<213> A.fumigatus

<400> 29105
Thr Arg Ser Ile Ser Asn His Tyr His Leu Val Leu Leu Val His His
1               5                   10                  15
Ala Ala Ile Glu Gly Asn Phe Thr Gly His Trp Asn Arg Thr Ser Asn
            20                  25                  30
His Ile Gln Thr Ser Tyr Val Arg Lys Pro Ala Ser Ser Leu Thr Glu
        35                  40                  45
Arg Leu Pro Leu His Gln Tyr Ile Asn Met Ser Leu Ser Tyr Thr Tyr
    50                  55                  60
Ile Pro Lys Ser Ala Thr Met
65                  70

<210> 29106
<211> 67
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (50),(62),(65)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29106
Arg Gly Gly Glu Gly Phe Met Lys Ile Ser Gly Arg Ser Ala Gly Asp
1               5                   10                  15
Leu Ala Ile Asn Thr Gly Leu Arg Val Met Gln Ala Lys Ala Thr Pro
            20                  25                  30
Arg His Pro Arg Ser Ser Gln Phe Tyr Leu Tyr His Glu Gly Arg Thr
        35                  40                  45
Thr Xaa Thr Lys Ser Tyr Asn Arg His Gly Trp Ile Gly Xaa Val Thr
    50                  55                  60
Xaa Gly Ser
65

<210> 29107
<211> 82
<212> PRT
<213> A.fumigatus

<400> 29107
Phe Asp Pro Ser Ala Cys Ala Arg Glu Gly Pro Ala Asp Phe Asp Ile
1               5                   10                  15
Tyr Asn Met Glu Thr Ile Ser Arg Ile Ser Ser Met Leu Glu Thr Gly
            20                  25                  30
Asn Ile Leu Ser Asp Val Ile Phe Arg Pro Pro Leu Leu Ile Val Val
        35                  40                  45
Trp Asn Ser Ser Arg Thr Asn His Gly Gly Ser Ser Val Gly Ser Phe
    50                  55                  60
```

```
Tyr Glu Arg Val Glu Tyr Arg Leu Cys Val Ala Gln Ser Gln Tyr Phe
65                  70                  75                  80
Ser His


<210> 29108
<211> 263
<212> PRT
<213> A.fumigatus

<400> 29108
Leu Met Tyr Ser Ser Glu Pro Ser Leu Pro Phe Phe Ser Tyr Val Val
1               5                  10                  15
Lys Asn Val Ala Asn Thr Asn Ile Glu Val Lys Lys Leu Val Tyr Ile
            20                  25                  30
Tyr Leu Val His His Ala Glu Thr Glu Pro Asp Leu Ala Leu Leu Ser
        35                  40                  45
Ile Asn Thr Ile Gln Lys Ser Leu Thr Asp Gln Asn Pro Gln Val Arg
    50                  55                  60
Ala Met Ala Leu Arg Thr Met Ser Gly Ile Arg Val Pro Val Ile Ser
65                  70                  75                  80
Gln Ile Val Ser Leu Ala Ile Lys Arg Gly Cys Gly Asp Met Ser Pro
                85                  90                  95
His Val Arg Lys Ala Ala Ala Leu Ala Ile Pro Lys Cys Tyr Arg Leu
            100                 105                 110
Asp Pro Asn Thr Leu Pro Gln Leu Val Gly Tyr Leu Ser Thr Leu Leu
        115                 120                 125
Gly Asp Thr Gln Tyr Phe Val Ala Gly Pro Ala Val Ala Ala Phe Leu
    130                 135                 140
Glu Ile Cys Pro Asp Arg Ile Asp Leu Ile His Lys His Tyr Arg Ser
145                 150                 155                 160
Leu Val Lys Lys Leu Val Asp Met Asp Glu Trp Gly Gln Leu Ala Thr
                165                 170                 175
Leu Arg Leu Leu Thr Phe Tyr Ala Arg Lys Cys Phe Pro Arg Lys Thr
            180                 185                 190
Gln Lys Met Lys Ser Ala Val Ser Arg Gly Phe Tyr Asp Asp Glu Gln
        195                 200                 205
Gly Gly Glu Thr Gln Gly Asp Gly Glu Glu Tyr Glu Met Pro Val Ile
    210                 215                 220
Asp Pro Asp Leu Glu Leu Leu Phe Arg Ser Cys Arg Leu Leu Leu His
225                 230                 235                 240
Asn Arg Asn Ser Ala Val Ile Val Ser Val Val Arg Cys Leu His Gln
                245                 250                 255
Arg Gly Arg Arg Thr Ser Val
            260


<210> 29109
<211> 321
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (128),(167)
<223> Identity of amino acid sequences at the above locations are unknown.
```

<400> 29109
Asn Glu Lys Gly Arg Val Glu Trp Tyr Arg Thr Leu His Pro Gln Arg
1 5 10 15
Arg Lys Lys Arg Met Lys Ala Ser Ala Lys Ile Glu Leu Lys Arg Gly
20 25 30
Cys Phe Leu Leu Pro Ser Glu Ile Phe Leu Pro Glu Ala Gln Lys Ile
35 40 45
Ser Arg Thr Asp Arg Glu Arg Val Ile Ile Arg Glu Val Leu Phe Arg
50 55 60
Arg Glu Ile Phe Tyr Cys Gly Ile Gly Tyr Gly Gly Phe Pro Thr Gln
65 70 75 80
Glu Asn Lys Gln Phe Phe Lys Gly Glu Arg Val Ser Thr Leu Val Phe
85 90 95
Trp Thr Leu Asn Ser Gly Trp Lys Arg Lys Val Phe Leu Glu Gly Ser
100 105 110
Met Arg Glu Ser Ser Glu Arg Leu Lys Met Asp Val Ile Gly Leu Xaa
115 120 125
Glu Ser Asp Thr Gln Arg Ile Ile Met Gly Asn Arg Asp Ile Ser Gln
130 135 140
Val Leu Ala Glu Glu Leu Gly Met Tyr Ala Asp Phe Gly Pro Val Pro
145 150 155 160
Asn Lys His Thr Trp Gly Xaa Val Ile Leu Ser Lys Phe Pro Ile Val
165 170 175
Asn Ser Thr His His Leu Leu Pro Ser Pro Val Gly Glu Leu Ala Pro
180 185 190
Ala Ile His Ala Thr Leu Asp Met Tyr Gly Glu Leu Val Asp Val Val
195 200 205
Val Phe His Ser Gly Gln Glu Glu Asp Pro Glu Asp Arg Arg Leu Gln
210 215 220
Ser Gln Tyr Leu Ala Lys Leu Met Gly Glu Ser Pro Arg Pro Met Val
225 230 235 240
Leu Leu Ser Tyr Leu Val Thr Lys Pro Leu Glu Gly Asn Tyr Asn Thr
245 250 255
Tyr Val Ser Glu Leu Ser Gly Met Lys Asp Ile Asp Pro Thr Asp Trp
260 265 270
Asp Arg Trp Cys Glu Tyr Ile Leu Tyr Lys Arg Leu Lys Arg Thr Gly
275 280 285
Tyr Ala Arg Ile Ser Arg Asp Ser Ile Thr Asp Thr Glu Ile Gln Val
290 295 300
Ser Ile Tyr Asp Asn Ser Pro Ser Gly Tyr Val Tyr Ala Asp Leu Leu
305 310 315 320
Asn

<210> 29110
<211> 117
<212> PRT
<213> A.fumigatus

<400> 29110
Lys Ile Ser Leu Arg Lys Arg Thr Ser Leu Ile Ile Thr Leu Ser Leu
1 5 10 15
Ser Val Arg Asp Ile Phe Cys Ala Ser Gly Lys Asn Ile Ser Asp Gly
20 25 30
Ser Lys Lys His Pro Leu Phe Ser Ser Ile Phe Ala Asp Ala Phe Ile
35 40 45

```
Leu Phe Phe Leu Leu Cys Gly Trp Ser Val Arg Tyr His Ser Thr Leu
    50                  55                  60
Pro Phe Ser Phe Tyr Lys His Ser Leu Phe Leu Ser Ala Pro Pro Phe
65                  70                  75                  80
Leu Phe Phe Ala Trp His Thr Ser Ile Phe His Val Ala Val Pro Ala
                85                  90                  95
Thr Ser Thr Tyr Ile Ser Pro Ile Pro Met Ser His Arg Leu Ser Ser
            100                 105                 110
Leu Thr Leu Tyr Tyr
        115
```

<210> 29111
<211> 96
<212> PRT
<213> A.fumigatus

<400> 29111

```
Arg Tyr Tyr Gly Pro Phe Leu Ser Gln Ser Lys Leu Ser Val Ala Asn
1               5                   10                  15
Leu Met Ile Ile Ala Phe Pro Phe Ser Thr Tyr Leu Ser Ile Ile Asp
            20                  25                  30
Lys Lys Thr Ser Leu Pro Val Arg Ser Val Phe Thr Thr Ser Gly Phe
        35                  40                  45
Leu Val Leu Leu Gly Leu Ile Asn Ile Gly Ser Thr Thr Ala Phe Asn
    50                  55                  60
Ala Ile Leu Ser Leu Ala Val Leu Gly Leu His Met Ser Tyr Leu Ile
65                  70                  75                  80
Pro Thr Gly Phe Met Leu Trp Arg Arg His Cys His Gln Gly Asp Val
                85                  90                  95
```

<210> 29112
<211> 136
<212> PRT
<213> A.fumigatus

<400> 29112

```
Phe Lys Ile Ala Leu Leu Pro Gly Thr Phe Gly Trp Val Ala Phe Thr
1               5                   10                  15
Ala Ser Ala Pro Phe Leu Ala Ala Thr Met Ile Gln Gly Leu Val Val
            20                  25                  30
Leu Asn Tyr Glu Glu Tyr Gln Ala Lys Arg Trp His Gly Thr Leu Ile
        35                  40                  45
Tyr Trp Ala Leu Leu Ala Ile Ser Ala Val Val Asn Ile Trp Gly Ala
    50                  55                  60
Arg Leu Ile Ser Leu Ile Glu Asn Ala Ser Ser Leu Ile His Leu Ala
65                  70                  75                  80
Ala Phe Ile Ala Glu Phe Val Val Ile Trp Val Cys Ala Pro Thr Lys
                85                  90                  95
His Ser Ala Ser Phe Val Phe Thr Leu Phe Arg Asn Glu Ser Gly Trp
            100                 105                 110
Ser Ser Asn Gly Val Ala Trp Ser Ile Gly Met Leu Ser Ser Cys Tyr
        115                 120                 125
Val Leu Ala Gly Glu Tyr Ser Ser
    130                 135
```

<210> 29113

<211> 120
<212> PRT
<213> A.fumigatus

<400> 29113
Gly Tyr Asp Gly Ala Ile His Leu Ser Glu Glu Met Thr Asn Ala Glu
1 5 10 15
Val Ala Val Pro Trp Cys Met Leu Gly Ser Leu Ala Ile Asn Gly Met
20 25 30
Leu Gly Phe Ala Phe Leu Leu Thr Val Leu Phe Cys Met Gly Asp Phe
35 40 45
Glu Ala Ala Leu Asn Thr Ala Thr Gly Phe Pro Ile Ile Gln Ile Phe
50 55 60
Tyr Asn Ile Thr Gly Ser Ala Ala Gly Ser Ala Ala Met Thr Ser Met
65 70 75 80
Leu Ile Ile Met Ala Gly Leu Ala Thr Ile Pro Leu Thr Ala Ser Thr
85 90 95
Ala Arg Met Leu Trp Ser Leu Thr Arg Asp Arg Gly Ile Met Val Leu
100 105 110
Phe Cys Leu Arg Ala Ser Ser Leu
115 120

<210> 29114
<211> 99
<212> PRT
<213> A.fumigatus

<400> 29114
Thr Ile Gly His Asp Glu Tyr Gly Ser Thr Ile Ala Ile His Ser Leu
1 5 10 15
Ala Val Leu Pro Glu Tyr Gln Gly Lys Gln Val Gly Ser Thr Leu Met
20 25 30
Lys Ser Tyr Ile Gln Arg Ile Arg Glu Ala Ala Ile Ala Glu Arg Ile
35 40 45
Ser Ile Ile Ala His Asp His Leu Val Pro Phe Tyr Gln Ser Phe Gly
50 55 60
Phe Glu Asn Arg Gly Pro Ser Lys Cys Gln Phe Gly Gly Gly Gly Trp
65 70 75 80
Thr Asp Leu Val Ser Ser Phe Leu Thr Asp Tyr Lys Val Tyr Gly Leu
85 90 95
Leu Gly Leu

<210> 29115
<211> 113
<212> PRT
<213> A.fumigatus

<400> 29115
Ile Pro Pro Val Pro Thr Asn Gln Glu Phe Leu Asp Ile Val Leu Ser
1 5 10 15
Arg Thr Gln Arg Gln Leu Pro Thr Gln Ile Arg Ala Gly Phe Lys Ile
20 25 30
Ser Arg Ile Arg Gly Met Ala Asp Ala Ala Glu Phe Cys Val Asp Leu
35 40 45
Arg Thr Asp Thr Met Ser Val Gln Phe Pro Ala Leu Leu Arg Arg Ala

```
    50                  55                  60
Val Thr Leu Thr Lys Ile Leu Cys Ala Thr Thr Gly Phe Tyr Thr Arg
65                  70                  75                  80
Lys Val Lys Tyr Thr Gln Glu Thr Phe Cys Glu Lys Phe Gln Ala Ile
                85                  90                  95
Leu Asp Gly Phe Pro Arg Leu Gln Asp Ile His Pro Phe Arg Met Leu
            100                 105                 110
Phe
```

<210> 29116
<211> 137
<212> PRT
<213> A.fumigatus

<400> 29116

```
His Pro Ser Asp Lys Asp Leu Met Asn Thr Leu Tyr Asp Ala Asp His
1               5                   10                  15
Phe Arg Ile Ala Leu Gly Gln Val Ser Thr Ala Lys His Leu Ile Glu
            20                  25                  30
Thr Val Ser Arg Asp Tyr Val Arg Leu Ile Lys Tyr Ala Gln Ser Leu
        35                  40                  45
Phe Gln Cys Lys Gln Leu Lys Arg Ala Ala Leu Gly Arg Met Ala Thr
    50                  55                  60
Ile Cys Arg Arg Leu Lys Asp Pro Leu Val Tyr Leu Glu Gln Val Arg
65                  70                  75                  80
Gln His Leu Gly Arg Leu Pro Ser Ile Asp Pro Asn Thr Arg Thr Leu
                85                  90                  95
Leu Ile Cys Gly Tyr Pro Asn Val Gly Lys Ser Ser Phe Leu Arg Ser
            100                 105                 110
Ile Thr Arg Ala Asp Val Asp Val Gln Pro Tyr Ala Phe Thr Thr Lys
        115                 120                 125
Ser Leu Phe Val Gly His Phe Glu Ser
    130                 135
```

<210> 29117
<211> 263
<212> PRT
<213> A.fumigatus

<400> 29117

```
Leu Leu Gly His Gly Leu Asn Ser Asn Gln Phe His Val Arg Cys Ala
1               5                   10                  15
Asp Val Cys Val Arg Met Phe Ser Ala Phe Leu Val Ser Gly Arg Tyr
            20                  25                  30
Ser Phe Asp His Ser Leu Tyr Phe Ile Tyr Ile Gly Val Ile Arg Leu
        35                  40                  45
Leu Ala Thr Tyr Leu Tyr Ala Ala Leu Phe Thr Tyr Val Ala Tyr His
    50                  55                  60
Leu Thr Arg Asn Ile Arg Arg Asn Tyr Leu Arg Ala Ala Phe Ser Gln
65                  70                  75                  80
Glu Ile Ser Tyr Tyr Asp Gln Gly Thr Ser Gly Ser Ile Ser Gln Gln
                85                  90                  95
Ala Thr Thr Asn Gly Asn Leu Ile Gln Ser Gly Ile Ala Glu Lys Leu
            100                 105                 110
Gly Ile Val Ile Gln Ala Val Ser Thr Phe Val Ala Ala Leu Val Ile
```

```
        115                 120                 125
Ala Phe Val Thr Gln Trp Lys Leu Thr Leu Ile Leu Ile Phe Met Val
    130                 135                 140
Pro Thr Leu Leu Ile Val Leu Gly Thr Ala Gly Gly Ile Asp Ala Met
145                 150                 155                 160
Ile Glu Thr Lys Ile Leu Gln Ile His Ala Gln Ala Gly Ser Tyr Ala
                165                 170                 175
Glu Ser Val Leu Gly Gly Val Arg Thr Val Gln Ala Phe Ser Leu Arg
            180                 185                 190
Pro Arg Val Ile Ala Lys Phe Asp Ser Tyr Leu Gln Glu Ala Tyr Ser
        195                 200                 205
Gln Gly Met Arg Lys Asn Lys Leu Tyr Gly Ile Val Phe Gly Gly Gln
    210                 215                 220
Tyr Phe Val Val His Ala Gly Met Gly Leu Ala Phe Trp Gln Gly Ile
225                 230                 235                 240
Ala Met Leu Asp Arg Gly Glu Ile Pro Asp Leu Arg Thr Val Phe Val
                245                 250                 255
Ser Val Ser His Thr Arg Glu
            260
```

<210> 29118
<211> 75
<212> PRT
<213> A.fumigatus

<400> 29118

```
Trp Leu Met Ser Arg Asp Asp Leu Ser Gln Arg Val Phe Thr Phe Gly
1               5                   10                  15
Asp Thr Lys Leu Tyr Leu Leu Glu Cys Ile Ala Phe Ile Ala Ala Ile
            20                  25                  30
Ala Ser Gly Thr Ala Leu Ala Met Val Asn Leu Val Met Gly Gln Phe
        35                  40                  45
Leu Thr Leu Leu Ser Asp Phe Ser Phe Ser Asp Met Asp Ser Thr Pro
    50                  55                  60
Thr Asn Phe Met Ser Ala Val Arg Thr Ser Ala
65                  70                  75
```

<210> 29119
<211> 174
<212> PRT
<213> A.fumigatus

<400> 29119

```
Ser Ser Ser Ser Asp Val Leu Asn Tyr Ile Ile Pro Ser Arg Trp Val
1               5                   10                  15
Phe Tyr Leu Ser Thr Met Pro Pro Val Phe Leu Gln Val Cys Leu Pro
            20                  25                  30
Tyr Ser Cys Pro Leu Ser Leu Thr Thr Asn Cys Thr Asp Ala Gly Ile
        35                  40                  45
Trp Lys Ile Ile Lys Gly Trp Ile Asn Pro Asp Met Val Thr Lys Ile
    50                  55                  60
His Phe Thr Lys Ser Val Ala Asp Leu Ala Gln Phe Ile His Pro Ser
65                  70                  75                  80
Gln Ile Val Ser Glu Leu Gly Gly Asp Glu Asp Trp Glu Tyr Glu Tyr
                85                  90                  95
Ser Gln Pro Glu Met Asp Glu Asn Gly Leu Met Glu Asp Asp Glu Ala
```

```
            100                 105                 110
Arg Asn Thr Leu Leu Ser Glu Arg Gln Gln Ile Ser Glu Glu Phe Leu
        115                 120                 125
Ser Leu Thr Ser Gln Trp Ile Glu Ala Thr Arg His Asn Tyr Pro Glu
    130                 135                 140
Glu Val Ala Met Val Gln Ser Arg Arg Phe Asn Val Met Glu Lys Leu
145                 150                 155                 160
Arg Val Asn Tyr Trp Lys Leu Glu Pro Phe Val Arg Ala Arg
                165                 170
```

<210> 29120
<211> 289
<212> PRT
<213> A.fumigatus

<400> 29120

```
Leu Phe Cys Pro Gln Met Val Pro Asp Pro Asn Asn Ile Pro Leu Gly
1               5                   10                  15
Phe Leu Gly Asn Leu Ser Thr Glu Gln Glu Arg Cys Leu Gln Gln Leu
            20                  25                  30
Trp Ser Leu Val Leu Tyr Leu Glu Asn Ala Ala Ser Phe Asn Asp Leu
        35                  40                  45
Glu His Leu Phe Gly Val Asn Ser Val Glu Arg Asn Lys Ser Ile Ser
    50                  55                  60
Ile Ser Ser Phe Ala Arg Arg Asn Ser Leu Leu Thr Arg Thr Asp Ser
65                  70                  75                  80
Ile Leu Leu Arg Arg Ser Ser Thr Ala Ser Phe Pro Ala Pro Ser Asn
                85                  90                  95
Pro Leu Leu Gln Thr Leu Ser Asn Ile Gly Met Thr Ala Ser Glu Ile
            100                 105                 110
Arg Ser Val Ala Lys Ser Leu Thr Tyr Leu Ser Pro Asp Asp Val Arg
        115                 120                 125
Trp Gly Ile Leu Thr Ala Ser Lys Gln Glu Tyr Pro Asp Arg Trp Met
    130                 135                 140
Leu Arg Tyr Leu Arg Phe Cys Lys Trp Asn Val Asn Lys Ala Phe Ile
145                 150                 155                 160
Leu Ile Leu Asn Ala Leu Gln Trp Arg Ile Lys Asp Met His Val Asp
                165                 170                 175
Asp Arg Leu Leu Pro Glu Gly Glu Leu Gly Ala Ile His Gln Ser Gln
            180                 185                 190
Ala Pro Leu Asn Ala Ala Glu Ala Gln Gln Ser Arg Gly Phe Leu Ser
        195                 200                 205
Gln Leu Gln Met Gly Lys Cys Tyr Val His Gly Val Asp Arg Leu Asn
    210                 215                 220
Arg Pro Leu Cys Val Ile Arg Val Arg Leu His Arg Pro Glu Asp Gln
225                 230                 235                 240
Ser Glu Glu Ala Met Asn Arg Tyr Ile Thr His Ile Met Glu Ser Val
                245                 250                 255
Arg Leu Leu Ile Ala Pro Pro Val Glu Thr Ala Val Cys Thr Pro Arg
            260                 265                 270
Arg Arg Arg Arg Trp Ile Ala Leu Leu Thr Pro Ala Val Asp Cys His
        275                 280                 285
Phe
```

<210> 29121

<211> 77
<212> PRT
<213> A.fumigatus

<400> 29121
Thr Val Ile Phe Asp Met Thr Gly Phe Ser Leu Ala Asn Met Val Ser
1 5 10 15
Ser Val Tyr Gly Trp Gly Gly Tyr Leu Leu Met Phe Tyr Ile Gln Asp
20 25 30
Tyr Ala Leu Val Lys Phe Ile Ile Arg Cys Phe Glu Leu Tyr Tyr Pro
35 40 45
Glu Ser Leu Gly Val Leu Leu Ile His Asn Ala Pro Arg Ile Phe Ala
50 55 60
Gly Val Phe Ala Leu Phe Val Ser Ser Val Ala His Tyr
65 70 75

<210> 29122
<211> 72
<212> PRT
<213> A.fumigatus

<400> 29122
Tyr Ser Ser Thr Ala Ala His Ser Thr Ile Ile Phe Ile Lys Lys Leu
1 5 10 15
Gln Asn Leu Ser Cys Ile Val Asn Thr Tyr Thr Ser Phe Arg Asp Leu
20 25 30
Leu Gly Gln Thr Val Asn Pro Leu Trp Ala Asn Leu Asn Leu Gln Ile
35 40 45
Pro Arg Ile Met His Ile Pro Leu Asn Leu Cys Pro Lys Gly Gly Lys
50 55 60
Lys Ile Ile Met Asn Ser Trp Gly
65 70

<210> 29123
<211> 253
<212> PRT
<213> A.fumigatus

<400> 29123
His Tyr Ser Leu Arg Ile Ser Leu Arg Ile Arg Lys Ala Tyr Lys Arg
1 5 10 15
Lys Ala Leu Glu Leu His Pro Asp Lys Asn Tyr Gly Asn Val Glu Ala
20 25 30
Ala Thr Lys Met Phe Ala Glu Ile Gln Thr Ala Tyr Gln Val Leu Ser
35 40 45
Asp Pro Gln Glu Arg Ser Trp Tyr Asp Thr His Lys Asp Ala Phe Leu
50 55 60
Ser Arg Asp Glu Gln Pro Ser Ser Ser Glu Tyr Cys Tyr Asp Ser Arg
65 70 75 80
Met Thr Thr Ser Gly Asp Ile Leu Lys Leu Phe Ser Lys Phe Ser Pro
85 90 95
Arg Met Glu Phe Ser Asp Ser Pro Ser Gly Phe Phe Gly Gly Leu Arg
100 105 110
Glu Ile Phe Ala Arg Leu Ala Leu Glu Glu Glu Met Ala Cys Arg Ala
115 120 125
Asp Met Leu Glu Phe Val Gly Tyr Pro Thr Phe Gly Ser Gln Cys Asp

```
    130                 135                 140
Thr Phe Glu Asp Val Val Arg Pro Phe Tyr Ser Val Trp Ser Ser Phe
145                 150                 155                 160
Ser Thr Lys Lys Ser Phe Ala Trp Lys Asp Ile Tyr Arg Tyr Ser Asp
                165                 170                 175
Ala Pro Asp Arg Arg Val Arg Arg Leu Met Glu Lys Glu Asn Lys Arg
            180                 185                 190
Leu Arg Glu Glu Gly Ile Arg Glu Phe Asn Glu Ala Val Arg Ser Leu
        195                 200                 205
Val Ala Phe Val Lys Lys Lys Asp Pro Arg Tyr Lys Arg Gly Thr Gln
    210                 215                 220
Ser Glu Ala Gln Arg Arg Gly Ala Pro Pro Ser Asn Cys Arg Cys Thr
225                 230                 235                 240
Ser Cys Tyr Ile Lys Asn Ser Lys Ser Ser Lys Ala Ala
                245                 250
```

<210> 29124
<211> 152
<212> PRT
<213> A.fumigatus

<400> 29124

```
Ser Asn Arg Tyr Phe Val Lys Ile Thr Gly Lys Glu Gly Phe His Leu
1               5                   10                  15
Arg Val Arg Val His Pro Phe His Val Ile Arg Ile Asn Lys Met Leu
            20                  25                  30
Ser Cys Ala Gly Ala Asp Arg Leu Gln Thr Gly Met Arg Gly Ala Phe
        35                  40                  45
Gly Lys Pro Gln Gly Thr Val Ala Arg Val Asn Ile Gly Gln Ile Ile
    50                  55                  60
Leu Ser Val Arg Thr Arg Asp Ser Asn Arg Ala Ala Ala Ile Glu Ala
65                  70                  75                  80
Leu Arg Arg Ala Met Tyr Lys Phe Pro Gly Arg Gln Lys Ile Ile Val
                85                  90                  95
Ser Lys Asn Trp Gly Phe Thr Pro Val Arg Arg Glu Asp Tyr Ile Gln
            100                 105                 110
Leu Arg Asn Glu Gly Lys Leu Lys Gln Asp Gly Ala Tyr Val Gln Phe
        115                 120                 125
Leu Arg Gly His Gly Leu Ile Glu Glu Asn Met Lys Arg Phe Pro Ser
    130                 135                 140
Ala Tyr Glu Asn Leu Ser Gln Ala
145                 150
```

<210> 29125
<211> 88
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (10),(19),(23),(24),(25),(30),(31),(37),(45),(48),(69),(88)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29125

```
Pro Leu Pro Leu Ser Pro Gly Phe Asn Xaa Phe Phe Ser Pro Thr Pro
1               5                   10                  15
```

```
Lys Ile Xaa Tyr Val Lys Xaa Xaa Xaa Leu Arg Arg Pro Xaa Xaa Met
            20                  25                  30
Thr Ser Leu Leu Xaa Val Asn Met Val Ser Lys Glu Xaa Glu Gln Xaa
        35                  40                  45
Ser Ser Glu Ala Phe Glu Ala Ala Cys Ile Cys Ala Asn Lys Tyr Val
    50                  55                  60
Asp Pro Pro Ser Xaa Pro His Pro Gln Pro Gln Gln Gln Gln Gln His
65                  70                  75                  80
His His Thr Thr Thr Ser Val Xaa
                85
```

<210> 29126
<211> 175
<212> PRT
<213> A.fumigatus

<400> 29126

```
His Glu Asn Gly Glu Leu Lys Ile Gly Leu Ser Phe Phe Ile Phe Ser
1               5                   10                  15
Leu Thr Leu Leu Gly Asn His Leu Ser Leu Arg Gln Val Leu Val Gly
            20                  25                  30
Ala Arg Glu Ala Leu His Val Leu Leu Asp Gln Thr Val Ala Thr Gln
        35                  40                  45
Glu Leu Asn Val Gly Thr Ile Leu Leu Glu Leu Ala Leu Val Ala Glu
    50                  55                  60
Leu Asp Val Val Leu Ala Thr Asp Gly Gly Glu Ala Pro Val Leu Gly
65                  70                  75                  80
Asp Asp Asp Leu Leu Ala Ala Gly Glu Leu Val His Gly Thr Ala Gln
                85                  90                  95
Ser Leu Asp Gly Gly Gly Ala Val Gly Val Thr Gly Ala Asp Gly Gln
            100                 105                 110
Asp Asp Leu Ala Asp Val His Thr Gly Asn Gly Thr Leu Gly Leu Thr
        115                 120                 125
Glu Gly Thr Thr His Thr Ser Leu Glu Thr Ile Gly Ser Gly Ala Gly
    130                 135                 140
Gln His Leu Val Asp Thr Asp Asp Val Glu Gly Val His Thr His Thr
145                 150                 155                 160
Gln Val Glu Thr Phe Leu Thr Gly Asp Leu Asp Glu Val Pro Ile
                165                 170                 175
```

<210> 29127
<211> 179
<212> PRT
<213> A.fumigatus

<400> 29127

```
Tyr Thr Leu Cys Pro Pro Met Ala His Cys Ser Val Ser Gly Leu Thr
1               5                   10                  15
Tyr Arg Pro Ser Lys Ile Asp Gly Leu Thr Val Gly Pro Arg Gly Thr
            20                  25                  30
Tyr His Pro Ile Gln Lys Cys Met Val Lys Glu Val Ser Ala Tyr Gly
        35                  40                  45
His Gln Asn Thr Glu Gly Ile Ile Gly Asp Gly Cys Gln Ala Gly Ser
    50                  55                  60
Leu Cys Val Leu Asn Asn Leu Thr Asn Gln Leu Phe Ile Asn Ala Ser
65                  70                  75                  80
```

```
His Ser Val Val Tyr Gln Thr Ile Ser Lys Asp His Thr Phe Ala Pro
                85                  90                  95
Ser Ser Leu Arg His Arg Ala Ser Pro Cys Asn Pro Glu Thr His Leu
            100                 105                 110
Tyr Thr Ser Thr Leu Leu Tyr Phe Thr Leu Leu His Thr Thr Asn Ser
        115                 120                 125
Leu Asn Tyr Arg Pro Thr Ala Asn Ile Tyr Ile Ser Pro Lys Gln Leu
    130                 135                 140
Lys Thr Thr Gln Leu Lys Lys Val Pro Cys Ser Ser Leu Ser Pro Glu
145                 150                 155                 160
Tyr Ala Pro Asn Ala Gln Pro Ala Gln Asp Pro Glu Met Gln Pro Pro
                165                 170                 175
Ser Ser Ala
```

<210> 29128
<211> 141
<212> PRT
<213> A.fumigatus

```
<400> 29128
Thr His Ser Arg Thr Phe Glu Gly Val Val Lys Thr Ile Leu Thr Thr
1               5                   10                  15
Arg Leu Ile Thr Ser Lys Arg Pro His Pro Ser Asn Pro Ser Lys Pro
            20                  25                  30
Ser His Gln Pro Ser Thr His Ser Ser Val His Ser Lys Ser Pro Phe
        35                  40                  45
Gln Ser Pro Pro Thr Ser Lys Asn Asp Pro Glu Pro Gln Ser Pro Pro
    50                  55                  60
Ser Ser Ala Ser Thr Ser Ala Gln Gln Ala Pro Pro His Pro Pro Pro
65                  70                  75                  80
Ser Tyr Val His His Pro Gln Ala Leu Lys Ser His Ser Gln Arg Asn
                85                  90                  95
Ser His Pro Gln Ala His Pro His Asn Gln Thr Pro Leu Lys Pro His
            100                 105                 110
Ala Ser Ser Asp Ala Pro Pro Ala Pro Thr Ser Ala Thr Ser Tyr Pro
        115                 120                 125
Gly Pro Gln Asp Lys Gln Lys Pro Ser Pro Pro His Pro
    130                 135                 140
```

<210> 29129
<211> 64
<212> PRT
<213> A.fumigatus

```
<400> 29129
Thr Asp Pro Phe Lys Thr Lys Leu Gly Thr Asn Phe Pro Thr Pro Ile
1               5                   10                  15
Thr Cys Arg Gly Phe Pro Ile Ala Cys Asn Phe Asn Ser Phe Phe Ile
            20                  25                  30
Thr Ala Phe Thr Ile Ser Thr Pro Leu Arg Val Pro Tyr Leu Pro Arg
        35                  40                  45
Leu Pro Pro Ile Pro Phe Leu Pro Pro Val Pro Gln Arg Arg Arg Pro
    50                  55                  60
```

<210> 29130

<211> 87
<212> PRT
<213> A.fumigatus

<400> 29130
Thr Ala His Ala Lys Leu Ser Tyr Leu Gly His Tyr Lys Asn Lys Thr
1 5 10 15
Tyr Ser Gln Asn Phe Val His Lys Tyr His Gly Pro Lys Cys Arg Ile
20 25 30
Arg Ser Cys Leu Phe Ile Ile Glu Asp Ser Gly Gln Pro Leu Arg Ile
35 40 45
Met Ile Ile Thr Leu Leu Lys Ala His Gly His Asn Tyr Ser Leu Val
50 55 60
Ser Thr Ser Ala Ser Pro Ile Leu Gln Val Arg Thr Met His Arg Arg
65 70 75 80
Thr Pro Met Gln Ile Leu Val
85

<210> 29131
<211> 752
<212> PRT
<213> A.fumigatus

<400> 29131
Gly Pro Phe Leu Pro Tyr Trp Arg Phe Pro Ala Leu Arg Gly Glu Asp
1 5 10 15
Gly Lys Arg Pro Pro Ser Thr Pro Lys Glu Ala Thr Ile Arg Ser Leu
20 25 30
Tyr Ser Asn Val Leu Asn Leu Pro Ile Asp Leu Ile Gly Met Asp Asp
35 40 45
Thr Phe Leu Arg Leu Gly Gly Asp Ser Leu Gln Ala Ile Arg Leu Val
50 55 60
Ala Ala Ala Arg Ala Ala Gly Leu Ile Leu His Ala Lys Asp Ile Leu
65 70 75 80
Ser Ser Gln Ser Thr Leu Ala Glu Gln Ser Lys Arg Ala Cys Leu Ile
85 90 95
Gln Thr Ile Tyr Arg Thr Trp Glu Ser Ser Pro Pro Phe Ala Leu Leu
100 105 110
His Gly Pro Thr Arg His Ala Ile Val Asp Leu Ala Gln Lys Gln Cys
115 120 125
Arg Val Pro Ser Asn Leu Ile Glu Asp Ile Tyr Pro Cys Thr Ala Leu
130 135 140
Gln Glu Gly Met Phe Ile Thr Ser Leu Lys His Pro Gly Met Tyr Thr
145 150 155 160
Gly Gln Ile Ile Phe Asp Ile Pro Asp Arg Met Glu Leu Pro Arg Leu
165 170 175
Arg Ala Ala Trp Leu Ser Val Val Ser Glu Asn Ala Ala Leu Arg Thr
180 185 190
Arg Val Ile Glu Thr His Glu Gly Leu Met Gln Ala Val Ile Val Asp
195 200 205
Asp Phe Val Trp Glu Glu Glu Thr Asp Glu Met Leu Leu Ser Ser Asp
210 215 220
Gly Glu Ala Leu Glu Ile Thr Lys Ile Gly Val Pro Leu Val Arg Phe
225 230 235 240
Arg Tyr Arg Pro Arg His Arg Gln Leu Met Met Thr Ile His His Ser
245 250 255

```
Ile Trp Asp Gly Trp Ser Leu Arg Leu Val His Glu Gln Leu His Arg
            260                 265                 270
Ala Tyr Ile Gly Arg Asp Leu Leu Pro Ser Thr Ser Tyr Arg Ser Phe
        275                 280                 285
Ile Gln Tyr Thr Gln Glu Leu Gln Gly Ala Asp Glu Phe Trp Ala Ser
    290                 295                 300
Glu Leu Ala Gly Val Asn Ala Pro Ile Phe Pro Thr Leu Pro Ser Gly
305                 310                 315                 320
Asn Tyr Arg Pro Arg Val Asn Ala Ser His Arg His Val Val Arg Asn
                325                 330                 335
Leu Ala Ser Thr Gly Lys Glu Glu His Thr Ala Ala Thr Tyr Ile His
            340                 345                 350
Leu Ala Trp Ser Leu Leu Val Ala His Tyr Thr Asp Ala Asp Glu Thr
        355                 360                 365
Val Tyr Gly Val Thr Val Asn Gly Arg Ser Ala Asp Val Pro Gly Val
    370                 375                 380
Glu Asn Ile Val Gly Pro Thr Ile Ala Thr Val Pro Thr Arg Ile Arg
385                 390                 395                 400
Val Asn Glu Glu Asp Thr Val Glu Met Ala Leu Asp His Val Gln Asp
                405                 410                 415
Ala Leu Ala Arg Met Ile Pro Tyr Glu Gln Ala Gly Leu Gln Arg Ile
            420                 425                 430
Ser Arg Cys Ser Arg Asp Ala Ser Glu Ala Cys Arg Phe Gln Thr Leu
        435                 440                 445
Leu Ile Ile Glu Ala Pro Thr Asp Ser Asp Val Asp Cys Glu Lys Asn
    450                 455                 460
Glu Ala Gly Asn Phe Ser Ile Ile Gly Gly Thr Thr Gln Thr Gly Met
465                 470                 475                 480
Asp Tyr Thr Ala Phe Ser Ser Tyr Ala Met Met Leu Val Phe Arg Thr
                485                 490                 495
Ser Ala Asn Lys Ser Ala Ile Ser Phe Asp Ile Thr Tyr Asp Ala Gln
            500                 505                 510
Val Ile Gly His Asp Glu Val Glu Arg Met Ala His Gln Phe Glu His
        515                 520                 525
Val Leu Arg His Ile Tyr Thr Leu Ala Thr Gly Arg Ile Gly Asp Ile
    530                 535                 540
Ser Phe Ile Gly Pro Arg Asp Ile Glu Gln Val Gln Gln Trp Asn Ser
545                 550                 555                 560
Thr Met Pro Pro Ala Asp Asn Arg Phe Leu Gln Glu Leu Ile Phe Ala
                565                 570                 575
Gln Cys Ser Arg Arg Pro Gln Ala Ser Ala Ile Ile Ser Trp Asp Gly
            580                 585                 590
Ser Trp Thr Tyr Arg Glu Leu Trp Ala His Ser Ser Phe Phe Ala Arg
        595                 600                 605
Gln Leu Gln Arg Tyr Gly Val Thr Arg Gly Thr Pro Val Ala Val Cys
    610                 615                 620
Leu Asp Arg Ser Arg Trp Ser Ile Ala Val Ile Leu Gly Val Leu Leu
625                 630                 635                 640
Ala Arg Gly Thr Cys Val Leu Ile Asp Leu Leu Ala Pro Arg Gln Arg
                645                 650                 655
Val Arg Asp Ile Leu Gln Ile Ala Gly Thr Gly Ile Leu Val His Ser
            660                 665                 670
His Ala Thr Ala Thr Leu Thr Ser Gly Leu Cys Pro Thr Val Val Asn
        675                 680                 685
Val Ser Phe Leu Ala Ala Gln Ser Asp Ser Ser Gln Pro Glu Phe Pro
    690                 695                 700
```

```
Phe Thr Leu Glu Thr Trp Gly Gly Thr Pro Glu Asp Leu Ala Phe Ile
705                 710                 715                 720
Ile Phe Thr Ser Gly Ser Thr Gly His Pro Lys Gly Ile Glu Met Pro
                725                 730                 735
His Arg Leu His Thr Arg Ala Trp Lys Ser Pro Arg Met Arg Ile Lys
            740                 745                 750
```

<210> 29132
<211> 189
<212> PRT
<213> A.fumigatus

<400> 29132

```
Ser Ile Pro Ala Ser Pro Val Met Arg Pro Glu Ile Glu Gln Glu Leu
1               5                   10                  15
Ala His Thr Leu Leu Val Glu Leu Leu Ala Tyr Gln Phe Ala Ser Pro
            20                  25                  30
Val Arg Trp Ile Glu Thr Gln Asp Val Ile Leu Ala Glu Lys Arg Thr
        35                  40                  45
Glu Arg Ile Val Glu Ile Gly Pro Ala Asp Thr Leu Gly Gly Met Ala
    50                  55                  60
Arg Arg Thr Leu Ala Ser Lys Tyr Glu Ala Tyr Asp Ala Ala Thr Ser
65                  70                  75                  80
Val Gln Arg Gln Ile Leu Cys Tyr Asn Lys Asp Ala Lys Glu Ile Tyr
                85                  90                  95
Tyr Asp Val Asp Pro Val Glu Glu Glu Ala Glu Ala Pro Ala Ala Ser
            100                 105                 110
Pro Ala Ala Pro Thr Ala Pro Val Ala Ala Ala Ala Pro Ala Pro Thr
        115                 120                 125
Ala Val Thr Pro Ala Pro Ser Ala Gly Pro Ala Ala Ala Val Asp Asp
    130                 135                 140
Ile Pro Val Thr Ala Val Asp Val Leu Arg Thr Leu Val Ala Gln Lys
145                 150                 155                 160
Leu Lys Lys Gly Leu Ser Asp Val Pro Leu Ser Lys Ala Ile Lys Asp
                165                 170                 175
Leu Val Gly Gly Thr Leu Gln Ser Leu Val Arg Asn Ser
            180                 185
```

<210> 29133
<211> 62
<212> PRT
<213> A.fumigatus

<400> 29133

```
Gln Ile Leu Ser Ile Ile Arg His Lys Cys Ile His Gly Cys Ile Trp
1               5                   10                  15
Gly Asn Ile Asp Tyr Ser Met Lys Thr Arg Tyr Thr Asp Val Lys Cys
            20                  25                  30
Gly Val Arg Leu Ser Asp Ile Ala Gly Gly Ile Tyr Leu Glu Ile Val
        35                  40                  45
Ala Val Ser Cys Gly Ile Ile Cys Thr Asp Gly Leu Ala Met
    50                  55                  60
```

<210> 29134
<211> 62
<212> PRT

<213> A.fumigatus

<400> 29134

```
Val Val Gln Met Leu Thr Asp Phe Arg Gly Lys Ala Trp Phe Ala Pro
1               5                  10                  15
Phe Pro Leu Gln Val Ser Asn Leu Ser Thr Arg Pro Phe Asp Gln Pro
            20                  25                  30
Ser Leu His Phe Phe Asn Leu Val Thr Leu Asn Asn Thr Ser Lys Val
        35                  40                  45
Asn Thr Leu Leu Arg Met Leu Leu Arg Pro Pro Ser Phe Trp
    50                  55                  60
```

<210> 29135
<211> 350
<212> PRT
<213> A.fumigatus

<400> 29135

```
Thr Asn Tyr Arg Thr Asp Thr Gln Leu Val Thr Phe Asp Ile Met Ser
1               5                  10                  15
Ala Leu Ala Phe Gly Arg Asn Phe Lys Ala Ile Ser Arg Gly Ser Ser
            20                  25                  30
Ser Ile Met Lys Trp Ala Gly Leu Ile Met Glu Met Leu Glu Ser Pro
        35                  40                  45
Ala Val Leu Gly Leu Leu Ser Leu Leu Pro Phe Ser Leu Ile Met Arg
    50                  55                  60
Pro Trp Lys Ile Met Tyr Arg Glu Leu Ala Ala Phe Ser Ser Asp Ala
65                  70                  75                  80
Val Glu Met Arg Lys Gln Leu Leu Ala Glu Asp Ser Thr Asp Lys Pro
                85                  90                  95
Leu Asp Leu Leu Gln Ala Phe Ile Asp Ala Glu Glu Pro Glu Ser Lys
            100                 105                 110
Ile Lys Met Ser Pro His Glu Val Gln Ala Glu Ser Ile Met Met Met
        115                 120                 125
Leu Ala Gly Ser Glu Thr Thr Ser Ser Ala Ile Met Trp Thr Phe His
    130                 135                 140
Leu Leu Leu Leu Tyr Pro Glu Thr Leu Arg Arg Ala Val His Glu Val
145                 150                 155                 160
Arg Ser Ala Phe Ser Leu Asn His Leu Val Thr Tyr Lys Asp Val Arg
                165                 170                 175
Ser Ser Leu Pro Tyr Val Glu Ala Cys Val Tyr Glu Ala Leu Arg His
            180                 185                 190
Ser Pro Thr Thr Ala Gly Leu Thr Pro Arg Ile Ser His Ser Thr Gly
        195                 200                 205
Ile Thr Leu Gln Gly Tyr Tyr Ile Pro Pro Gly Thr Glu Ile Tyr Val
    210                 215                 220
Asn Leu Arg Ser Pro Ser Met His Pro Ser Leu Trp Asp Asp Pro Ala
225                 230                 235                 240
Arg Phe Asn Pro Asp Arg Phe Leu Asp Ser Asp Asn Asn Lys Arg Leu
                245                 250                 255
Leu Phe Thr Phe Ser Tyr Gly Pro Arg Asn Cys Leu Gly Arg Asn Leu
            260                 265                 270
Ala Trp Val Glu Met Leu Thr Ile Val Ala Asn Val Leu Lys Asp Tyr
        275                 280                 285
Asp Ile Ala Leu Thr Glu Asp Ser Leu Phe Gly Pro His Cys Thr Asp
    290                 295                 300
```

```
Glu Asn Gly Leu Pro Val Leu Met Pro Ala Lys Cys Phe Ile Ala Ser
305                 310                 315                 320
Phe Pro Ala Lys Pro Glu Arg Asp Cys Arg Met Val Ile Thr Lys Arg
                325                 330                 335
Met Ala Gly Val Lys Ala Cys Ala Arg Glu Tyr Ser Pro Cys
            340                 345                 350
```

<210> 29136
<211> 209
<212> PRT
<213> A.fumigatus

<400> 29136

```
Lys Asp Glu Phe Gly Asn Thr Glu Tyr Leu Gln Ser Cys His Gly Thr
1               5                   10                  15
Asp Cys Ser Val Tyr Lys Val Leu Leu Ile Arg Pro Thr Leu Val Val
            20                  25                  30
Thr Glu Leu Leu Pro Leu Thr Met Ala Thr Asp Ser Ser Met Pro Gly
        35                  40                  45
Thr Val Ile Gly Lys Ala Glu Phe Ser Asp Thr Lys Ala Ala Ser Glu
    50                  55                  60
Phe Gly Thr Asp Leu Ser Arg Trp Arg Leu Asn Val Asp Asn Gly Arg
65                  70                  75                  80
His Met Trp Glu Tyr Leu Glu Ser Glu Asp Glu Ala Arg Lys Arg Pro
                85                  90                  95
Gln Ser Phe Leu Glu Lys Tyr Trp Leu Gly Leu Pro Tyr Glu Leu Pro
            100                 105                 110
Ala Arg Pro Arg Ala Thr Cys Ala Leu Glu Ala Val Glu Asn Gly Trp
        115                 120                 125
Glu Phe Phe Lys Arg Leu Gln Thr Ala Asp Gly His Trp Gly Cys Asn
    130                 135                 140
Asp Asp Gly Pro Leu Phe Val Thr Ser Gly Met Val Ile Ala Arg Tyr
145                 150                 155                 160
Ile Val Gly Ile Pro Ile Asp Ser His Met Lys Gln Glu Met Cys Arg
                165                 170                 175
Tyr Leu Leu Asn Val Val Asn Glu Asp Gly Gly Trp Gly Leu Phe Ile
            180                 185                 190
Gln Ser Pro Ser Thr Val Phe Thr Asp Arg Gly Trp Lys Lys Thr Arg
        195                 200                 205
Trp
```

<210> 29137
<211> 99
<212> PRT
<213> A.fumigatus

<400> 29137

```
Pro Lys Val Gln Met Ala Arg Thr Gln Lys Asn Lys Ala Thr Ala Phe
1               5                   10                  15
His Leu Gly Met Cys Arg Thr Lys Ile Lys Ile His Val Ser Trp Glu
            20                  25                  30
Arg Ile Thr Asp Gly Cys Glu Gly Gln Leu Lys Ala Lys Leu Ala Lys
        35                  40                  45
Leu Lys Arg Glu Leu Leu Thr Pro Ser Gly Gly Gly Gly Gly Gly Gly
    50                  55                  60
```

```
Gly Lys Trp Lys Gly Val Ala Ile Val Phe Tyr Arg Arg Leu Thr Arg
65                  70                  75                  80
Arg Phe Ser Trp Phe Arg Cys Arg Ser Tyr Arg Cys Cys Gln Cys Val
                85                  90                  95
Cys Ile Asp
```

<210> 29138
<211> 67
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (22),(51)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29138

```
Thr Ser Thr Ser Arg Cys Ser Thr Lys Arg Leu Ser Arg Thr Asn Trp
1               5                   10                  15
Lys Gly Val Val Ser Xaa Ser Thr Asn Asn Pro Pro Asn Phe Val Phe
            20                  25                  30
Lys Lys Lys Asp Arg Gly Gly Ile Ala Ile Thr Thr Thr Val Pro Leu
        35                  40                  45
Thr His Xaa Asp His Asp Val Cys Ala Pro Asp Val Trp Leu Ser Gln
    50                  55                  60
Ala Arg Ser
65
```

<210> 29139
<211> 125
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (94),(124)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29139

```
Pro Arg Arg Ala Glu Arg Lys Leu Thr Phe Gly Phe Ala Ala Ala Ala
1               5                   10                  15
Tyr Glu Phe Thr Thr Leu Thr Thr Val Pro Gly Gln Val Leu Tyr Asn
            20                  25                  30
Gly Ala Lys Ile Gln Ile Leu Asp Leu Pro Gly Ile Ile Gln Gly Ala
        35                  40                  45
Lys Asp Gly Lys Gly Arg Gly Arg Gln Val Ile Ala Val Ala Lys Thr
    50                  55                  60
Cys His Leu Ile Phe Ile Val Leu Asp Val Asn Lys Pro Leu Leu Asp
65                  70                  75                  80
Lys Lys Ile Ile Glu Asn Glu Leu Glu Gly Cys Gly Ile Xaa Ile Asn
                85                  90                  95
Lys Gln Pro Ala Gln Leu Cys Phe Gln Lys Lys Arg Gln Arg Trp Tyr
            100                 105                 110
Cys His His Tyr His Arg Pro Pro Asn Thr Tyr Xaa Pro
        115                 120                 125
```

<210> 29140
<211> 91
<212> PRT
<213> A.fumigatus

<400> 29140
Ser Asn Pro Ile Ser Thr Leu Ser Glu Glu Asn Gly Ala Ser Ser Gly
1 5 10 15
Leu His Phe Gly Cys Ile Ala Phe Cys Pro Leu Phe Cys Asp Ile Glu
20 25 30
Leu Val Ala Gln His Ala Gln Asp Ala Ser Val Ser Ile Ser Cys Met
35 40 45
Gly Arg Glu Ser Ser Met Leu Pro Arg Ile Ser Ile Leu Ala Leu His
50 55 60
Leu Gly Leu Leu Ile Asn Lys Leu Cys Gly Asp Leu His Thr Ala Glu
65 70 75 80
Phe Ser Pro Pro Gly Pro Lys Val Lys Arg Lys
85 90

<210> 29141
<211> 89
<212> PRT
<213> A.fumigatus

<400> 29141
Ser Gly Arg Ser Gln Val Asp Pro Leu Gly Thr Ile Asn Phe Ser Gly
1 5 10 15
Ala Val Met Ile Trp Pro Tyr Leu His Val Ala Glu Thr Asn Ala His
20 25 30
Met Tyr Arg Ala Ile Leu Ser Gln Gly Ser His Ala Asn Asn Val Leu
35 40 45
Trp Gln Leu Ile Leu Val Trp Ser Pro Gly Arg Gly Ser Ala Ile His
50 55 60
Asp His Ala Asn Ala His Cys Val Met Lys Val Ser Leu Ala Thr Arg
65 70 75 80
Leu His Pro Arg Ser Gly Arg Asn Cys
85

<210> 29142
<211> 104
<212> PRT
<213> A.fumigatus

<400> 29142
Arg Ile Leu Thr Thr Met Pro Tyr Leu Asp Ser Thr Thr Ser Leu Pro
1 5 10 15
Pro Ser Gln Ser Lys Tyr Pro Asp Asn Ala Phe Glu Asn Leu Val Leu
20 25 30
Asp Leu Ser Ala Ala Leu Gly Pro Ser Ser Gly Leu Asp Ser Asp Asp
35 40 45
Val Asn Pro Leu Asp Ile Gln Arg Leu Met Glu Gln Tyr Val Ser Asn
50 55 60
Pro Glu Glu Trp Arg Pro Phe Ala Leu Gly Asp Asn Ser Arg Gly Tyr
65 70 75 80
Thr Arg Asn Leu Ile Asp Gln Gly Asn Gly Lys Ser Asn Leu Val Gly

```
                85                  90                  95
Arg Arg Ser Ile Pro Ser Val Leu
            100

<210> 29143
<211> 72
<212> PRT
<213> A.fumigatus

<400> 29143
Val Leu Lys Gly Ser Leu Gln Glu Thr Leu Tyr Thr Trp Pro Asp Gln
1               5                  10                  15
Asp Lys Leu Arg Asn Gly Gln Pro Ser Ser Pro Gln Ile Ile Lys Lys
            20                  25                  30
Thr Thr Tyr Thr Glu Asn Gln Val Thr Tyr Met Ser Asp Lys Val Cys
        35                  40                  45
Lys Phe Pro Pro Arg Tyr Phe Thr Gln Ala Tyr Asp Asn Ser Lys Leu
    50                  55                  60
Thr Ile Cys Gln Ala Gly Pro Pro
65                  70

<210> 29144
<211> 248
<212> PRT
<213> A.fumigatus

<400> 29144
Cys Ala His Ala Ile Leu Thr Arg Ala Leu Asp Phe Pro Glu Gln Glu
1               5                  10                  15
Asp Cys Ile Phe Ala Lys Met Asn Gln Ile Ser Lys Tyr Leu Tyr His
            20                  25                  30
Ile Val Leu Thr Ile Ser His Leu Thr Lys Asn Pro Asn Asn Leu Val
        35                  40                  45
Glu Lys Val Arg Val Leu Gly Ser Tyr Thr Thr Leu Pro Ala Ala Lys
    50                  55                  60
Val Ala Ala His Ser Cys Leu Phe Asp Ala Gly Tyr Glu Arg Glu Phe
65                  70                  75                  80
Phe Thr Lys Tyr Glu Val Asp Ser Thr Asp Phe Glu Lys Gln Asp Leu
                85                  90                  95
Val Gln Arg Pro Gly Leu Ala Val Leu Ala Val Ala Ala Asp Gly Thr
            100                 105                 110
Thr Phe Arg Val Arg Ile Asp Thr Thr Pro Asn Asn Met Arg Leu Thr
        115                 120                 125
Thr Glu Leu Glu Asp Gly Arg Ile Ser Ile Pro Leu Tyr Tyr Val Ile
    130                 135                 140
Gln Thr Thr Val Val Tyr Asn Gly Gln Lys Glu Ala Thr Asn Val Arg
145                 150                 155                 160
Asp Leu Asn Ile Glu Gly Thr Phe Lys Thr Tyr Asp Glu Ala Arg Ala
                165                 170                 175
Phe Ala Lys Gln Val Leu Leu Ser Thr Glu Asp Asn Val Thr Lys Asp
            180                 185                 190
Ser Phe Ala Glu Tyr Asp Glu Ala Ala Pro Asp Glu Lys Asp Cys Gly
        195                 200                 205
Tyr Gly Glu Asn Val Ile Val His Ala Ala Ser Asn Tyr Gly Glu Asn
    210                 215                 220
Phe Leu Ile Ser Val Ile Gln Thr Gln Glu Leu Lys Asn Val Ala Leu
```

225 230 235 240
Thr Glu Ala Ala Met Arg Ile Ala
245

<210> 29145
<211> 78
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (66)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29145
Leu Ser Leu Gln Gln Asp Cys Gly Gln Ile Val Ala Ser Lys Phe Phe
1 5 10 15
Pro Val Asp Ala Glu Asp Gly Ser Gly Gln Tyr Pro Leu Cys Glu Thr
20 25 30
Asp Tyr Phe Arg Arg Leu Asp Leu Leu Cys His Glu Cys Gly Gly Ala
35 40 45
Leu Arg Gly Ser Tyr Ile Thr Ala Leu Asp His Lys Tyr His Ile Glu
50 55 60
His Xaa Thr Cys Ser Val Cys Pro Thr Val Phe Gly Ala Gln
65 70 75

<210> 29146
<211> 249
<212> PRT
<213> A.fumigatus

<400> 29146
Arg Tyr Phe Ile Asp Val Leu Leu Lys Ser Ser Arg Gln Gly Leu Gln
1 5 10 15
Lys Arg Val Leu Leu Ala Asp Met Pro Pro Gly Asp Val Pro Leu Pro
20 25 30
Asp Ser Leu Val Pro Gly Asn Gly Ala Val Arg Pro Thr Leu Asn Thr
35 40 45
Ser Gly Gln Gly Gly Ser Phe Gln Lys Gln Thr Pro Thr Ser Pro Ala
50 55 60
Asp Ser Asn Arg Thr Phe Asp Ser Pro Arg Ala Arg Ser Gly Gly Arg
65 70 75 80
Asn Gly Ser Ala Val Thr Ser Pro Val Asp Gly Met Gln Asn Pro Asp
85 90 95
Gly Arg Thr Gly Arg Arg Leu Asp Ser Asn Asn Pro Gly Gln Arg Asp
100 105 110
Pro Ser Thr Pro Arg Asp Arg Ala Gly Tyr Trp Glu Lys Ser Ala Gln
115 120 125
Arg Asp Arg Pro Ser Gln Ser Gly Arg Leu Pro Thr Lys Ser Pro Gly
130 135 140
Ser Ser Arg Ile Cys Lys Lys Cys Gly Glu Pro Leu Thr Gly Gln Phe
145 150 155 160
Val Arg Ala Leu Gly Ala Thr Tyr His Leu Glu Cys Phe Lys Cys Glu
165 170 175
Val Ser Leu Val Val His Leu Asn Glu Thr Arg Arg Val Leu Leu Ala
180 185 190

```
Asn Cys Leu Cys Asn Arg Ile Ala Gly Lys Leu Trp His Leu Ser Ser
        195                 200                 205
Phe Leu Ser Thr Leu Arg Thr Glu Ala Asp Ser Ile His Cys Val Arg
    210                 215                 220
Gln Ile Thr Phe Gly Asp Trp Thr Ser Ser Ala Thr Asn Val Ala Ala
225                 230                 235                 240
Leu Cys Val Val Pro Ile Ser Pro Pro
                245
```

<210> 29147
<211> 87
<212> PRT
<213> A.fumigatus

<400> 29147

```
Asn Thr Gln Asp Asp Thr Leu Arg Gln Val Arg Val Gln Ile Gly Pro
1               5                   10                  15
Ser Glu Ala Arg Arg Thr Phe Cys Lys Tyr Ala Asn Tyr Arg Gly Ile
            20                  25                  30
Leu Trp Ala Asp Gly Arg Ser Glu Lys Val Cys His Val Ala Leu Thr
        35                  40                  45
Ser Pro Asn Asn Gln Leu Asp His Ala Glu Leu Met Asp Pro Ala Gly
    50                  55                  60
Gln Gly Cys Ser Ser Pro Ile Phe Gly Pro Cys Asp Arg Leu Asp Phe
65                  70                  75                  80
Ala Ser His Pro Pro Gly Leu
                85
```

<210> 29148
<211> 140
<212> PRT
<213> A.fumigatus

<400> 29148

```
Pro Ala Ser Ile Ile Ala Ala Ala Leu Asn Val Thr Glu Pro Ser Ser
1               5                   10                  15
Thr Gly Ile Gly Gly Asp Met Phe Cys Leu Phe Tyr Asp Ala Lys Ser
            20                  25                  30
Lys Lys Val His Ser Leu Asn Gly Ser Gly Arg Tyr Pro Ala Asn Ala
        35                  40                  45
Thr Leu Glu Lys Ile Arg Lys Asp Leu Asn Leu Gly Ala Asn Glu Lys
    50                  55                  60
Gly Ser Ile Pro Met Thr Ser Val Leu Ser Val Thr Thr Pro Gly Ala
65                  70                  75                  80
Thr Ala Gly Trp Val Asp Thr Val Glu Arg Phe Gly Ser Gly Lys Leu
                85                  90                  95
Ser Leu Glu Gln Ile Leu Thr Pro Thr Ile Glu Leu Gly Glu Gln Gly
            100                 105                 110
Phe Ala Gly Ser Glu Leu Ser Ser Tyr Phe Glu Gly Leu Ser Phe Phe
        115                 120                 125
Asp Arg Ser Ser Ile Cys Ser Ile Leu Cys His Ser
    130                 135                 140
```

<210> 29149
<211> 338
<212> PRT

<213> A.fumigatus

<220>
<221> UNSURE
<222> (307),(316)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29149

```
Gln Leu Phe Lys Trp Arg Glu Ser Glu Asp Leu Leu Arg Asn Ala Ser
1               5                  10                  15
Pro Asn Phe Arg Glu Met Leu Lys Leu Asp Pro Lys Ala Arg Asp Gly
            20                  25                  30
Val Arg Ser Pro Arg Pro Gly Glu Ile Met Lys Asn Pro Thr Leu Ala
        35                  40                  45
Lys Thr Phe Arg Arg Leu Ala Ala Glu Gly Lys Lys Gly Phe Tyr Glu
    50                  55                  60
Gly Glu Val Ala Gln Glu Leu Val Lys Val Ile Gln Asp Leu Gly Gly
65                  70                  75                  80
Tyr Met Thr Leu Asp Asp Leu Lys Tyr His Ala Glu Thr Gly Thr Gln
                85                  90                  95
Asn Thr Glu Ala Ile Ser Leu Lys Phe Thr Gly Gln Asp Ile Val Lys
            100                 105                 110
Lys Gln Thr Ala Gly Thr Asp Gly Glu Glu Asn Gln Gly Val Glu Ile
        115                 120                 125
Trp Glu His Pro Pro Asn Gly Gln Gly Ile Val Ala Leu Met Ala Leu
    130                 135                 140
Gly Ile Leu Glu Glu Leu Glu Arg Thr Gly Lys Ile Pro Val Phe Thr
145                 150                 155                 160
Glu Asp Gln His Asn Ser Thr Glu Tyr Leu His Ala Val Ile Glu Ser
                165                 170                 175
Leu Arg Ile Ala Phe Ala Asp Ala Ser Trp Trp Val Thr Asp Pro Asp
            180                 185                 190
Val Glu Lys Val Pro Ser Lys Glu Leu Ile Ser Arg Glu Tyr Leu Ala
        195                 200                 205
Glu Arg Ala Lys Leu Phe Asn Pro Glu Lys Ala Val Asp Ile Ile Asp
    210                 215                 220
His Gly Ser Pro Ala His Asn His Cys Asp Thr Val Tyr Phe Ala Val
225                 230                 235                 240
Thr Asp Glu Glu Gly Asn Gly Ile Ser Phe Ile Asn Ser Asn Tyr Ala
                245                 250                 255
Gly Phe Gly Ser Gly Ile Ile Pro Lys Gly Cys Gly Phe Thr Leu Gln
            260                 265                 270
Asn Arg Gly Ala Asn Phe Ser Leu Asp Pro Gly His Pro Asn Ala Leu
        275                 280                 285
Ala Ser Arg Lys Arg Pro Tyr His Thr Ile Ile Pro Ala Leu Ile Thr
    290                 295                 300
Asn Cys Xaa Asp Gly Ser Leu His Phe Cys Tyr Xaa Val Met Gly Gly
305                 310                 315                 320
Phe Met His Pro Pro Gly His Val Gln Val Leu Phe Asn Met Pro Ala
                325                 330                 335
Phe Asn
```

<210> 29150
<211> 75
<212> PRT

<213> A.fumigatus

<400> 29150
Pro Val Tyr Asn Ala Ser Thr Pro Lys Gly Gly Asp Pro Thr Lys Val
1 5 10 15
Asp Val Asn Ala Gln Tyr Ala Gly Phe Glu Tyr His Tyr Val Tyr Ile
20 25 30
Val Ala Cys Ser Phe Val Val Trp Leu Ile Leu Pro Gly Ile Gly Leu
35 40 45
Leu Tyr Ser Gly Leu Ala Arg Arg Lys Ser Ala Leu Ala Leu Leu Phe
50 55 60
Gln Ser Trp Met Val Leu Ala Val Tyr Val Pro
65 70 75

<210> 29151
<211> 86
<212> PRT
<213> A.fumigatus

<400> 29151
Asp His Thr Thr Ser Met Ile Leu Ser Met Ser Arg Thr Thr Phe Gln
1 5 10 15
Trp Met Phe Trp Gly Tyr Ser Leu Thr Tyr Ser Arg Asp Gly Gly Pro
20 25 30
Phe Ile Gly Thr Leu Lys Asn Phe Gly Met Arg Asp Val Leu Val Ala
35 40 45
Pro Ser Pro Gly Ser Ala Val Leu Pro Glu Ile Val Phe Cys Leu Tyr
50 55 60
Gln Leu Leu Phe Cys Ala Cys Thr Val Arg Ala Ser Ala His Leu Arg
65 70 75 80
Gln Met Arg Pro Val Arg
85

<210> 29152
<211> 145
<212> PRT
<213> A.fumigatus

<400> 29152
Gln Ala Arg Gln Ala Gly Ile Ala Tyr Thr Ile Tyr Glu Gln His Asp
1 5 10 15
Asp Glu Ala Tyr Ala Arg Arg Ala Gly Gln Trp Thr Met Ala Leu His
20 25 30
Ser Ser Leu Pro Tyr Leu Asp Ser Ile Leu Pro Ser Asp Leu Arg Ala
35 40 45
Lys Leu Asn Ser Thr Thr Thr Asn Pro Trp Ala Glu Pro Asp Pro Thr
50 55 60
Ile Ala Ala Ala Ile Pro Phe Val Asn Gly Ala Thr Gly Glu Leu Met
65 70 75 80
Ala Lys Ile Pro Met Pro Ser Pro Lys Arg Val Ile Arg Gly Lys Leu
85 90 95
Arg Asp Leu Leu Arg Thr Gly Val Glu Val Arg Phe Gly Arg Arg Leu
100 105 110
Thr Asp Ile Arg Val Glu Asp Asp Gly Val Ile Ala Val Phe Asp Gly
115 120 125
Glu Glu Val Arg Gly Asn Val Leu Val Gly Ala Asp Gly Gly Arg Tyr

130 135 140
Ser
145

<210> 29153
<211> 72
<212> PRT
<213> A.fumigatus

<400> 29153
Pro Tyr Gln Pro Leu Val Tyr Asp Thr Ser Gln Val Met Thr Lys Gly
1 5 10 15
Cys Tyr Thr Cys Arg Arg Arg Arg Ile Ile Cys Asp Asn Gly Leu Pro
20 25 30
Thr Cys Arg Lys Cys Arg Asp Ala Gly Lys Glu Cys Leu Gly Tyr Arg
35 40 45
Lys Pro Leu Val Trp Val Lys Gly Gly Val Ala Ser Arg Gly Lys Met
50 55 60
Met Gly Arg Ser Phe Asp Asp Val
65 70

<210> 29154
<211> 105
<212> PRT
<213> A.fumigatus

<400> 29154
Glu Asp Glu Phe Phe Glu Asp Arg Leu Gln Ala Lys Thr Glu Lys Leu
1 5 10 15
Arg Thr Leu Ile Arg Asp Asn Glu Asp Arg Phe Gln Gly Glu Phe Leu
20 25 30
Ser Phe Pro Leu Ala Thr Ala Ile Leu Thr Gln Ser Gln Phe Ser Asn
35 40 45
Leu Leu Gly Thr Val Tyr Arg Lys Gly Asn Leu Leu Phe Thr Pro Asp
50 55 60
Gly Asn Cys Leu Leu Ser Pro Val Gly Asn Arg Val Thr Val Phe Asp
65 70 75 80
Leu Val Gln Tyr Val Arg Ser Leu Thr Cys Tyr Gly Ile Leu Val Gly
85 90 95
Ser Phe Glu Leu Ile Glu Trp Pro Cys
100 105

<210> 29155
<211> 199
<212> PRT
<213> A.fumigatus

<400> 29155
Arg Asn Thr Ser Tyr Thr Leu Pro Phe Ser His Arg Thr Asn Ile Asp
1 5 10 15
Arg Leu Asp Leu Ser Pro Arg Gly Asn Leu Leu Leu Ser Val Asp Glu
20 25 30
Asn Gly Arg Ala Ile Leu Thr Asn Phe Val Arg Arg Ile Val Ile His
35 40 45
His Phe Ser Phe Lys Gly Arg Val Thr Ala Leu Lys Phe Ser Ser Thr
50 55 60

```
Gly Arg His Phe Ala Val Gly Val Gly Arg Arg Leu Gln Ile Trp His
65                  70                  75                  80
Thr Pro Ser Thr Pro Gly Thr Asp Asn Asn Gly Glu Ile Glu Phe Ala
                85                  90                  95
Pro Phe Val Leu His Arg Asp Leu Ala Ala His Phe Asp Val Ile Gln
            100                 105                 110
Asp Ile Glu Trp Ser Arg Asp Ser Arg Phe Leu Leu Thr Ala Ser Lys
        115                 120                 125
Asp Leu Thr Ala Arg Ile Trp Ser Leu Asp Pro Glu Glu Gly Phe Glu
    130                 135                 140
Pro Thr Thr Leu Ala Gly His Arg Gln Gly Val Lys Ala Ala Tyr Phe
145                 150                 155                 160
Thr Ala Asp Gln Glu Ser Val Ser Arg Ile Glu Ile Phe Thr Ile Ser
                165                 170                 175
Leu Ala Asp Ile Val Gln Asp Leu His Asn Gln Phe Gly Trp Ser Ser
            180                 185                 190
Phe Gln Val Gly Val Arg Asp
        195
```

<210> 29156
<211> 111
<212> PRT
<213> A.fumigatus

<400> 29156

```
Val Glu Ser Lys Tyr Leu Gln Phe Pro Leu Leu Thr Ser Ser Lys Ile
1               5                   10                  15
Tyr Thr Ile Ser Ser Asp Gly Ala Leu Phe Arg Trp Glu Tyr Val Thr
            20                  25                  30
Lys Lys Asp Pro Asp Thr Met Glu Asp Ile Ala Glu Ala Arg Trp Arg
        35                  40                  45
Ile Val Lys Lys Asp Tyr Phe Met Gln Asn Asp Ala Lys Val Asn Cys
    50                  55                  60
Ala Thr Phe His Ala Pro Ser Asn Leu Leu Val Val Gly Phe Ser Asn
65                  70                  75                  80
Gly Leu Phe Gly Leu Tyr Asp Leu Pro Asp Phe Asn Pro Ile His Gln
                85                  90                  95
Leu Arg Tyr Glu Ser Cys Tyr Leu Ile Val Asn Cys Glu Ala Asp
            100                 105                 110
```

<210> 29157
<211> 225
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (212),(215)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29157

```
Pro Leu Leu Thr Cys Ala Arg Pro Gln Pro Tyr Glu His Leu Met Ile
1               5                   10                  15
Val Phe Phe Asp Ile Leu Leu Leu Asp Asp Asp Ile Cys Leu Arg Lys
            20                  25                  30
Pro His Arg Glu Arg Arg Leu Leu Leu Lys Asn Val Val Lys Val Ile
```

```
        35                  40                  45
Asp Gly Tyr Ala Asp Ile Ala Glu Gln His Ile Val Glu Phe Ser His
    50                  55                  60
Pro Ser Gly Arg Ser Arg Leu Glu Thr Ile Phe Ser Lys Ala Val Thr
65                  70                  75                  80
Glu Arg Trp Glu Gly Leu Val Leu Lys Gly Cys Glu Asp Pro Tyr Val
                85                  90                  95
Ser Ile Phe Pro Gly Ser Glu Asn Gly Ser Gly Gly Arg Trp Ile Lys
            100                 105                 110
Leu Lys Lys Asp Tyr Ile Pro Gly Leu Gly Asp Thr Val Asp Leu Thr
        115                 120                 125
Leu Ile Gly Ala Arg Tyr Asp Ser Arg Asp Ala Ala Ala Leu Asn Ser
    130                 135                 140
Ser Thr Lys Ile Phe Trp Thr His Phe Tyr Ile Gly Cys Leu Val Asn
145                 150                 155                 160
Lys Asp Ala Val Leu Gln Ser Ala Ala Glu Pro Arg Phe Leu Val Met
                165                 170                 175
Asp Val Ile Asp Cys Asn Ser Met Ser Leu Lys Asn Met Gln Ile Leu
            180                 185                 190
Asn His Phe Gly Gln Phe Gly Ala Cys Arg Leu Asp Ser Gly His Gly
        195                 200                 205
Phe Arg Ile Xaa Phe Trp Xaa Gly Ile Ser Leu Arg Leu Glu Tyr Pro
    210                 215                 220
Val
225
```

<210> 29158
<211> 76
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (47)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 29158
Gly Cys Lys Ile Thr Pro Arg Pro Ser Ser Pro Arg Thr Val Asp Thr
1               5                   10                  15
Lys Ile Phe Pro Ser Phe Cys Ile Thr Ile Gly Ser Ala Pro Thr Asn
            20                  25                  30
Gln Thr Ile Gly Ala Phe Ser Pro Leu Cys His Leu Thr Asp Xaa Ser
        35                  40                  45
Phe Met Ser Met Ile Cys Ser His Phe Lys Arg Ser Asp Ile Val Lys
    50                  55                  60
Arg Met Gly His Leu Ser Phe Thr Phe Gly Glu Tyr
65                  70                  75
```

<210> 29159
<211> 326
<212> PRT
<213> A.fumigatus

```
<400> 29159
Leu His Lys Asp His Pro Thr Arg Gln Trp Ile Lys Pro Lys Leu Thr
1               5                   10                  15
```

```
Glu Glu Lys Ala Pro Lys Leu Val Ala Phe Glu Phe Thr Thr Ser Thr
            20                  25                  30
Ser Arg Lys Pro His Ser Leu Ile Phe Ile Gly Gly Leu Thr Asp Gly
        35                  40                  45
Leu Cys Thr Val Pro Tyr Val Ala Pro Leu Ala Ala Ala Leu Glu Pro
    50                  55                  60
Thr Asp Trp Ser Val Phe Gln Ala Gln Leu Ser Ser Ser Phe Gly Gly
65                  70                  75                  80
Trp Gly Ile Gly Ser Leu Asp Lys Asp Val Glu Glu Ile Ala Lys Cys
                85                  90                  95
Ile Asp Phe Val Arg Ser Leu Lys Ala Ser Ser Ala Ser Gly Ser Ala
            100                 105                 110
Ser Ala Pro Gly Lys Ile Val Ile Met Gly His Ser Thr Gly Ser Gln
        115                 120                 125
Asp Val Leu His Tyr Leu Tyr Thr Gln Gly Asp Arg Pro Val Val Asp
    130                 135                 140
Gly Ala Ile Leu Gln Ala Pro Val Ser Asp Arg Glu Ala Met Leu Ala
145                 150                 155                 160
Glu Met Arg Lys Pro Arg Asp Val Gly Ala Glu Ala Lys Gly Ser Trp
                165                 170                 175
Glu Gln Leu Val Ser Leu Ala Arg Gln Ala Pro Val Gly Asp Ile Ile
            180                 185                 190
Leu Pro Leu Asn Leu Ser Ser Lys Val Gly Leu Pro Pro Asp Pro Val
        195                 200                 205
Ser Ala Arg Arg Phe Leu Ser Leu Ala Ser Pro Asp Ser Pro Asp Arg
    210                 215                 220
Pro Ala Glu Asp Asp Leu Phe Ser Ser Asp Leu Thr Asp Gln Arg Leu
225                 230                 235                 240
Arg Glu Thr Phe Gly Ala Val Ala Thr Arg Gly Leu Leu Arg Ser Lys
                245                 250                 255
Leu Leu Val Leu Tyr Ser Gly Asn Asp Glu Phe Ala Ala Pro Trp Val
            260                 265                 270
Asp Lys Lys Ala Leu Met Ala Arg Trp Arg Glu Ala Thr Glu Ala Leu
        275                 280                 285
Lys Pro Gly Thr Trp Asp Gln Asn Ser Gly Val Ile Pro Gly Ala Ser
    290                 295                 300
His Asn Val Lys Asp Gln Gly Gln Ala Asp Leu Thr Glu Arg Val Thr
305                 310                 315                 320
Arg Tyr Leu Lys Ser Ile
                325
```

<210> 29160
<211> 177
<212> PRT
<213> A.fumigatus

<400> 29160

```
Arg Lys Gly Ile Glu Arg Ile Thr Met Thr Leu Leu Leu Ser Leu Leu
1               5                   10                  15
Phe Leu Phe Phe Ser Phe His Phe Ser Phe Ser Ser Gly Phe Leu Phe
            20                  25                  30
Leu Pro Leu Ser Cys Pro Leu Leu Ser Ser Tyr Ser Ser Phe Pro Ser
        35                  40                  45
Ser Pro Pro Ser Ser Pro Leu Leu Phe Ser Phe Ser Phe Ser Leu Phe
    50                  55                  60
Ile Phe Ser Leu Ser Phe Leu Leu Leu Leu Ser Phe Pro Leu Leu Pro
```

65 70 75 80
Ser Leu Leu Val Phe Ser Leu Leu Phe Leu Ser Phe Phe Ile Phe Pro
85 90 95
Leu Leu Ser Phe Ser Phe Leu Leu Phe Phe Leu Val Phe Leu Leu Ser
100 105 110
Pro Pro Val Phe Leu Leu Leu Ser His Phe Leu Leu Phe Val Ala Tyr
115 120 125
Leu Ser Ser Ser Ser Leu Leu Leu Ser Ser Ser Ile Ser Pro Phe Phe
130 135 140
Leu Pro Val Ser Leu Pro Ser Leu Ser Leu Arg Leu Pro Ser Phe Val
145 150 155 160
Leu Leu Ser Phe Tyr Leu Pro Ser Leu Phe Ser Phe Leu Ser Leu Ser
165 170 175
Leu

<210> 29161
<211> 168
<212> PRT
<213> A.fumigatus

<400> 29161
Pro Phe Tyr Ser Leu Ser Phe Phe Ser Ser Phe Leu Phe Thr Ser Leu
1 5 10 15
Ser Leu Leu Ala Phe Phe Phe Tyr Leu Phe Pro Ala Leu Phe Ser Leu
20 25 30
Pro Thr Pro Leu Phe Leu Leu Leu Leu Leu Leu Pro Leu Phe Phe Ser
35 40 45
Pro Phe Leu Phe Leu Ser Leu Ser Ser Pro Ser Leu Phe Phe Phe Phe
50 55 60
Ser Pro Phe Pro Phe Phe Pro Leu Phe Ser Ser Phe Leu Ser Phe Ser
65 70 75 80
Phe Leu Ser Leu Phe Phe Pro Ser Phe Pro Ser Leu Phe Phe Phe Ser
85 90 95
Phe Ser Ser Phe Ser Ser Leu Leu Pro Ser Phe Ser Ser Tyr Leu Ile
100 105 110
Ser Cys Ser Ser Leu Leu Ile Ser Leu Leu Pro Pro Ser Phe Cys Leu
115 120 125
Leu Leu Tyr Leu Leu Ser Phe Phe Leu Phe Pro Cys Leu Leu Ser Leu
130 135 140
Phe Ala Ser Leu Leu Leu Phe Tyr Phe Leu Ser Ile Phe Leu Leu Cys
145 150 155 160
Phe Arg Phe Ser Leu Ser Leu Phe
165

<210> 29162
<211> 180
<212> PRT
<213> A.fumigatus

<400> 29162
Glu Leu Lys Lys Arg Asp Arg Glu Asp His His Asp Pro Ser Thr Leu
1 5 10 15
Ser Pro Phe Ser Leu Leu Phe Phe Ser Leu Leu Phe Leu Phe Trp Leu
20 25 30
Ser Phe Phe Thr Ser Phe Leu Pro Ser Ser Leu Phe Leu Leu Leu Phe

```
        35                  40                  45
Ser Phe Phe Ser Ser Phe Phe Pro Ser Ser Phe Leu Leu Phe Phe Phe
    50                  55                  60
Ser Leu Tyr Leu Leu Pro Leu Phe Ser Ser Ser Ser Leu Leu Ser Pro
65                  70                  75                  80
Ser Ser Leu Ser Ser Arg Leu Phe Ser Pro Phe Pro Phe Phe Leu Tyr
                85                  90                  95
Phe Ser Pro Pro Phe Leu Leu Phe Ser Ser Phe Leu Ser Arg Leu Ser
            100                 105                 110
Pro Leu Ser Ser Arg Leu Ser Pro Leu Ile Ser Phe Leu Ala Leu Arg
        115                 120                 125
Cys Leu Ser Leu Phe Phe Leu Pro Pro Ser Val Phe Phe Tyr Ile Ser
    130                 135                 140
Phe Leu Ser Ser Cys Phe Leu Ala Phe Ser Leu Ser Ser Pro Pro Phe
145                 150                 155                 160
Phe Cys Phe Thr Phe Phe Leu Ser Ser Phe Ser Val Phe Val Ser Leu
                165                 170                 175
Ser Leu Ser Phe
            180
```

<210> 29163
<211> 147
<212> PRT
<213> A.fumigatus

<400> 29163

```
Asn Cys Leu Pro Leu Cys Trp Phe Arg Ser Leu Thr Gly Thr Leu Glu
1               5                   10                  15
Arg Gln Thr Cys Thr Gly Arg Gln Val Ala Thr Thr Ala Ser His Leu
            20                  25                  30
Gln Pro Val Thr Ser Leu Val Val Asp Pro Thr Ser Asn Phe Ile Leu
        35                  40                  45
Ser Gly Ser Ser Asp Ala Ser Ile His Val Trp Ser Leu Val Asp Ile
    50                  55                  60
Leu Ser Phe Thr Lys Pro Pro Ser Gly Arg Asp Arg Gln Gln Pro Asn
65                  70                  75                  80
Ser Pro Val Arg Thr Phe Ser Asn His Arg Ala Ala Ile Thr Ser Ile
                85                  90                  95
Ala Val Gly His Ser Ser Gly Arg Tyr Asn Ile Ala Val Ser Ala Ser
            100                 105                 110
Lys Asp Asn Thr Ala Ile Ala Trp Asp Tyr His Thr Gly Arg Leu Leu
        115                 120                 125
Arg Thr Phe Leu Leu Pro Gly Ser Ala Thr Cys Leu Ile Leu Asp Pro
    130                 135                 140
Val Val Phe
145
```

<210> 29164
<211> 116
<212> PRT
<213> A.fumigatus

<400> 29164

```
Asp Phe Val Asp Gly Met Met Glu Gly Phe Ser Gly Leu Val Thr Gln
1               5                   10                  15
Pro Ile Lys Gly Gly Lys Glu Glu Gly Ala Leu Gly Val Val Lys Gly
```

```
            20                  25                  30
Leu Ala Lys Gly Thr Ala Gly Leu Val Thr Lys Val Pro Ser Ala Gly
        35                  40                  45
Leu Gly Leu Val Ala Tyr Pro Phe Gln Gly Ile Val Lys Ser Ile Glu
    50                  55                  60
Ser Ser Val Arg Ser Lys Thr Arg Lys Ala Ile Ile Thr Ala Arg Leu
65                  70                  75                  80
Arg Asp Gly Tyr Glu Leu Ser Arg Arg Glu Glu Val Ser Gln Glu Glu
                85                  90                  95
Arg Arg Phe Val Leu Gln Lys Phe Gln Ser Leu Leu Cys Gly Pro Thr
            100                 105                 110
Ala Thr Pro Thr
        115
```

<210> 29165
<211> 224
<212> PRT
<213> A.fumigatus

<400> 29165

```
Phe Ser Asp Ala Leu Gly Ile Pro Leu Tyr Tyr Ala Leu Leu Thr Leu
1               5                   10                  15
Arg Thr Leu Ala Gln Arg Arg Leu Trp His Thr Leu Pro His Ser Leu
            20                  25                  30
His Phe Cys Glu Leu Pro Gln His Gly Pro Gln Val Leu Asp Ile Val
        35                  40                  45
Thr Val His Ile Tyr Phe Pro Tyr Ile Leu Arg Tyr Val Lys His Pro
    50                  55                  60
Ser Ala Ser Arg Ile Val Met Glu Ala Asn Pro Gln Ala Val Pro Arg
65                  70                  75                  80
Leu Val Pro Ile Ala Leu Ala Pro Ala Arg Ala Ser Ser Val Asp Met
                85                  90                  95
Gln Asn Asp Ser Asn Ala Asp Leu Thr Thr Met Arg Phe Asn Cys Gln
            100                 105                 110
Gly Cys Val Arg Lys Lys Gly Lys Cys Asn Arg Val Val Pro Thr Cys
        115                 120                 125
Ser Asn Cys Ser Lys Ser Lys Leu Gln Cys Val Tyr Gln Ala Pro Leu
    130                 135                 140
Pro Arg Lys Arg Lys Arg Ser Gln Val Glu Glu Asp Val Tyr Glu Arg
145                 150                 155                 160
Leu Ala Arg Tyr Glu Arg Ile Leu Arg Glu Asn Asn Leu Leu Pro Thr
                165                 170                 175
Ala Ser Ala Leu Ala Pro Cys Ser Lys Ala Met Asp Thr Ser Val Val
            180                 185                 190
Ser Thr Arg Asp Pro Ser Pro Ala Pro Asn Met Gln Pro Ala Thr Ser
        195                 200                 205
Gly Lys Leu Leu Ser Ala Gly Gly Lys Ser Arg Tyr Ile Asp Ser Val
    210                 215                 220
```

<210> 29166
<211> 535
<212> PRT
<213> A.fumigatus

<400> 29166

```
Asp Gly Ile Glu Glu Ile Leu Lys Ala Arg Ile Leu Ala Ser Ala Arg
```

```
1               5                  10                  15
His Lys Ala Phe Val Val Ser Ala Asp Glu Arg Glu Gly Cys Leu Arg
            20                  25                  30
Asn Leu Leu Asn Trp Gly His Ser Ile Gly His Ala Ile Glu Ala Ile
        35                  40                  45
Leu Thr Pro Gln Ile Leu His Gly Glu Cys Val Ala Ile Gly Met Val
    50                  55                  60
Lys Glu Ala Glu Leu Ala Arg His Leu Gly Ile Leu Lys Gly Val Ala
65                  70                  75                  80
Val Ala Arg Ile Val Lys Cys Ile Ala Ala Tyr Gly Leu Pro Thr Ser
                85                  90                  95
Leu Lys Asp Ser Arg Ile Arg Lys Leu Thr Ala Gly Lys His Cys Ser
            100                 105                 110
Val Asp Gln Ile Leu Phe Asn Met Ala Leu Asp Lys Lys Asn Asp Gly
        115                 120                 125
Pro Lys Lys Lys Ile Val Leu Leu Ser Ala Ile Gly Arg Thr Tyr Glu
    130                 135                 140
Pro Arg Ala Ser Val Val Pro Asn Glu Asp Ile Gly Val Val Leu Ala
145                 150                 155                 160
Pro Ser Ile Glu Val His Pro Gly Val Ser Thr Thr Ser Glu Val Val
                165                 170                 175
Cys Ala Pro Pro Gly Ser Lys Ser Ile Ser Asn Arg Ala Leu Val Leu
            180                 185                 190
Ala Ala Leu Gly Ser Gly Thr Val Arg Ile Lys Asn Leu Leu His Ser
        195                 200                 205
Asp Asp Thr Glu Val Met Leu Asn Ala Leu Glu Arg Leu Gly Ala Ala
    210                 215                 220
Thr Phe Ser Trp Glu Glu Glu Gly Glu Val Leu Val Val Asn Gly Lys
225                 230                 235                 240
Gly Gly Ala Leu Gln Ala His Pro Ser Pro Leu Tyr Leu Gly Asn Ala
                245                 250                 255
Gly Thr Ala Ser Arg Phe Leu Thr Thr Val Ala Thr Leu Ala Thr Ala
            260                 265                 270
Ser Ser Val Asp Ser Ser Val Leu Thr Gly Asn Asn Arg Met Lys Gln
        275                 280                 285
Arg Pro Ile Gly Asp Leu Val Asp Ala Leu Thr Ala Asn Gly Ala Gln
    290                 295                 300
Ile Glu Tyr Val Glu Asn Lys Gly Ser Leu Pro Leu Lys Ile Ala Ala
305                 310                 315                 320
Ser Gly Gly Phe Thr Gly Gly Gln Ile Asn Leu Ala Ala Lys Val Ser
                325                 330                 335
Ser Gln Tyr Val Ser Ser Leu Leu Met Cys Ala Pro Tyr Ala Lys Glu
            340                 345                 350
Pro Val Thr Leu Lys Leu Val Gly Gly Lys Pro Ile Ser Gln Pro Tyr
        355                 360                 365
Ile Asp Met Thr Thr Ala Met Met Arg Ser Phe Gly Ile Asp Val Lys
    370                 375                 380
Lys Ser Thr Thr Glu Glu His Thr Tyr His Ile Pro Gln Gly Arg Tyr
385                 390                 395                 400
Ile Asn Pro Ala Glu Tyr Val Val Glu Ser Asp Ala Ser Ser Ala Thr
                405                 410                 415
Tyr Pro Leu Ala Ile Ala Ala Val Thr Gly Thr Thr Cys Thr Ile Pro
            420                 425                 430
Asn Ile Gly Ser Lys Ser Leu Gln Gly Asp Ala Arg Phe Ala Val Asp
        435                 440                 445
Val Leu Arg Pro Met Gly Cys Thr Val Glu Gln Thr Asp Thr Ser Thr
```

```
    450                 455                 460
Thr Val Thr Gly Pro Ala Asp Gly Val Leu Arg Pro Leu Pro Asn Val
465                 470                 475                 480
Asp Met Glu Pro Met Thr Asp Ala Phe Leu Gly Ala Ser Val Leu Ala
                485                 490                 495
Ala Ile Ala Arg Gly Lys Asp Ser Asn His Thr Thr Arg Ile Tyr Gly
            500                 505                 510
Ile Ala Asn Gln Pro Val Val Phe Tyr His Lys Ala Thr Arg His Pro
        515                 520                 525
Arg Ile Gly Ser Pro Pro Gly
    530                 535
```

<210> 29167
<211> 101
<212> PRT
<213> A.fumigatus

<400> 29167

```
Arg Ala Pro Pro Leu Pro Leu Thr Thr Arg Thr Ser Pro Ser Ser Ser
1               5                   10                  15
His Glu Lys Val Ala Ala Pro Arg Arg Ser Lys Ala Phe Ser Met Thr
            20                  25                  30
Ser Val Ser Ser Glu Cys Ser Arg Phe Leu Ile Arg Thr Val Pro Glu
        35                  40                  45
Pro Arg Ala Ala Ser Thr Arg Ala Arg Leu Glu Met Leu Phe Glu Pro
    50                  55                  60
Gly Gly Ala Gln Thr Thr Ser Glu Val Val Asp Thr Pro Gly Cys Thr
65                  70                  75                  80
Ser Ile Leu Gly Ala Arg Thr Thr Pro Ile Ser Ser Phe Gly Thr Thr
                85                  90                  95
Leu Ala Arg Gly Ser
            100
```

<210> 29168
<211> 61
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (15),(23),(28),(34)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29168

```
Ala Gln Val Gln Gly Thr Asp Asn Leu Tyr Gly Thr Arg Asp Xaa Leu
1               5                   10                  15
Ser Arg Asn Glu Lys Leu Xaa Thr Ser Gly Ser Xaa Lys Leu Glu Glu
            20                  25                  30
Pro Xaa Asn Gly Asn Ala Arg Ala Ile Leu Ser Gly Asp Pro Gly Leu
        35                  40                  45
Tyr Leu Pro Asn Gly Pro Gln Arg Thr Ile Leu Pro Ile
    50                  55                  60
```

<210> 29169
<211> 99
<212> PRT

<213> A.fumigatus

<400> 29169
Pro Val Ala Thr Ser Val Phe Pro Ala Val Thr Ser Pro Ile Arg Pro
1 5 10 15
Gln Tyr Pro Val Asp Leu His Ile His Ser Gly Ala Glu Asp Thr Gln
20 25 30
Ser Ser Thr Met Gln Ala Val Pro Glu Ser Arg Gln Gln Thr Phe Glu
35 40 45
Glu Ile Tyr Gly Pro Pro Glu Asn Phe Leu Glu Ile Glu Val Cys Ser
50 55 60
Asn Asn Phe His His Glu Thr Thr Pro Pro Asn Gln Leu Thr Asp Lys
65 70 75 80
Ser Asp Ile Ile Leu Ala Val Gln Val Lys Thr Asn Leu Ser Ser Tyr
85 90 95
Ser Gly Pro

<210> 29170
<211> 75
<212> PRT
<213> A.fumigatus

<400> 29170
Asp His Asp Asn Gly Ser Met Ile Met Arg Ala Val Thr Arg His Phe
1 5 10 15
Thr Gln Asn Ser Leu Glu Asp Lys Asp Asp Pro Met Asn Ser Pro Ala
20 25 30
Ile Pro Leu Pro Ser Ser Val Ile Leu Asn Ala Ile Val Glu Asn Ser
35 40 45
Phe Ser Tyr Leu Ser Ala Ile Ile Leu His Ile Ile Leu Thr Ala Lys
50 55 60
Lys Ser Thr Phe Phe Lys Ser Pro Arg Pro Leu
65 70 75

<210> 29171
<211> 228
<212> PRT
<213> A.fumigatus

<400> 29171
Arg Ser Arg Phe Tyr Leu Thr Asp Gln Ser Gln His Pro Ser Ser Pro
1 5 10 15
Arg Ser Leu Pro Pro Ser Ala Leu Ser Ile Leu Ser Ile Phe Thr Phe
20 25 30
Thr Leu Gly Gln Lys Thr Pro Ser His Arg Gln Cys Lys Pro Ser Leu
35 40 45
Asn Arg Asp Asn Lys His Ser Arg Arg Ser Thr Asp Leu Pro Arg Thr
50 55 60
Phe Ser Arg Leu Arg Tyr Ala Ala Ile Thr Ser Ile Thr Lys Leu Pro
65 70 75 80
His Pro Ile Asn Ser Pro Thr Ser Pro Ile Ser Tyr Ser Gln Ser Lys
85 90 95
Ser Arg Leu Thr Ser His Arg Ile Gln Val Arg Asn Pro Gln Thr His
100 105 110
Gly Thr Ser Arg Asn Met Tyr Thr Ser Tyr Glu Ile Val Cys Arg Thr

```
        115                 120                 125
Asn Ile Pro Ala Phe Lys Leu Lys His Ser Val Val Arg Arg Arg Tyr
    130                 135                 140
Ser Asp Phe Glu Tyr Phe Arg Asp Ile Leu Glu Arg Glu Ser Thr Arg
145                 150                 155                 160
Val Thr Ile Pro Pro Leu Pro Gly Lys Val Phe Thr Asn Arg Phe Ser
                165                 170                 175
Asp Asp Val Ile Glu His Arg Arg Glu Gly Leu Gln Arg Phe Leu Gln
            180                 185                 190
Ile Val Ala Gly His Pro Leu Leu Gln Thr Gly Ser Lys Val Leu Ala
        195                 200                 205
Ser Phe Ile Gln Gly Glu Leu Ser Ser Leu Gly Leu Val Val Tyr Gln
    210                 215                 220
Glu Glu Lys Asp
225
```

<210> 29172
<211> 168
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (160),(162),(167)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29172

```
Leu Leu Pro Tyr Ile Ala Leu Ser Ser His Ile Leu Phe Ala Ile Asp
1               5                  10                  15
Ser Arg Gln Met Asp Cys Arg Leu Asp Ser Met Glu Asn Val Val Ile
            20                  25                  30
Pro Leu Ile Gln Arg Gln Phe His Phe Pro Asn Met Asn Phe Ala Thr
        35                  40                  45
Gln Gly Ser Asn Ser Phe Ser Glu Ser Ser Lys Gly Cys Cys Asp Asn
    50                  55                  60
Arg Ile Arg Leu Arg Ser Leu Arg Gly Leu Arg Lys Ile Phe Leu Arg
65                  70                  75                  80
Gly Lys Glu Glu Ala Ser Arg Leu Arg Arg Val Ile Thr Val Ser Phe
                85                  90                  95
Ser Leu Val Ser Gly Arg Ser Leu Val Ser Ser Ser Ile Phe Tyr Phe
            100                 105                 110
Ser Phe Pro Ser Pro Phe Leu Asp Pro Ser Ala Ala Asn Ala Glu Pro
        115                 120                 125
Glu Trp Met Lys Ala Cys Phe Lys Ile Leu Ile Ser Lys Thr Ile Val
    130                 135                 140
Tyr Cys Arg Val Leu Val Trp Thr Lys Thr Glu Arg Leu Arg Cys Xaa
145                 150                 155                 160
Asn Xaa Glu Arg Asp Asp Xaa Asn
                165
```

<210> 29173
<211> 511
<212> PRT
<213> A.fumigatus

<220>

<221> UNSURE
<222> (411)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29173

```
Asn Val Gly Cys Cys Ser Ser Gly Arg Thr Cys Ser Leu Tyr Ser Ala
1               5                  10                  15
Ser Ser Ser Val Glu Leu Thr Thr Arg Trp Arg Ile Tyr Pro Pro Ser
            20                  25                  30
Ser Gly Gly Arg Glu Leu Leu His Ala Pro Gln Val Arg Ala Phe Gln
        35                  40                  45
Cys Gly Thr Pro Leu Val Ser Arg Arg Ala Asp Arg Tyr Ile Gly Asn
    50                  55                  60
His Ala Gln Gly Val Ala Phe Ser Ala Arg Lys Leu Lys Ile Pro Ala
65                  70                  75                  80
Thr Ile Val Met Pro Ser Gly Thr Pro Ala Ile Lys His Leu Asn Val
                85                  90                  95
Ala Arg Leu Gly Gly Ser Val Ile Leu His Gly Asn Asp Phe Asp Ala
            100                 105                 110
Ala Lys Glu Glu Ala His Arg Leu Glu Lys Gln His Gly Leu Thr Ser
        115                 120                 125
Ile Pro Pro Phe Asp Asp Pro Tyr Val Ile Ala Gly Gln Gly Thr Ile
    130                 135                 140
Gly Met Glu Ile Leu Arg Gln Ala Asn Leu Glu Lys Leu Glu Ala Val
145                 150                 155                 160
Phe Cys Ala Val Gly Gly Gly Gly Leu Val Ala Gly Ile Gly Val Tyr
                165                 170                 175
Leu Lys Arg Ile Ala Pro His Val Lys Val Ile Gly Val Glu Ala Tyr
            180                 185                 190
Asp Ala Asn Ala Met Ala Arg Ser Leu Gly Glu Gly Ser Arg Val Phe
        195                 200                 205
Leu Arg Glu Val Gly Leu Phe Ala Asp Gly Ala Ala Val Lys Thr Val
    210                 215                 220
Gly Glu Glu Thr Tyr Arg Leu Ala Arg Glu Val Ile Asp Asp Val Ile
225                 230                 235                 240
Leu Val Ser Thr Asp Glu Thr Cys Ala Ala Ile Lys Asp Ala Phe Glu
                245                 250                 255
Asp Thr Arg Ser Ile Ile Glu Pro Ala Gly Ala Leu Ala Leu Ala Gly
            260                 265                 270
Leu Lys Lys Tyr Val Ser Gln Asn Pro Ser Pro Asp Thr Ser Arg Glu
        275                 280                 285
Leu Val Ala Ile Thr Ser Gly Ala Asn Met Asp Phe Asp Arg Leu Arg
    290                 295                 300
Phe Val Ala Glu Arg Ala Ala Leu Gly Glu Arg Lys Glu Ala Leu Leu
305                 310                 315                 320
Ser Val Lys Ile Pro Glu Lys Pro Gly Ala Phe Ala Asn Leu Val Glu
                325                 330                 335
Val Ile Leu Pro Gln Ala Val Thr Ala Phe Ser Tyr Arg Tyr Ala Arg
            340                 345                 350
Ala Glu Ser Ala Asp Val Leu Met Gly Ile Ser Leu Ser Ala Leu Thr
        355                 360                 365
Gly Arg Glu Asp Leu Ala Lys Ile Met Asp Gln Leu Glu Lys Ala Gly
    370                 375                 380
Met Pro Ala Lys Asp Leu Ser Asp Asp Glu Leu Ala Lys Arg His Val
385                 390                 395                 400
Arg Phe Leu Val Gly Gly Arg Cys Asp Val Xaa Asp Glu Arg Leu Phe
```

```
                405                 410                 415
Met Phe Glu Phe Pro Glu Arg Pro Gly Pro Trp Pro Ile Ser Ser Arg
            420                 425                 430
Arg Ser Gly Pro Thr Arg Thr Ser Pro Gly Ser Thr Thr Ala Ile Met
        435                 440                 445
Val Val Met Ser Glu Arg Tyr Trp Pro Ala Phe Ser Val Gln Leu Asn
    450                 455                 460
Lys Lys Lys Ile Ser Arg Pro Ser Ser Thr Thr Ser Gly Tyr Pro Phe
465                 470                 475                 480
Lys Gln Ser Lys Pro Asn Leu Pro Pro Tyr Gln Lys Phe Pro Thr Leu
                485                 490                 495
Leu Lys Lys Asn Cys Cys Tyr Pro Thr Pro Arg Leu Phe Leu Ala
            500                 505                 510
```

<210> 29174
<211> 68
<212> PRT
<213> A.fumigatus

<400> 29174

```
Ala Pro Ile Met Pro Asp Gln Ser Ala Thr Asn Gly Thr Thr Thr Pro
1               5                   10                  15
Val Thr Ala Lys Leu Ser Asn Leu Ala Leu Thr Glu Tyr Thr Ala Ala
            20                  25                  30
Pro Thr Pro Pro Ser Glu Lys Asp Gln Asp Thr Ala Leu Gly Val Ser
        35                  40                  45
Arg Asp Trp Gly Ile Pro Asn Ala Phe Leu Leu Pro Asn Gly Tyr Pro
    50                  55                  60
Asp Val Ser Ser
65
```

<210> 29175
<211> 105
<212> PRT
<213> A.fumigatus

<400> 29175

```
Pro Asn Gly Phe Val Phe Pro Asn Ile Ile Ser Gln Pro Leu Leu Ala
1               5                   10                  15
Thr Gln Tyr Leu Arg Leu Ile Leu Thr Ser Arg Val Tyr Asp Val Ile
            20                  25                  30
Gln Glu Thr Pro Leu His His Ala Ile Asn Leu Ser Asn Arg Leu Glu
        35                  40                  45
Cys Arg Val Leu Leu Lys Arg Glu Asp Leu Leu Pro Val Phe Ser Phe
    50                  55                  60
Lys Leu Arg Gly Ala Tyr Asn Lys Met Ala His Leu Ser Pro Glu Gln
65                  70                  75                  80
Arg Trp Lys Gly Val Ile Ala Cys Ser Ala Gly Gln Ser Leu Ser Met
                85                  90                  95
Trp Tyr Thr Thr Arg Leu Glu Glu Ser
            100                 105
```

<210> 29176
<211> 92
<212> PRT
<213> A.fumigatus

<400> 29176
Ile Ser Arg Ala Ser Arg Thr Leu Ala Asn Phe Leu Pro Thr Leu Arg
1 5 10 15
Pro Asn Gln Asn Ile Ser Arg Phe His Tyr Arg Asn Tyr Gly Gly Asp
20 25 30
Val Arg Lys Val Leu Ala Gly Ile Gln Cys Pro Ile Glu Gln Lys Lys
35 40 45
Asp Phe Glu Ala Phe Leu Asn Asp Leu Arg Leu Ser Val Gln Ala Lys
50 55 60
Gln Thr Glu Ser Pro Pro Leu Pro Glu Ile Pro Asn Val Val Lys Lys
65 70 75 80
Lys Leu Leu Leu Ser His Pro Pro Val Ile Phe Gly
85 90

<210> 29177
<211> 204
<212> PRT
<213> A.fumigatus

<400> 29177
Asn Gln Asp Asp Ile Val Asn Tyr Leu Thr Ser Lys Thr Ile Cys Phe
1 5 10 15
Leu Ser His Ser Leu His Ser Arg Ser Val Arg Lys Gln Ser Asn Leu
20 25 30
Pro Lys Glu Asp Ser Arg Ser Phe Ala Gln Arg Pro Gly His Gly Val
35 40 45
Gly Ile Val Gly Leu Asn Ser Asp Asp Leu His Met Arg Arg Asn Ala
50 55 60
Leu Gln Ile Asn Pro Asp Thr Gly Asn Gln Thr Pro Ser Ala Asp Ser
65 70 75 80
Thr Glu Asn Ser Phe Glu Phe Leu Gln Val Cys Leu Thr Gln Asn Phe
85 90 95
His Ser Asn Gly Thr Leu Ser Cys Asn His Val Arg Ile Ile Lys Gly
100 105 110
Arg Asn Ala Gly Gln Ala Val Leu Leu Leu Gln Ser Met Ser Phe Leu
115 120 125
Leu Gly Ser Val Glu Val Val Ser Val Lys Asp Asn Thr Ala Ala Lys
130 135 140
Thr Arg Asn Ile Gln Met Leu Asp Gly Arg Gly Thr Arg Gly His Asp
145 150 155 160
Asp Gly Arg Gly Asp Leu Glu Leu Ala Gly Gly Lys Cys Asn Ala Leu
165 170 175
Cys Val Val Thr Tyr Ile Pro Val Ser Ser Pro Arg Asp Glu Trp Cys
180 185 190
Thr Thr Leu Lys Gly Ser Asp Leu Arg Ser Met Gln
195 200

<210> 29178
<211> 148
<212> PRT
<213> A.fumigatus

<400> 29178
Gly Arg Ile Thr Ser Thr Arg Phe Ala Lys Ala Pro Gly Phe Ser Gly
1 5 10 15

```
Ile Leu Thr Leu Ser Ser Ala Ser Phe Arg Ser Pro Arg Ala Ala Arg
            20                  25                  30
Ser Ala Thr Lys Arg Lys Arg Ser Lys Ser Met Phe Ala Pro Asp Val
        35                  40                  45
Met Ala Thr Ser Ser Arg Leu Val Ser Gly Leu Gly Phe Trp Glu Thr
    50                  55                  60
Tyr Phe Leu Arg Pro Ala Ser Ala Arg Ala Pro Ala Gly Ser Ile Ile
65                  70                  75                  80
Asp Leu Val Ser Ser Asn Ala Ser Leu Met Ala Ala Gln Val Ser Ser
                85                  90                  95
Val Glu Thr Lys Met Thr Ser Ser Ile Thr Ser Arg Ala Arg Arg Tyr
            100                 105                 110
Val Ser Ser Pro Thr Val Phe Thr Ala Ala Pro Ser Ala Asn Ser Pro
        115                 120                 125
Thr Ser Arg Arg Lys Thr Arg Asp Pro Ser Pro Asn Asp Arg Ala Met
    130                 135                 140
Ala Leu Ala Ser
145
```

<210> 29179
<211> 189
<212> PRT
<213> A.fumigatus

<400> 29179

```
Phe Ile Thr Asn Asp Gly Thr Thr Thr Gly Thr Leu Ser Glu Ile Arg
1               5                   10                  15
Arg Gln Tyr Ile Gln Asn Gly Lys Val Ile Ala Asn Ala Val Ser Ser
            20                  25                  30
Thr Gly Val Asn Ser Ile Thr Glu Asp Trp Cys Thr Ser Val Asp Gly
        35                  40                  45
Ser Ala Ala Thr Phe Gly Gly Leu Thr Thr Met Gly Lys Ala Leu Gly
    50                  55                  60
Arg Gly Met Val Leu Ile Phe Ser Ile Trp Asn Asp Ala Ser Gly Phe
65                  70                  75                  80
Met Asn Trp Leu Asp Ser Gly Asn Ala Gly Pro Cys Ser Ser Thr Glu
                85                  90                  95
Gly Asn Pro Asp Leu Ile Lys Ala Gln Asn Pro Thr Thr His Val Val
            100                 105                 110
Phe Ser Asn Ile Arg Trp Gly Asp Ile Gly Ser Thr Phe Lys Gly Ser
        115                 120                 125
Asp Gly Ser Val Thr Thr Thr Thr Ser Thr Thr Ser Thr Lys Thr Thr
    130                 135                 140
Thr Ser Thr Ala Pro Gly Pro Thr Gln Thr His Tyr Gly Gln Cys Gly
145                 150                 155                 160
Gly Gln Gly Trp Thr Gly Pro Thr Ala Cys Ala Ser Pro Tyr Thr Cys
                165                 170                 175
Gln Val Leu Asn Pro Trp Tyr Ser Gln Cys Leu Tyr Pro
            180                 185
```

<210> 29180
<211> 128
<212> PRT
<213> A.fumigatus

<400> 29180

```
Tyr Arg Val Glu Glu Val Glu Thr Pro Ala Leu Leu Asp Ala Trp Lys
1               5                  10                  15
Lys Thr Ile Ala Leu Ile Ala Ala Leu Gln Pro Val Lys Val Ile Pro
            20                  25                  30
Gly His Leu Glu Pro Gly Trp Glu Leu Asp Ala Gln Ala Asp Ile Ala
        35                  40                  45
His Thr Gln Lys Tyr Leu Asp Leu Phe Ala Glu Lys Val Thr Tyr Ala
    50                  55                  60
Pro Thr Lys Pro Gln Val Gln Glu Leu Tyr Asp Phe Phe Gln Gly Ala
65                  70                  75                  80
Phe Pro Gln Cys Gln Gln Asn Leu Asp Phe Phe Leu Gly His Leu Ser
                85                  90                  95
Asn Gln Phe Gly Glu Gly Gly Lys Val Trp Glu Glu Asn Arg His His
            100                 105                 110
Asp Val Gly Lys Arg Thr Ile Glu Gly Leu Thr Gly Tyr Trp Phe Lys
        115                 120                 125
```

<210> 29181
<211> 153
<212> PRT
<213> A.fumigatus

```
<400> 29181
Ser Ser Thr His Gly Gln Ser Leu Pro Gly Met Glu Asn Met Asn Ser
1               5                  10                  15
Leu Met Asp Tyr Asn Thr Lys Arg Lys Ser Gly Asp Pro Asp Ser Asp
            20                  25                  30
Asn Lys Val Ser Pro Ala Leu Lys Arg Arg Lys Val Phe Gly Pro Val
        35                  40                  45
Leu Pro Ser Ser Pro Asp Ser Glu Asp Thr Glu Thr Glu Arg Arg Ala
    50                  55                  60
Glu Gly Ala Arg Thr Val Glu Ser Thr Arg Thr Asp Gly Leu Asn Gln
65                  70                  75                  80
Glu Asp Glu Asp Gln Asp Gln Asp Glu Asp Glu Asp Asp Glu Ala Asp
                85                  90                  95
Asp Asp Tyr Gly Pro Ser Leu Pro Pro Leu Gly Gly Glu Val Thr Ala
            100                 105                 110
Asn Ser Asn Met Asp Lys Ile Tyr Asp Glu Ser His Ile Gln Pro Gly
        115                 120                 125
Lys Pro Asp Ala His Asn Asn Asn Ser Gln Arg Asp Ala Trp Met Arg
    130                 135                 140
Leu His His Glu Leu Glu Asn Pro Arg
145                 150
```

<210> 29182
<211> 97
<212> PRT
<213> A.fumigatus

```
<400> 29182
Arg Lys Ile Gly Leu Lys Tyr Ile Val Met Cys Ser Leu Leu Leu Ala
1               5                  10                  15
Ala Ser Val Cys Trp Thr Val Tyr Ser Ser Thr Leu Val Thr His Ile
            20                  25                  30
Asp Asn Ala Gln Gln Gly Gly Leu Cys Leu Lys Thr Ala Gln Val Val
        35                  40                  45
```

```
Lys Val Glu Leu Glu Gly Leu Cys Lys Phe Lys Lys Ser Val Asn Arg
    50                  55                  60
Arg Tyr Asp Val Ile Gly Ala Ala Asp Pro Pro Ile Pro Arg Thr Gly
65                  70                  75                  80
Gly Leu Ser Arg Arg Cys Pro Arg Arg His Cys Ile Glu Ser Asp Arg
                85                  90                  95
Ser
```

<210> 29183
<211> 98
<212> PRT
<213> A.fumigatus

<400> 29183

```
Arg Gly Ala Ser Glu Ile Trp Arg Asn Leu Arg Leu Trp Glu Ile Gln
1               5                   10                  15
Thr Ser Cys Lys Ala Asp Asn Asp Lys His Leu Asn Thr Ser Met Arg
            20                  25                  30
His Pro Ser His Arg Ser Glu Ile Ile Cys Lys Leu Ile Asp Asp Phe
        35                  40                  45
Phe Leu Asn Phe Asn Gly Arg Leu Ile Ser Phe Ala Leu Thr Tyr Lys
    50                  55                  60
Asp Ile Pro Trp Leu Pro Leu Arg Arg Thr Glu Phe Ala Ser Arg Thr
65                  70                  75                  80
Leu Asn Val Ile Phe Cys Ala Lys Val Pro Thr Pro Ala Pro Tyr Ile
                85                  90                  95
Arg Asn
```

<210> 29184
<211> 117
<212> PRT
<213> A.fumigatus

<400> 29184

```
Leu Leu Pro Lys Pro His Pro Cys Leu Asp Pro Ile Ala Val Tyr His
1               5                   10                  15
Ser Thr Met Ser Glu Pro Gly Pro Glu Ser Ile Pro Thr Ser Ala Asp
            20                  25                  30
Pro Arg Ser Lys Arg Pro Val Lys Arg Arg Ala Val Thr Pro Leu Ser
        35                  40                  45
Glu Gln Ala Ser Gln Ile Glu His Leu Phe Arg Asp Pro Asn Lys Glu
    50                  55                  60
Ile Lys Leu Pro Glu Pro Ser Lys Gln Arg Thr Ala Asp Ser Leu Ala
65                  70                  75                  80
Pro Pro Pro Glu Ile Val Ala Asn Val Gln Gly Ser Ser Ala Gly Ala
                85                  90                  95
Gly Ser Gly Glu Phe Pro Phe Tyr Lys Ala Ser Arg Lys Lys Gly Ile
            100                 105                 110
Arg Ser Ser Ala Pro
        115
```

<210> 29185
<211> 125
<212> PRT

<213> A.fumigatus

<400> 29185
Thr Val Tyr Leu Thr His Lys Leu His Ser His Ser Phe Leu Cys Pro
1 5 10 15
Val Arg His Pro Tyr Thr Pro Phe Pro His Val Ser Met Arg His His
20 25 30
Gly Leu Pro Leu Leu Pro Asn Pro Thr Gln Asp Glu Arg Asp Pro Leu
35 40 45
Arg Trp Pro Val Trp Leu Lys Arg Cys Ala Ile Val Thr Thr Ser Met
50 55 60
Thr Asn Phe Val Thr Asn Met Ala Gly Ala Gly Leu Ser Val Ala Val
65 70 75 80
Pro Glu Leu Ile Gln Glu Tyr His Lys Pro Glu Ser Ala Val Val Gln
85 90 95
Leu Leu Thr Val Gly Ser Pro Phe Asn Gln Ser Asp Tyr Ser Ser Leu
100 105 110
Leu Met Val Arg Arg Leu Gly Ser Ile Thr Ser Cys Phe
115 120 125

<210> 29186
<211> 117
<212> PRT
<213> A.fumigatus

<400> 29186
Ile Gln Arg Arg Arg Thr Lys Ile Asn Arg Arg Leu Asn Lys Met Ile
1 5 10 15
Pro Thr Thr Tyr Leu Leu Leu Ala Val Ser Ile Phe Leu Trp Leu Gln
20 25 30
Leu Leu Pro Ser Ile His Ala Ser Asn Thr Ala Gly Thr Thr Val Ile
35 40 45
Val Thr Val Thr Pro Thr Ile Ser His Pro Ala Ser Tyr Thr Ser Leu
50 55 60
Glu Ile Phe Lys Asp Thr Val Leu Ser Thr Ser Asn Ala Tyr Arg Arg
65 70 75 80
Glu His Asn Ala Ser His Leu Thr Trp Asn Glu Thr Leu Thr Lys Tyr
85 90 95
Ala Lys Arg Trp Ala Glu Gly Cys Lys Trp Lys His Ser Val Ser His
100 105 110
Ala Leu Leu Ile Arg
115

<210> 29187
<211> 178
<212> PRT
<213> A.fumigatus

<400> 29187
Gln Val His Val Ala Thr Glu Leu Ile Asn Lys Gly Gly Pro Tyr Gly
1 5 10 15
Glu Asn Leu Ala Phe Gly Tyr Gln Asp Pro Ala Ala Ala Val Ala Ala
20 25 30
Trp Gly Asp Glu Gly Gln Lys Tyr Asp Tyr Lys Leu Pro Thr Gly Phe
35 40 45
Ser Glu Glu Thr Gly His Phe Thr Gln Leu Val Trp Arg Ala Thr Arg

```
    50                  55                  60
Glu Val Gly Cys Ala Ala Phe Asn Cys Gly Tyr Gln Asn Gly Asn Asp
65                  70                  75                  80
Ala Lys Asn Lys Glu Gly Arg Tyr Thr Arg Ala Gln Gly Trp Tyr Val
                85                  90                  95
Val Cys Glu Tyr Ser Pro Ala Gly Asn Val Val Gly Asn Gln Asn Ala
            100                 105                 110
Phe Phe Arg Val Asn Val Gln Pro Thr Ser Thr Tyr Ser Gly Pro Glu
        115                 120                 125
Thr Ala Gly Ser Ala Thr Gly Thr Ser Ala Ser Ala Ser Gly Ser Ala
    130                 135                 140
Thr Ala Thr Ala Thr Ser Gly Val Glu Glu Leu Tyr Asp Gly Arg Leu
145                 150                 155                 160
Arg Asp Gln Tyr Gln Asn Ala Phe Val Gly Leu Ile Val Phe Ile Asn
                165                 170                 175
Leu Val
```

<210> 29188
<211> 137
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (6)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 29188
Asn Leu His Thr Phe Xaa Gly Gln Thr Phe Ser Glu Asn Pro Thr Asp
1               5                   10                  15
Lys Phe Lys Gln Phe Phe Trp Arg Pro Arg Pro Pro Thr Leu Leu Ser
            20                  25                  30
Lys Glu Glu Gln Lys Gln Val Arg Lys Asn Leu Arg Glu Tyr Ser Lys
        35                  40                  45
Glu Phe Asp Glu Glu Asp Arg Tyr Ala Val Asp Ile Ala Asn Thr Ala
    50                  55                  60
Val Val Glu Lys Arg Lys Arg Val Leu Asn Glu Trp Ile Ala Trp Ile
65                  70                  75                  80
Arg Arg Glu Lys Glu Leu Leu Ala Glu Glu Lys Asp Ala Tyr Gly Leu
                85                  90                  95
Pro Glu Glu Ala Asp Asp Pro Lys Leu Ala Lys Asp Ala Ala Ala Thr
            100                 105                 110
Thr Gln Glu Gln Gly Glu Thr Val Val Glu Glu Ile Val Glu Glu Ile
        115                 120                 125
Ile Glu Glu Ser Glu Glu Val Ile Gly
    130                 135
```

<210> 29189
<211> 329
<212> PRT
<213> A.fumigatus

```
<400> 29189
Thr Cys Leu Arg Tyr His Asn Ser Gly Arg Ser Asn Trp Thr Leu His
1               5                   10                  15
```

```
Gly Leu Thr Thr Arg Ala Ala Gln Ser Ile Gly Leu His Arg Asp Gly
            20                  25                  30
Arg His Phe Asn Leu Ser Pro Leu Glu Cys Glu Leu Arg Arg Arg Leu
        35                  40                  45
Trp Trp His Ile Val Thr Cys Asp Gln Arg Ala Ala Glu Asp His Gly
    50                  55                  60
Leu Ser Ile Ile Ala His Asn Glu Pro Cys Asp Thr Asn Leu Pro Ser
65                  70                  75                  80
Asn Leu Asp Asp Gln Asp Leu Ser Ala Thr Ala Thr Val Pro Pro Ala
                85                  90                  95
Pro Gln Pro Arg Trp Thr Glu Met Thr Phe Pro Leu Leu Thr Ile Gln
            100                 105                 110
Ile Asn Arg His Leu His Glu Ile Ser Arg Lys Thr Ser Gln Gly Val
        115                 120                 125
Ser Pro Asp Pro Leu Val Arg Glu Leu Lys Asp Tyr Ile Gln Arg Asn
    130                 135                 140
Tyr Leu Gln Tyr Gly Asp Ala Asn Ile Pro Ile Gln Gln Gln Gly Leu
145                 150                 155                 160
Val Leu Ala Asp Val Leu Thr Thr Lys Val Ala Val Tyr Val Arg Gln
                165                 170                 175
Lys Ala Leu Gln Ile His Ser Gln Gly Gln Ser Gln Cys Pro Pro Gln
            180                 185                 190
Glu Ser Ala Thr Ala Gln Glu Thr Leu Ala Met Ala Cys His Gly Leu
        195                 200                 205
Glu Arg Ala Leu Glu Leu Gln Thr Asn Asp Leu Leu Arg Gly Phe Arg
    210                 215                 220
Trp Leu Thr Ala Thr Tyr Thr Gln Tyr His Leu Leu Cys Tyr Ile Leu
225                 230                 235                 240
Trp His Leu Cys Val Tyr Pro Ala Ser Val His Val Glu Arg Ala Trp
                245                 250                 255
Arg Ser Val Glu Ala Ile Phe Glu Val Val Glu Arg Asp Pro Thr Trp
            260                 265                 270
Pro Asp Pro Gly Pro Lys Trp Ala Val Met Ser Gln Leu Arg Ala Lys
        275                 280                 285
Ala Met Arg Ala Arg Glu Gly Leu Thr Asn Arg Gln Ala Asp Val Gln
    290                 295                 300
Glu Lys Gly Pro Glu Asn Val Leu Asp Trp Gly Asn Trp Asp Leu Glu
305                 310                 315                 320
Leu Phe Gly Phe Gly Glu Trp Thr Ile
                325
```

<210> 29190
<211> 68
<212> PRT
<213> A.fumigatus

<400> 29190

```
Tyr Phe Arg Phe Ser Arg Tyr Glu Thr Arg Ile Trp Met Ser Tyr Thr
1               5                   10                  15
Trp Leu Ser Ser Thr Ala Thr Asn Pro Met Pro Thr Ser Ser Ile Ile
            20                  25                  30
Pro Glu Asn Ser Phe Ile Ser Val Arg Gly Ala Ala Thr Asn Phe Cys
        35                  40                  45
Pro Trp Asn Cys Cys Leu Arg Arg Arg Arg Ala Ile Asp Met Asp Pro
    50                  55                  60
Arg Ser Ala Arg
```

65

<210> 29191
<211> 604
<212> PRT
<213> A.fumigatus

<400> 29191
Ser Gly Leu Ser Ser Ala Asn Glu Tyr Ile Ile Leu Pro Gln Ser Pro
1 5 10 15
Arg His Ser Ser Glu Gly Leu Ser Glu Lys Leu Arg Arg Arg Leu Ser
20 25 30
Arg Glu Ser Lys Arg Leu Asn Val Val Ser Arg Arg Ser Asp Arg Arg
35 40 45
Ser Gly Thr Ser Leu Phe Ser Ile Ser Ser Lys Ser Ala Lys Tyr Asn
50 55 60
Gly Ala Val Val Thr Pro His Glu Phe Gly Ser Gly Leu Met Ser Glu
65 70 75 80
Arg Gly Tyr Asp Ser Asp Ala Gln Phe Ile Ser Thr Pro Thr His Ile
85 90 95
Ala Asp Asn Val Lys Ala Ala Ala Ser Ile Gly Arg Glu Gly Val Leu
100 105 110
Pro Ala Gln Pro Tyr Pro Asn Glu Gly Asn Ser Phe Leu Ala Lys Asp
115 120 125
Gly Lys Cys Pro Val Tyr Gln His Thr Glu Val Ser Leu Ser Ser Pro
130 135 140
Glu His Glu Ser Trp Ser Pro Gln Ala Met His Gly Phe Phe Lys Ser
145 150 155 160
His Glu Pro Asn Val Gln Ser Pro Lys Ala Arg Gly Ser Pro Arg Pro
165 170 175
Ser Ala Ser Leu Asn Asn Arg Ala Ser Ser Gly Glu Asn Asn Ala Asn
180 185 190
Cys Gly Leu Val Pro Ala Ala Ser Ala Ser Ala Ala Ser Leu Asn Ile
195 200 205
Phe Glu Gly Lys Asp Ile Ile Thr Pro Thr Leu Gln Glu Gln Ser Gly
210 215 220
Ser Pro Gly Arg Gly Ser Gly Thr Leu Leu His Thr Phe Asn Leu Val
225 230 235 240
Ser Pro Ser Thr Glu Arg Tyr Ser Glu Leu Leu Ile Thr Lys Arg Arg
245 250 255
Gln Arg His Pro Thr Cys Glu Asp Gln Ser Ile His Leu Ala Asp Leu
260 265 270
Gly Ile Ser Lys Met Leu Ala Ser Ala Ser Thr Ser Pro Val Ile Leu
275 280 285
Ser Pro Ser Gln Ser Ser Tyr Glu Asp Pro His Ser Ser Thr Ser Gly
290 295 300
Ile Gly Thr Thr Gln Tyr Gln Gly Gly Gly Ile Gly Arg Pro Ala Arg
305 310 315 320
Ile Leu Thr Pro Val Trp Asp Gly Gly Val Leu Lys Leu Gly Val Gln
325 330 335
Asp Ala Arg Gln Ala Ser Ser Cys Tyr Ser Pro Arg Thr Ser Ser Ala
340 345 350
Ser Ala Asp Val Pro Ala Asn Leu Glu Lys Arg Glu Val Ser Cys Ser
355 360 365
Arg Thr Pro Phe Ala Ala Leu Ser Ser Asn Ser Ser Ser Arg Ser Val
370 375 380

```
Ser Leu Leu Glu Lys His Val Pro Ser Leu Asp Cys Gly Ser Leu Gly
385                 390                 395                 400
Asn Thr Asp Ala Leu Lys Ser Arg Phe Thr Glu Gln Phe Asp Leu Asn
                405                 410                 415
Arg Ser Ile Thr Ser Leu Gly Ser Val Ala Met Arg Ser Gly Val Thr
            420                 425                 430
Ser Pro Arg Lys Val Ser Ile Gly Trp Met Ser Gly Gly Arg Arg Leu
        435                 440                 445
Gly Tyr Gly Tyr Thr Val Val Asp Gly Asp Thr Tyr Glu Thr Ala Glu
    450                 455                 460
Lys Asp Ser Gly Lys Ala Ser Ser Thr Arg Trp Glu Ser Pro Asn Lys
465                 470                 475                 480
Pro Pro Ile Ala His Ile Ile Asp Arg Leu Arg Val Ser Arg Trp Ser
                485                 490                 495
Gly Ala Thr Ala Leu Ile Arg Pro Ser Asn Ala Ser Asp Ser Ala Ser
            500                 505                 510
Cys Asp Ser Val Val Asn Ser Arg Ser Trp Arg Arg Phe Ala Val Arg
        515                 520                 525
Arg Lys Asn Leu Ala Asp Ala Gln Met Ser Asp Asn Arg Arg Val Pro
    530                 535                 540
Trp Ser Gln Lys Pro Thr Asn Cys Ser Ser Asp Cys Ala Gly Glu Arg
545                 550                 555                 560
Gln Ala Ser Gly His Tyr Ala Gln Ala Phe Asn Glu Ser Leu Arg Asp
                565                 570                 575
Ser Ser Met Glu Ser Ala Arg Glu Leu Gln Ser Ser His Ser Leu Ser
            580                 585                 590
Ser Pro Ser Gly Gly Arg Arg Ile Arg Ala Asn Val
        595                 600
```

<210> 29192
<211> 419
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (37),(74),(77)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29192

```
Arg Cys Ser Val Pro Gly Ile Pro Pro Ser Gln Arg Phe Arg Lys Gly
1               5                   10                  15
Trp Thr Phe Lys Gly Gln Pro Arg Phe Ser Gln Thr Arg Asp Pro Gly
            20                  25                  30
Gln Ala Ser Cys Xaa Arg Arg Pro Asp Arg Ala Ile Phe Glu Pro Trp
        35                  40                  45
Val Ser Arg Ala His Glu Gly Val Asp Tyr Glu Val Gln Arg Val Ala
    50                  55                  60
Ile Lys Arg Lys Trp Asp Arg Leu Leu Xaa Lys Ser Xaa Gly Gln Gln
65                  70                  75                  80
Val Thr Val Asn Tyr Arg Asp His Thr Gln Tyr Ala Thr Phe Asp Thr
                85                  90                  95
Ile Gly Ala Leu Ala Phe Gly Arg Glu Phe Asn Ala Leu Thr Asn Asp
            100                 105                 110
Asp Arg Thr Val Ile Arg Trp Ile Glu Ala Thr Gly Leu Tyr Leu Gly
        115                 120                 125
```

```
Ile Arg Lys Asn Phe Pro Leu Leu Lys Leu Trp Pro Phe Ser Arg Val
    130                 135                 140
Leu Arg Gln Tyr Arg Glu Arg Tyr Glu Arg Phe Ile Ala Tyr Ser Lys
145                 150                 155                 160
Glu Ser Val Thr Arg Arg Lys Asn Leu Leu Ser Thr Val Gly Glu Arg
                165                 170                 175
Pro Met Asp Leu Leu Gln Ala Phe Ile Asp Ala Glu Asp Pro Glu Asn
            180                 185                 190
Pro His Val Lys Met Thr Ala Asp Glu Val Met Thr Glu Ser Ile Ala
        195                 200                 205
Met Gln Leu Ala Gly Ser Glu Ser Thr Ser Phe Val Thr Ser Trp Val
    210                 215                 220
Ile His Leu Leu Thr Leu Tyr Pro Gln His Leu Ala Lys Val Thr Glu
225                 230                 235                 240
Glu Ile Arg Ser Gln Phe Ser Pro Ser His Leu Ile Thr Phe Ala Glu
                245                 250                 255
Cys Arg Asp Lys Leu Pro Tyr Leu Glu Ala Cys Val Tyr Glu Thr Leu
            260                 265                 270
Arg Tyr Ser Pro Ile Thr Ser Gly Phe Leu Pro Arg Ile Ser Tyr Thr
        275                 280                 285
Lys Gly Leu Thr Ile Gln Gly His Tyr Ile Pro Pro Gly Val Glu Ile
    290                 295                 300
Ala Ile Asn Leu His Gly Ala His Ile Asn Lys Asp Val Trp Thr Asn
305                 310                 315                 320
Pro His Leu Tyr Asp Pro Thr Arg Phe Leu Gly Asp Asp Gln Ala Lys
                325                 330                 335
Arg Asn Val Phe Ala Phe Ser Tyr Gly His Arg Asn Cys Ile Gly Arg
            340                 345                 350
Asn Leu Ala Met Met Glu Ile Met Ile Ile Ile Ala Asn Ile Leu Lys
        355                 360                 365
Glu Tyr Asp Ile Ala Leu Pro Glu Asp Ser Val His Gly Pro Trp Asn
    370                 375                 380
Val Asp Ala Leu Gly Arg Pro Arg Ile Met Pro Thr Arg Ser Ala Leu
385                 390                 395                 400
Phe Thr Thr Pro Lys Tyr Pro Glu Arg Asp Cys Arg Leu Val Val Ser
                405                 410                 415
Arg Arg Gln
```

<210> 29193
<211> 407
<212> PRT
<213> A.fumigatus

<400> 29193

```
Arg Ser Ser Asn Ser Asn Leu His Lys Pro Leu Arg Ser Ser Ser Leu
1               5                   10                  15
Cys Arg Ser Ser Arg Leu Ile Ser Lys Glu Thr Asn Leu Arg Val Ser
            20                  25                  30
Leu Asp Glu Gly Glu Tyr Glu Ala Tyr Pro Asn Glu Tyr Lys Ile Ala
        35                  40                  45
Ala Lys Asn Thr Asp Glu Tyr Asn Ser Glu Arg Ile Gly Leu Val Phe
    50                  55                  60
Gly Ile Ser Ala Val Leu Tyr His Ser Pro Thr Gln Ser Tyr Ser Lys
65                  70                  75                  80
Ser Ala Ala Glu Asn Lys Met Glu Gly Leu Asn Ile Ser Asn Gln Val
```

```
                85                  90                  95
Phe Asp Leu Ser Pro Leu Asp Ile Ile Pro Ser His Leu Tyr Ile Thr
            100                 105                 110
Asn Ala Phe Phe Tyr Glu Asn Lys Thr Pro Gly Pro Arg Pro Phe Met
        115                 120                 125
Gln Pro Ser Leu Leu Lys Glu Ser Leu Tyr Arg Ala Leu Gln Asn Phe
    130                 135                 140
Pro Ile Leu Leu Gly His Val Arg Arg His Arg Arg Asn Ala Met Gln
145                 150                 155                 160
Ile Val Val Asp Cys Asp Asn Leu Asn Leu Pro Leu Tyr Glu Glu Gln
                165                 170                 175
Thr His Pro Gln Leu His Phe Arg His Leu Lys Asp His Gln Phe His
            180                 185                 190
Arg Asp Val Trp Pro Lys Asp Ala Asn Val Ile Asp Pro Arg Ala Ser
        195                 200                 205
Pro Asn Gly Glu Leu Leu Gln Val His Ile His Arg Leu Ala Glu Glu
    210                 215                 220
Ser Gly Val Val Met Val Val Arg Ile Ala His Cys Ala Val Asp Ala
225                 230                 235                 240
Lys Gly Tyr Val Asp Phe Met Gln Ser Trp Gly Trp Phe Ala Arg Asn
                245                 250                 255
His Ser His Pro Glu Gly Asp Ser Trp Pro Arg Leu Leu Ala Asp Arg
            260                 265                 270
Arg Val Met Tyr Glu Tyr Leu Pro Pro Asp Val Gln Pro Ala Ala Pro
        275                 280                 285
Arg Ser Met Trp His Pro Ala Ser Trp Leu Leu Arg Leu Leu Ser Thr
    290                 295                 300
Leu Val Val Leu Phe Leu Gly Leu Tyr Lys Arg Leu Leu Gly Asp Lys
305                 310                 315                 320
Thr Pro Pro Asp Glu Ile Glu Ser His Leu Phe Ser Val Pro Pro His
                325                 330                 335
Thr Leu Asp Arg Leu Arg Tyr Ala Ala Thr Cys Ile Asp Ser Ser Ser
            340                 345                 350
Arg Val Ser Asp His Asp Ile Ile Ser Ala Leu Phe Thr Leu Ala Phe
        355                 360                 365
Ala His Thr Lys Leu Leu Leu Thr Cys Arg Thr Gln Thr Val Asn Asp
    370                 375                 380
Lys Arg Arg Leu Arg Leu Ser Pro Pro His Trp Cys Thr Glu His Leu
385                 390                 395                 400
His Met Gln Leu Arg Asn Arg
                405
```

<210> 29194
<211> 91
<212> PRT
<213> A.fumigatus

<400> 29194

```
Ser Asn Leu Gly Tyr Cys Leu Thr Pro Arg Thr Met Lys Leu Ser Val
1               5                   10                  15
Ala Leu Leu Ser Cys Ala Ser Leu Leu Pro Gly Ala Leu Ser Phe Ser
            20                  25                  30
Asp Ala Cys Arg Gln Gly Leu Leu Tyr Cys Gly Ser Thr Leu Glu Lys
        35                  40                  45
Tyr Asn Gly Thr Cys Thr Pro Val Asp Ser Gln Gly Lys Leu Ser Cys
    50                  55                  60
```

```
Pro Leu Ala Lys Ser Thr Leu Asn Arg Ile Leu Ile Asn Gly Ala Pro
65                  70                  75                  80
Ile Gly His Gln Arg Gln Ser Gly Arg Leu Ser
                85                  90
```

<210> 29195
<211> 283
<212> PRT
<213> A.fumigatus

<400> 29195

```
Pro Ile Cys Lys Met Arg Tyr Pro Phe Asp Gln Gly Asp Gln Glu Thr
1               5                  10                  15
Trp Thr Gln Val Gly Gln Leu Leu Val Ala Thr Gly Leu Ser Ser Ile
            20                  25                  30
Ile Gly Ile Glu Arg Glu Trp Arg His Lys Ser Ala Gly Leu Arg Thr
        35                  40                  45
Asn Thr Leu Val Gly Ile Gly Ala Ala Leu Phe Met Leu Ile Ser Lys
    50                  55                  60
Leu Gly Ser Phe Asp Val Leu Ala Arg Gly Leu Val Val Leu Asp Pro
65                  70                  75                  80
Ser Arg Ile Ala Ala Gln Ile Val Ser Gly Ile Gly Phe Ile Gly Gly
                85                  90                  95
Gly Ile Ile Phe Lys Gln Arg Asn Glu Ile Arg Gly Leu Thr Thr Ala
            100                 105                 110
Ala Gly Val Trp Leu Ser Ala Ala Val Gly Ala Ala Cys Gly Ala Gly
        115                 120                 125
Leu Leu Arg Leu Ala Ser Val Ala Thr Ala Leu Tyr Phe Val Ala Val
    130                 135                 140
Leu Val Tyr Pro Thr Val Leu Arg Val Leu Arg Gln Tyr Leu Asp Arg
145                 150                 155                 160
Lys Asp Thr Thr Glu Ile Ser Pro Val Ile Arg Tyr Arg Ile Gly Ala
                165                 170                 175
Asp Gly Leu Gln Thr Leu Leu Met Asn Ile Met Gln Ala Gly Phe Arg
            180                 185                 190
Val Arg Met Ile Thr Arg Leu Glu Glu Val Phe Val Asn Gln Ala Ala
        195                 200                 205
Ser Lys Gly Pro Ala Gly Gly Asp Gly Tyr Gln Ser Ile Ser Ser Ile
    210                 215                 220
Ser Arg Ser Pro Met Thr Pro Ala Ala Gln Ile Glu Arg Leu Glu Arg
225                 230                 235                 240
Ile Phe Asp Ile Arg Leu Thr Val Asn Gly Thr Arg Gly Pro Asp Ser
                245                 250                 255
Leu Met His Ala Leu Ser Gln Leu Glu Ser Ile Ile Ser Val Ser Ile
            260                 265                 270
Glu Asp Asp Glu Gly Glu Phe Val Gln Arg Val
        275                 280
```

<210> 29196
<211> 126
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (119),(123)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29196

```
Glu Ser Glu Ile Arg Met Ala Ser Gln Gln Leu Ser Pro Val Pro Lys
1               5                  10                  15
Pro Leu Ala Leu Phe Asp Arg Phe Ile Ala Gln Gln Thr Glu Thr Met
            20                  25                  30
Ala Leu Lys Glu Lys Val Leu Ser Ile Ser Gly Asp Ser Phe Asp Val
        35                  40                  45
Lys Leu Ala Asn Gly Gln Pro Ile Phe Gln Ile Lys Ala Lys His Met
    50                  55                  60
Ser Leu Ser Gly Arg Lys Ser Val Leu Asp Met Ala Gly Asn His Leu
65                  70                  75                  80
Phe Asp Ile Val Lys Glu His Leu His Ile His Thr Thr Phe Ala Ala
                85                  90                  95
Val Asp Pro His Gly Lys Lys Leu Leu Glu Val Lys Ser Ser Phe Ser
            100                 105                 110
Trp Ser Cys Val Phe Tyr Xaa Thr Gly Asp Xaa Asp Gln Ala
        115                 120                 125
```

<210> 29197
<211> 139
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (19)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29197

```
Leu Gly Thr Gly Glu Ser Asn Cys Pro Arg Tyr Ile Leu Asp Ser Arg
1               5                  10                  15
Pro Ile Xaa Thr Val Tyr Glu Leu Gln Gly Val Ala Leu Ile Pro Val
            20                  25                  30
Asn Arg Arg Ser Ser Pro Arg Ser Met Ala Asp Glu His Ser His Ser
        35                  40                  45
Arg Val Glu Leu Tyr Asp Ser Gly Leu Thr Asp Pro Ser Asp Ser Glu
    50                  55                  60
Ile Tyr Ser Ala Asn His Glu Val Ser Ser Pro Met Ser Ala Cys Ser
65                  70                  75                  80
Ser Pro Leu Ile Leu Tyr Lys Pro Pro Ser Ile Trp Gly Ile Leu Arg
                85                  90                  95
Gly Ala Ala Ile Asn Leu Ile Leu Pro Phe Val Asn Gly Leu Met Leu
            100                 105                 110
Gly Phe Gly Glu Leu Phe Ala His Glu Ala Ala Phe Arg Leu Gly Trp
        115                 120                 125
Ser Asn Thr Lys Val Arg Ser Met Lys Ser Leu
    130                 135
```

<210> 29198
<211> 203
<212> PRT
<213> A.fumigatus

<400> 29198

```
Leu Ala Ile Leu Gln Ile Ser Ser Phe Arg Pro Gln Ser Ser Arg Phe
1               5                  10                  15
Pro Val Arg Tyr Gly Gly Pro Thr Gln Thr Leu Ser Gly Lys Ile Ser
            20                  25                  30
Trp Lys Pro Ala Ser Ser Ile Pro Gly Val Met Ser Ala Arg Phe Asn
        35                  40                  45
Ser Thr Ser Ser Val Thr Asp Ala Ala Ala Ser Glu His Leu Ser Gly
    50                  55                  60
Ala Pro Thr Asp Thr Gly Val Pro Asp Leu Ser Asp Leu Ser Ala Ala
65                  70                  75                  80
Asp Leu Ser Ser Ile Pro Glu His Ile Gly Tyr Leu Lys Asp Leu Gly
                85                  90                  95
Leu Asp Tyr Gly Trp Gly Pro Phe Ser Ile Ile Gln Phe Ser Leu Ser
            100                 105                 110
Ile Ser Thr Tyr Gly Glu Gly Leu Pro Trp Trp Ala Ser Val Val Gly
        115                 120                 125
Thr Gly Ile Leu Leu Pro Ile Ala Leu Leu Tyr Pro Thr Leu Gly Ala
    130                 135                 140
Val Asp Thr Ser Thr Lys Met Leu Asn Ile Lys Pro Val Thr Glu Pro
145                 150                 155                 160
Phe Ala Gln Gln Ile Ile Ile Leu Gly Arg Lys Ala Ile Gln Ile Glu
                165                 170                 175
Met Leu Lys Leu Pro Thr Arg Asn Ser Glu Ala Ser Pro Gly Ala Arg
            180                 185                 190
Tyr Arg Gly Met Glu Ser Ile Asn Ser His Ala
        195                 200
```

<210> 29199
<211> 79
<212> PRT
<213> A.fumigatus

```
<400> 29199
Ser Arg Lys Leu Tyr Leu Leu His Leu Thr Pro Lys Gly Tyr Val Ser
1               5                  10                  15
Lys Asn Ser Asn Leu Ile Asn Pro Arg Thr Pro Ala Ser Arg Asp Tyr
            20                  25                  30
Leu Gln Ile Leu Gly Thr Phe Leu Phe Pro Asn Ala Asn Asn Phe Ile
        35                  40                  45
Asn Leu Ile Phe Phe Val Tyr Thr Leu Leu Leu Gly Pro Ile Pro Tyr
    50                  55                  60
Gly Phe Ser Asn Asn Ser Asn His Pro Cys Pro Arg Gly Gly Thr
65                  70                  75
```

<210> 29200
<211> 116
<212> PRT
<213> A.fumigatus

```
<400> 29200
Ser Leu Pro Arg Arg Asn Asn Arg Ile Gln Arg Phe Asn Val Pro Cys
1               5                  10                  15
Ser Pro Thr Pro Pro Thr Ser Ser Ser Ser Arg Arg Ser Phe Pro Pro
            20                  25                  30
Ser Ser Ala Gly Pro Cys Arg Cys Ala Pro His Leu Cys Thr Thr Gly
        35                  40                  45
```

```
Thr Pro Pro Ser His Gly Glu Pro Gly Ala Ser Pro Pro Arg Gln Val
    50                  55                  60
Pro Ser Ser His Thr Pro Thr Pro Gly Arg Arg His Cys Ala Ser Ser
65                  70                  75                  80
Pro Glu Ala Arg Ser Lys Arg Arg Arg Tyr Gln Arg Pro Ala Ala Arg
                85                  90                  95
Ala Ser Gly Gly Arg Cys His Gly Ser Gly Arg Arg Trp Ser Arg Pro
            100                 105                 110
Trp Arg Arg Arg
        115
```

<210> 29201
<211> 310
<212> PRT
<213> A.fumigatus

<400> 29201

```
Ala Pro Ser Ala Arg Arg Gln His Arg Arg Ala Asp Arg Cys Pro Gly
1               5                   10                  15
Glu Thr Ile Glu Tyr Arg Gly Leu Met Ser Leu Ala His Gln Leu Leu
            20                  25                  30
Gln Leu Leu Pro Arg Leu Ala Asp Leu Phe Leu His His Leu Pro Gly
        35                  40                  45
His Ala Ala Val Arg His Thr Cys Val Pro Gln Val Leu Arg Pro Leu
    50                  55                  60
Thr Glu Ser Gln Val Leu Leu Arg His Asp Arg Tyr Leu Leu Leu Ile
65                  70                  75                  80
Leu Pro His Gln Val Gly Asp Ile Ala His Arg His Arg Lys Gln Gly
                85                  90                  95
Pro Ser Gly Asp Asp Thr Lys Gly Gln Arg Arg Glu Arg Ala Glu Glu
            100                 105                 110
Asp Ala Thr Val Pro Gly Asp Asp Gly Ala Gly His Gly Gly Asp Asp
        115                 120                 125
Asp Val Asp Ala Ala Gly Glu Glu Ala Leu Ala Gly Phe Gly Arg Gly
    130                 135                 140
Gly Gln Arg Gly Asp Gly Val Gly Glu Gly Val Leu Asp Val Gln Gly
145                 150                 155                 160
Ala Gly Glu Glu Val Val Glu Ala Val Leu Asn Gly Glu Gly Val Val
                165                 170                 175
Val Glu Glu Glu Thr Gly Leu Ala Asp Leu Gly Arg Gln Asp Val Ser
            180                 185                 190
Trp Gly Arg Arg Gly Gly Gly Gly Arg Gly Ser Leu Ser Ala Gly Gly
        195                 200                 205
Arg Glu Leu Asp Gly Gly Pro Gly Arg Phe Gly Asp Val Gly Trp Glu
    210                 215                 220
Val Ile Ile Asp Gly Phe Phe Leu Lys Thr Leu Val Lys Ser Lys Ile
225                 230                 235                 240
Cys Arg Arg Leu Trp Tyr Arg Asn Ser Leu Glu His Thr Leu Pro Arg
                245                 250                 255
Gly Ser Ser Ala Tyr Ala Val Arg Leu Gly Tyr Arg Ala Thr Pro Pro
            260                 265                 270
Ala Arg Arg Val Ala Ala Ile Gly Ala Thr Ala Arg Trp Thr Ser Gln
        275                 280                 285
Gln Ser Ser Lys Arg Glu Thr Glu Lys Gly His Ser Pro Ala Gly Thr
    290                 295                 300
Leu Ala Gly Met Thr Ser
```

305 310

<210> 29202
<211> 288
<212> PRT
<213> A.fumigatus

<400> 29202
Ser Ile Asp Asp Ser Leu Gln Val Phe Leu Pro Gly Arg Leu Ala Met
1 5 10 15
Lys Asp Gln Leu Leu Val Pro Leu Arg Arg Arg Pro Trp Thr Cys Gln
20 25 30
Lys Cys Leu Gln Arg Leu Gln Leu Pro Arg His Gln Thr Arg Arg Ser
35 40 45
Phe Glu Thr Ala Ala Ser Pro Phe Pro Arg Pro Leu Asp Ser Leu Pro
50 55 60
Ala Asp Tyr Ala Arg Thr Lys Thr Val Asp Asp Asp Thr Leu Arg Arg
65 70 75 80
Val Phe Asp Ser Gln Gln Phe Trp Arg Glu Phe Ser Gln Gln Arg Ala
85 90 95
Ala Gln Pro Lys Leu Thr Gly Leu Val Gln Asn Gln Tyr Leu Thr Ser
100 105 110
Pro Asp Gly Phe Arg Thr Phe Ala Asn Val Ser Leu Gln Lys Cys Gln
115 120 125
Ala Ile Val Ser Lys Val Leu Ala Ala Ser Thr Leu Glu Glu Tyr Arg
130 135 140
Thr Met Ala Arg Asp Leu Asp Arg Leu Ser Asp Leu Leu Cys Arg Val
145 150 155 160
Ile Asp Leu Ser Asp Phe Ile Arg Val Ile His Pro Asp Pro Gln Val
165 170 175
Gln Glu Ala Ala Thr Leu Ala Tyr Ala Leu Met Phe Glu Tyr Met Asn
180 185 190
Val Leu Asn Thr Thr Thr Gly Leu Asn Asp Gln Leu Asn Lys Gly Gly
195 200 205
Ala Ile Pro Asp Val Thr Ser Gln Trp Ser Asn Lys Glu Asn Ile Val
210 215 220
Gly Gln Ile Leu Ile Asn Asp Phe Pro Asn Ser Ala Asn His Met Pro
225 230 235 240
Pro His Glu Arg Ala Arg Phe Val Lys Leu Phe Asn Glu Phe Pro His
245 250 255
Leu Gly Ser Ser Leu Val Asn Gly Ala Glu Pro Gly Gln Phe Pro Val
260 265 270
Gln Cys Trp Arg Pro Lys Ala Trp Arg Gly Leu Tyr Ser Ile Leu Met
275 280 285

<210> 29203
<211> 68
<212> PRT
<213> A.fumigatus

<400> 29203
Ala Ala Asp Asp Asp Gly Glu Asp Arg Ala Ser Arg Thr Ala Ala Lys
1 5 10 15
Arg Lys Arg Leu Gly Ser Ser Asn Val Asn Gln Pro Arg Tyr Phe Phe
20 25 30
Leu Phe Ile Ser Thr Thr Thr Arg Phe Leu Ser Leu Ser Ser Pro Pro

```
        35                  40                  45
Pro Leu Ala Leu Ile Asp Leu Ser Pro Ser Gly Cys His Ser Gly Gln
    50                  55                  60
Cys Ser Ser Arg
65

<210> 29204
<211> 210
<212> PRT
<213> A.fumigatus

<400> 29204
Arg Leu Gln Lys Lys Pro Ile Tyr Asp Asp Leu Pro Thr Asp Ile Pro
1               5                   10                  15
Glu Pro Thr Arg Ala Pro Val Glu Leu Pro Pro Thr Arg Arg Gln Thr
            20                  25                  30
Ser Ser Ser Ser Ser Ser Ser Pro Thr Pro Thr Asp Ile Leu Thr Ala
        35                  40                  45
Gln Val Arg Gln Ala Arg Leu Phe Leu Tyr Asn His Ser Leu Ala Val
    50                  55                  60
Glu Asn Ser Phe Asn Asp Phe Leu Ser Arg Ala Leu His Ile Glu Asn
65                  70                  75                  80
Ala Phe Thr Asn Thr Val Ala Ser Leu Ala Pro Ser Pro Glu Ser Gly
                85                  90                  95
Glu Arg Leu Leu Pro Gly Gly Val Tyr Val Ile Val Ala Ala Met Ala
            100                 105                 110
Gly Ser Ile Val Ser Arg Asn Arg Gly Ile Phe Leu Arg Ser Leu Ser
        115                 120                 125
Pro Leu Ala Phe Gly Ile Val Ala Ala Trp Thr Leu Leu Pro Val Thr
    130                 135                 140
Met Arg Asn Val Ser Asp Leu Val Trp Glu Tyr Glu Lys Lys Val Pro
145                 150                 155                 160
Val Val Ala Glu Lys His Leu Ala Leu Arg Glu Arg Ala Glu Tyr Leu
                165                 170                 175
Trp Tyr Thr Gly Val Ala His Ser Gly Met Ala Arg Gln Met Met Glu
            180                 185                 190
Glu Lys Ile Gly Glu Thr Arg Lys Lys Leu Glu Glu Leu Val Ser Lys
        195                 200                 205
Gly His
    210

<210> 29205
<211> 269
<212> PRT
<213> A.fumigatus

<400> 29205
Arg Gly Ser Phe Gln Pro Pro Trp Leu Lys Thr Thr Thr Pro Ser His
1               5                   10                  15
His Pro Ser Thr His Thr Leu Leu Pro Thr Gly Gly Glu Gly Gly Lys
            20                  25                  30
Pro Thr His Thr Gly Gly Thr Gly Thr Gly Thr Gly Thr Gly Thr Gly
        35                  40                  45
His Pro Gln Pro Thr Thr Thr Val Val Pro Gly Gly Asp Ser Gly Ser
    50                  55                  60
Val Ser Thr Val Thr Glu Thr Ile Thr Lys Thr Thr Phe Gln Pro Cys
```

```
65                  70                  75                  80
Ser Thr Pro Ile His Thr Gln Ser Gly Thr Thr Tyr Tyr Ser Thr Trp
                85                  90                  95
Leu Thr Thr Ser Thr Tyr Glu Thr Thr Thr Cys Tyr Thr Thr His Ile
            100                 105                 110
Pro Thr Thr Ile Pro Ala Ser Pro Gln Thr Thr Thr Val Thr Leu Pro
        115                 120                 125
Gly Pro Gly Asn Ser Cys Pro Pro Pro Ser Thr Val Thr Val Thr Val
    130                 135                 140
Thr Val Ser Ser Gly Gly Asp Thr Gly Pro His Thr Gln Ala Pro Ala
145                 150                 155                 160
Pro Gly Gly Asp Ser Gly Ser Gly Pro Asn Pro Gly Thr Gly Thr Gly
                165                 170                 175
Thr Gly Ser Gly Pro Cys Lys His Cys Glu Thr Ile Thr Tyr Thr Asn
            180                 185                 190
Thr Tyr Gly Tyr Thr Thr Thr Ile Val Ile Pro Pro Ile Ser Glu Pro
        195                 200                 205
Thr Ser Ser Ala Thr Thr Arg Thr Thr Gly Thr Gly Thr Thr Thr Thr
    210                 215                 220
Lys Pro Thr Pro Pro Val Gly Thr Gly Thr Ala Pro Gly His Ser His
225                 230                 235                 240
Thr Arg Gly Ser Pro Thr Gly Thr Gly Val Gly Gln Ala Pro Thr Glu
                245                 250                 255
Thr Lys Thr Trp His Phe Glu Arg Arg Ile Val Arg Val
            260                 265
```

<210> 29206
<211> 139
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (132)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29206

```
Phe Pro Pro Glu Ile Asp Cys Thr Met Asn Ala Ala Asp His Glu Ile
1               5                   10                  15
Glu Arg Ala Glu Glu Asp Ala Ile Pro Val Ser Ser Arg Thr Ser Leu
            20                  25                  30
Asp Ser Ser Leu Ser Ser Ser Ser Asp Gly Ser Gln Pro Arg Leu Arg
        35                  40                  45
Thr Met Tyr Ser Arg Arg Thr Glu Thr Asp Leu Glu Arg Tyr Gln Thr
    50                  55                  60
Ser Ser Gln Val Ile Asp Arg Ile Glu Thr Gln Arg Leu Gln His Ala
65                  70                  75                  80
Leu Thr Val Gly Glu Ser Ile Lys Thr Gln Ser Arg Ser Ser Gly Arg
                85                  90                  95
Gly Pro Leu Pro Ala Phe Gly Ala Gly Lys Pro Tyr Pro Pro His Leu
            100                 105                 110
Pro Asn Arg Glu Lys Tyr Val Val Glu Phe Asp Gly Glu Asp Glu Ser
        115                 120                 125
Leu Phe Pro Xaa Lys Trp Ser Thr Arg Arg Lys
    130                 135
```

<210> 29207
<211> 232
<212> PRT
<213> A.fumigatus

<400> 29207
Val Ile Pro Thr Ser Gly Leu Ala Met Ala Ala Arg Leu Lys Val Leu
1 5 10 15
Gly Met Glu Asn Leu Ile Ile Glu Arg Ser Glu Glu Val Gly Asp Val
20 25 30
Trp Lys Asn Arg Tyr Glu Tyr Leu Ser Leu His Phe Pro His Trp Pro
35 40 45
Asp Ala Leu Pro Tyr Phe Lys Tyr Pro Gln His Trp Pro Thr Tyr Thr
50 55 60
Pro Ala Gln Lys Gln Gly Leu Tyr Met Lys Trp Tyr Ala Ser Ala Leu
65 70 75 80
Glu Leu Asn Val Trp Thr Lys Ser Glu Val Val Lys Ala Glu Gln Asp
85 90 95
Ala Glu Gly Arg Trp Thr Val Val Ile Asn Lys Glu Gly Lys Glu Thr
100 105 110
Arg Thr Leu His Pro Gln Gln Leu Ile Met Ala Thr Ser Leu Cys Gly
115 120 125
Val Pro Ser Ile Pro Ala Val Pro Gly Met Ala Val Phe Arg Gly Val
130 135 140
Ile Arg His Ser Ile Ala His Lys Ser Ala Arg Asp Phe Val Gly Lys
145 150 155 160
Lys Val Cys Val Val Gly Thr Ser Ser Ser Gly Phe Asp Thr Ala Tyr
165 170 175
Lys Cys Ala Arg Leu Gly Ile Asp Val Thr Leu Leu Gln Arg Ser Pro
180 185 190
Thr Tyr Val Met Ser Leu Thr His Ser Val Pro Arg Leu Leu Gly Trp
195 200 205
Tyr Ser Pro Asp Lys Asp Gly Asn Leu Pro Asn Leu Asp Val Gln Asp
210 215 220
Pro Leu Met Phe Ser Thr Pro Phe
225 230

<210> 29208
<211> 184
<212> PRT
<213> A.fumigatus

<400> 29208
Glu Thr Met Ala Thr Tyr Val Gln Glu Ser Ala Gly Thr Asp Ser Ala
1 5 10 15
Phe Pro Ala Ser Leu Gln Ser Lys Gly Ala Val Leu Asn His Asp Gln
20 25 30
Val Pro Lys Pro Val Ala Asp Asp Phe Met Tyr Ala Phe Lys Tyr Asn
35 40 45
His Ser Leu Pro Thr Thr Asp Val Leu Gly Val Glu Ile Pro Ala Asp
50 55 60
Cys Asp Ala Gln Lys Glu Ala Glu Gly Ile Val Ala Arg Leu Ser Thr
65 70 75 80
Ala Thr Ser Gln Gly Asp Ala His Ala Phe Ala Gly Leu Phe Leu Asp
85 90 95
Tyr Gly Glu Thr Leu Ser Lys Thr Arg Pro Glu Ile Pro Thr Phe Ala

```
            100                 105                 110
Asp Phe Gln Cys Thr Gly Val Trp Arg Asp Lys Leu Ser Phe Thr Trp
        115                 120                 125
Asp Phe Arg Thr Phe Asn Phe Arg Ala Gly His Pro Gln Arg Pro Leu
    130                 135                 140
Pro Ile Phe Leu Leu Gln Thr Arg Ala Thr Asn Phe Thr Phe Leu Glu
145                 150                 155                 160
Pro Ala Pro Phe Gly Gly Leu Ala Leu Leu Pro Gly Leu Leu Ala Ala
                165                 170                 175
Thr Ile Arg Cys Val Leu Arg Asp
            180
```

<210> 29209
<211> 462
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (434)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29209

```
Ser Ser Pro Ala Leu Leu Ser Ser Phe Thr Phe Ser Leu Leu Leu Pro
1               5                   10                  15
Gly Phe Ile Met Ile Gly Ala Thr Ser Phe Leu Asn His Ser Gly Pro
            20                  25                  30
Arg Pro Pro Arg Tyr Arg Thr Pro Ser Pro Pro Arg Arg Ala Val Glu
        35                  40                  45
Pro Ile Ser Pro Phe Thr Thr Thr Thr Asp Phe Arg Ala Ser Trp Ile
    50                  55                  60
Asp Arg Gly Asp Ser Gln Ala Ala Ser Tyr Asp Arg Asp Arg Val Thr
65                  70                  75                  80
Ser Asn Asn Asp Val Tyr Ser Ser Thr Asn Arg Gly Ser His Gly Arg
                85                  90                  95
Thr Ser His Gly Arg Ser Ser Ser Thr Ile Asp Thr Leu Ala Thr Ile
            100                 105                 110
Ala Leu Ala Thr Ser Pro Thr Phe Ala Pro Leu Ser Tyr Arg Pro Pro
        115                 120                 125
Ser Gln Asp Pro Thr Pro Ala Met Pro Leu Phe Pro Ser Gln Ser Ile
    130                 135                 140
Glu Ser Thr Glu Arg Pro Ala Lys Arg Pro Arg Ser Glu Lys Ser Pro
145                 150                 155                 160
Ser Pro Leu His Gln Pro Gln Thr Thr Val Ala Pro Asp Ala Asn Pro
                165                 170                 175
Ser Ser Thr Phe Asp Ser Met Lys Thr Asp Ala Glu Leu Leu Leu Asn
            180                 185                 190
Phe Ala Arg Pro Ser Asn Phe Gln Pro Ala Ala Phe Tyr Pro Ser Lys
        195                 200                 205
Arg Val Ser Ile Asp Glu Ser Tyr His Pro His Tyr Gly Glu Glu Pro
    210                 215                 220
Lys Ser His Phe Arg Ala Gly Leu Gly Ser Thr Tyr Ile Leu Pro Asp
225                 230                 235                 240
Gly Glu Lys Ser Ala Tyr His Thr Ser Ala Asn Thr Ala Phe Pro Ala
                245                 250                 255
Ser Arg Met Arg Ser Gln Ser Asp Gly Ser Ala Phe Ile Ser Arg Pro
```

```
            260                 265                 270
Val Ile Gln Gly Val Arg Pro Asn Thr Ser Ser Ser Thr Leu Pro Pro
        275                 280                 285
Ile Val Trp Gln Glu Glu Glu Gly Asn Ala Lys Thr Gly Pro Gly Pro
    290                 295                 300
Pro Ser Thr Lys Phe Pro Gly Ala Glu Thr Arg Tyr Glu Asn Ser Val
305                 310                 315                 320
Phe Thr Gly Ile Asp Thr Gly Ala Asp Arg Ala Ser Leu Asp Val Pro
                325                 330                 335
Pro Arg Gly Asp Asp Asp Thr Glu Ser Asp Glu Asn Asn Gln Ala Asn
            340                 345                 350
Cys Ala Ala Cys Asn Leu Val Arg Ile Pro Val Asp Ser Glu Glu Gln
        355                 360                 365
Gly Asp Val Thr Trp Ile Ser Cys Asp Gly Cys Lys Gln Trp Phe His
    370                 375                 380
Ile Val Cys Ala Gly Phe Lys Asn Asp Arg Glu Ile Arg Thr Val Asp
385                 390                 395                 400
Lys Phe Ile Cys Arg Arg Cys Arg Pro Ile His Gly Gln Thr Thr Phe
                405                 410                 415
Val Arg Lys Ser Ser Arg Ala Arg Thr Ala Ile Asp Tyr Ala Gly Leu
            420                 425                 430
Asn Xaa Ser Leu Val Lys Ala Ala Ser His Ser Leu Glu His His Tyr
        435                 440                 445
Ile Glu Pro Ile Arg Glu Gly Lys Ile Arg Phe Leu Pro Glu
    450                 455                 460

<210> 29210
<211> 74
<212> PRT
<213> A.fumigatus

<400> 29210
Leu Leu Val Ala Ser Thr Glu Thr Ala Pro Tyr Asp Met Ser Ala Ser
1               5                   10                  15
Gly Thr Leu Arg Ala Asn Thr Asn Pro Gln Met Arg Lys His Asp Ser
            20                  25                  30
Ala Ile Pro Glu Ser Gly Val Val Val Ser Ile Ile Ile Asn Ser Asn
        35                  40                  45
Pro Glu Ala Leu Ile Ser Arg Gln Asn Met Leu Ser Asp Tyr Ser Asp
    50                  55                  60
Thr Lys Lys Gly Cys Lys Leu Leu Cys His
65                  70

<210> 29211
<211> 65
<212> PRT
<213> A.fumigatus

<400> 29211
Cys His Glu Ala Gln Thr Asn Thr Val Ala Asn Val Ser Gly Thr Val
1               5                   10                  15
Ile Thr Gln Tyr Ser Gln Lys Phe Pro Asp Met Ile His Asp Phe Ala
            20                  25                  30
Pro Pro Ser Phe Asp Lys Ser Lys Lys Phe Val Pro Asn Arg Pro Tyr
        35                  40                  45
Ile Leu Lys Tyr Gln Pro Leu Ser Ala Thr Lys Val Arg Arg Gly Leu
```

50 55 60
His
65

<210> 29212
<211> 87
<212> PRT
<213> A.fumigatus

<400> 29212
Phe Tyr Cys Met Ser Ser Pro Ala Leu Thr Ser Ile Ile Ser Arg Pro
1 5 10 15
Glu Asn Arg Tyr Ala Asn Tyr Pro Glu Gly Ser Ile Asp Asp Ser Pro
20 25 30
Val Leu Arg Gln Lys Asn Pro Asn Val Phe Phe Pro Pro Glu Phe Phe
35 40 45
Pro Val Ile Arg Ala Asp Leu Asn Gly Thr Phe Phe Cys Asp Tyr Asp
50 55 60
Ile Asp Gly Asp Gly Asn Val Thr Lys His Ser Leu Ser Asn Pro Leu
65 70 75 80
Pro Ser Ser Ser Ser Pro Tyr
85

<210> 29213
<211> 66
<212> PRT
<213> A.fumigatus

<400> 29213
Leu Leu Gln Ala Gly Val Thr His Ala Phe Val Asn Leu Gly Ser Asp
1 5 10 15
His Pro Ser Ile Leu Glu Ala Met Val Lys Gly Gln Lys Glu Lys Pro
20 25 30
Asp Gln Phe Pro Lys Ile Ile Thr Cys Pro Asn Glu Val Phe Leu Glu
35 40 45
Ile Arg Leu Ser His Thr Leu Ser His Ser Glu Thr Gly Pro Thr Ser
50 55 60
Thr Cys
65

<210> 29214
<211> 96
<212> PRT
<213> A.fumigatus

<400> 29214
Met Val Ala Leu Ser Met Ala Asp Gly Tyr Ala Arg Leu Thr Gly Lys
1 5 10 15
Pro Gln Cys Val Ile Val His Val Asp Val Gly Thr Gln Gly Leu Ala
20 25 30
Ala Ala Val His Asn Ala Ser Cys Gly Arg Ala Pro Val Leu Ile Phe
35 40 45
Ala Gly Leu Ser Pro Phe Thr Ile Glu Gly Glu Met Arg Gly Ser Arg
50 55 60
Thr Glu Tyr Ile His Trp Ile Gln Asp Val Pro Asp Gln Lys Gln Ile
65 70 75 80

```
Val Ser Asn Thr Val Val Ile Arg Pro Lys Ser Asn Pro Ala Arg Thr
                85                  90                  95

<210> 29215
<211> 217
<212> PRT
<213> A.fumigatus

<400> 29215
Ser Glu Gly Pro Val Tyr Leu Thr Gly Ala Arg Glu Val Met Glu Glu
1               5                  10                  15
Glu Ile Glu Pro Tyr Thr Leu Ala Gln Gly Val Trp Gly Pro Val Ala
            20                  25                  30
Pro Ser Ala Leu Thr Pro Glu Ala Val Glu Leu Ile Thr Ser His Leu
        35                  40                  45
Ala Ala Ala Lys Glu Pro Leu Ala Ile Val Gly Tyr Ser Gly Arg Ser
    50                  55                  60
Ala Arg Gly Val Lys Glu Leu Val Thr Leu Ala Asp Thr Phe Lys Gly
65                  70                  75                  80
Leu Arg Val Leu Asp Thr Gly Gly Ser Asp Met Cys Phe Pro Gly Asp
                85                  90                  95
His Pro Ala Ser Leu Gly Leu Arg Tyr Gly Val His Asp Ala Ile Lys
            100                 105                 110
Thr Ala Asp Phe Ile Leu Val Ala Asp Cys Asp Val Pro Trp Ile Pro
        115                 120                 125
Thr Gln Cys Lys Pro Ser Asp Ser Ala Lys Ile Ile His Ile Asp Val
    130                 135                 140
Asp Pro Leu Lys Gln Gln Ile Pro Val Phe Tyr Ile Pro Ser Leu Ala
145                 150                 155                 160
Thr Phe Arg Ala Glu Ser Ala Thr Ala Phe Lys Gln Ile Asn Asp Phe
                165                 170                 175
Ile Ala Ser Ser Lys Ala Leu Gln Glu Val Val His Ser Glu Glu Gln
            180                 185                 190
Val Ala Phe Gly Gln Arg Arg Glu Glu Val Cys His Thr Gly Pro Glu
        195                 200                 205
Gly His Ala Asn Gly Ala Thr Arg Pro
    210                 215

<210> 29216
<211> 77
<212> PRT
<213> A.fumigatus

<400> 29216
Thr Ser Thr Pro Glu Leu Gln Tyr Thr Ala Val Phe Tyr Ser Ser Phe
1               5                  10                  15
Tyr Asn Lys Ile Asn Leu Asn Arg Thr Asn Lys Glu Thr Tyr Ala Thr
            20                  25                  30
Tyr Gln Tyr Pro Ile Ser Ile Gly Leu Tyr Pro Ala Ala Glu Ile Leu
        35                  40                  45
Arg Trp Leu His Asp Asn Pro Arg Ala Ser Pro Ser Val Gly Val Leu
    50                  55                  60
Leu Thr Phe Gly Ser Cys Arg Asn Ser Glu Pro Asp Thr
65                  70                  75

<210> 29217
```

<211> 86
<212> PRT
<213> A.fumigatus

<400> 29217
Ser Gly Gln His Ile Trp Ala Tyr Cys Arg Val His Trp Ser Gly Asp
1 5 10 15
Cys Leu Gly Ala Glu Phe Arg Leu Gln Gly Lys Ser Asp Arg Phe Gly
20 25 30
Asp Ser Ile Thr Gly Ala Asp Met Lys Gln Tyr Ser Ala Thr Met Lys
35 40 45
Lys Ile Arg Glu Gln Gln Pro Gly Val Asp Thr Pro Pro Met Phe Asn
50 55 60
Val Ser Phe Thr Pro Val Glu His Pro Asp Thr Trp Arg Leu Val Asn
65 70 75 80
Gln Gly Gly Gln Gly Met
85

<210> 29218
<211> 395
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (32)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29218
Thr Arg Gly Gly Arg Gly Leu Pro Ile Thr Thr Pro Glu Trp His Phe
1 5 10 15
Gln Lys Pro Pro Gly Asp Asp Arg Ile Ser Asn Phe Pro Leu Thr Xaa
20 25 30
Asn Leu Arg Leu Ile Arg Glu Asp Ala Leu Asp Glu Glu Arg Arg Val
35 40 45
Arg Asp Pro Thr Asp Trp His Arg Arg Asp Ile Asp Asp Ser Gly Met
50 55 60
Gln Tyr Pro Phe Asp Gly Ile Arg Thr Gly Glu Val Asn Arg Phe Pro
65 70 75 80
His Ala Leu Leu Glu Ile Lys Leu Arg Gly Ser Ala His His Ile Glu
85 90 95
Trp Val Asn Glu Leu Met Val Ser His Leu Val Lys Glu Ala Pro Arg
100 105 110
Phe Ser Lys Phe Val His Gly Val Ala Gln Leu Phe Glu Asp His Val
115 120 125
Asn Ser Phe Pro Phe Trp Leu Ser Glu Leu Glu Asn Asp Ile Arg Arg
130 135 140
Asp Pro Glu Thr Ala Phe Arg Glu Glu Gln Glu Arg Leu Ala Lys Arg
145 150 155 160
Ala Glu Asp Asp Met Ala Val Gly Ser Phe Leu Gly Asn Arg Ala Ser
165 170 175
Pro Thr Val Arg Pro Met Val Gly Ser Pro Val Thr Met Phe Ser Glu
180 185 190
Leu Gly Ser Ser Ala Arg Ala Arg Gln Pro Ser Gln Pro Gly Pro Gln
195 200 205
Pro Ser Arg Pro Thr Ile Gln Glu Gly Glu Gly Arg Thr Phe Pro Glu

```
    210                 215                 220
Glu Ser Ala Pro Gly Glu Thr Gln Pro Ile Thr Ser Ser Arg Leu Ala
225                 230                 235                 240
Ala Leu Phe Pro Ser Phe Pro Ile Ser Arg Ser Ser Arg Ser His Arg
                245                 250                 255
Gln Ser Val Val Leu Pro Pro Gly Val Arg Glu Pro Leu Thr Trp Ile
            260                 265                 270
Lys Asp Ser Gly Pro Val Arg Val Glu Ser Lys Val Tyr Leu Ala Asn
        275                 280                 285
Gln Arg Thr Phe Ile Lys Trp Leu His Ile Ser Ile Leu Leu Ser Ser
    290                 295                 300
Leu Ser Leu Gly Leu Tyr Asn Ala Ala Gly Lys His Asn Asp Ile Ala
305                 310                 315                 320
Arg Ala Leu Ser Ile Val Tyr Thr Phe Phe Ala Leu Phe Ala Ala Ala
                325                 330                 335
Trp Gly Trp Tyr Met Tyr Glu Lys Arg Ser Arg Leu Ile Arg Gln Arg
            340                 345                 350
Ser Gly Arg Asp Leu Asp Asn Thr Phe Gly Pro Ile Val Val Cys Ile
        355                 360                 365
Gly Leu Ala Ile Ala Leu Val Leu Asn Phe Ala Phe Lys Val Ser Leu
    370                 375                 380
Ile Gly Ser Glu Ile Arg Leu Leu Gly Leu Thr
385                 390                 395

<210> 29219
<211> 265
<212> PRT
<213> A.fumigatus

<400> 29219
Gln Val Cys Pro Gly Arg Gly Arg Ser Gly Arg Leu His Glu Gly Gly
1               5                   10                  15
Val Glu Ile Cys Val Ser His Leu His Ile Gln Ala Arg Ile Thr Ala
            20                  25                  30
Asn Met Thr Ser Leu Tyr Leu Val Tyr Leu Phe Ile Ala Lys Phe Val
        35                  40                  45
Leu Val Tyr Ile His Thr Ala Ala Ala Ser Ile Ala Ala Ile Arg Ala
    50                  55                  60
Thr Lys Ala Leu Arg Leu Asp Phe Leu His Ser Leu Met Arg Gln Asp
65                  70                  75                  80
Met Ser Tyr Phe Asp Ser Asn Ala Ala Gly Ser Pro Ser Val Lys Val
                85                  90                  95
Thr Thr Asn Gly Asn Leu Val Thr Asn Gly Leu Ser Glu Lys Leu Ser
            100                 105                 110
Val Phe Val Gln Ser Cys Ala Thr Phe Ile Ala Ala Phe Val Val Ala
        115                 120                 125
Phe Ala Val Gln Trp Lys Leu Thr Leu Ile Thr Val Cys Ile Val Pro
    130                 135                 140
Thr Ile Val Ile Val Thr Gly Ile Cys Met Gly Ile Asp Val Lys Asn
145                 150                 155                 160
Glu Asp Lys Leu Met Gly Ile Tyr Ser Arg Ala Ser Leu Val Ala Glu
                165                 170                 175
Glu Val Phe Ser Ser Ile Ser Thr Val His Ala Phe Trp Leu Gln Pro
            180                 185                 190
Val Met Ala Lys Arg Tyr Glu Asp His Leu Ala Glu Leu Glu Arg Val
        195                 200                 205
```

```
Gly Met Lys Lys Ser Pro Asn Tyr Gly Val Leu Phe Ser Thr Glu Phe
    210                 215                 220
Phe Cys Val Tyr Ala Gly Tyr Gly Leu Ala Phe Trp Gln Gly Ile Arg
225                 230                 235                 240
Met Tyr Ala Arg Gly Glu Val His Glu Pro Gly Asp Ile Val Thr Cys
                245                 250                 255
Val Cys Cys Leu Leu Asp Gly Cys Ser
            260                 265
```

<210> 29220
<211> 91
<212> PRT
<213> A.fumigatus

<400> 29220

```
Leu Arg Pro Asp Glu Val Glu Glu Ala Pro Lys Pro Ser Gly Leu Arg
1               5                   10                  15
Ser Tyr Met Arg Ile Phe Asn Tyr Ala Asp Arg Thr Ser Met Ile Leu
            20                  25                  30
Tyr Ala Ile Ala Met Val Ala Ala Ile Ala Ala Gly Ser Ala Leu Pro
        35                  40                  45
Leu Met Asp Leu Val Phe Gly Lys Phe Val Thr Thr Phe Asn Lys Phe
    50                  55                  60
Ala Leu Gly Ala Val Gly Pro Asp Asp Tyr Met Arg Glu Val Ser Lys
65                  70                  75                  80
Tyr Ala Ser Val Ile Cys Thr Ser Lys Arg Gly
                85                  90
```

<210> 29221
<211> 208
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (207)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29221

```
Phe Ser Val Ser Val Ile Phe Ala Val Val Val Ala Ala Thr Ala Leu
1               5                   10                  15
Thr Gln Val Ala Pro Gln Ile Ile Thr Ile Thr Lys Ala Ala Ala Ala
            20                  25                  30
Ala Asp Glu Leu Phe Arg Val Ile Asp Lys Gln Ser Ala Ile Asp Ser
        35                  40                  45
Leu Ser Ile Ser Gly Leu Ala Pro Glu Thr Cys Val Gly Glu Ile Glu
    50                  55                  60
Ile Lys Ala Leu Asp Phe Ala Tyr Pro Ser Arg Pro Asp Thr Gln Val
65                  70                  75                  80
Leu Asn Gly Leu Asn Leu Ser Val Pro Ala Gly Lys Thr Thr Ala Leu
                85                  90                  95
Val Gly Ala Ser Gly Ser Gly Lys Ser Thr Ile Val Gly Leu Leu Glu
            100                 105                 110
Arg Trp Tyr Asp Pro Ala Ala Gly Thr Ile Leu Leu Asp Gly Ile Glu
        115                 120                 125
Ile Gln Lys Leu Asn Ile Ala Trp Leu Arg Thr Gln Val Arg Leu Val
```

```
    130                 135                 140
Gln Gln Glu Pro Val Leu Phe Ser Gly Thr Ile Phe Asp Asn Val Ala
145                 150                 155                 160
Phe Gly Leu Glu Gly Thr Ser Tyr Ala Glu Ala Pro Tyr Glu Gln Lys
                165                 170                 175
Leu Ala Leu Val Lys Glu Ala Cys Arg Asp Ala Tyr Ala His Glu Phe
            180                 185                 190
Met Ser Ser Pro Arg Gly Trp Lys Asn Gln Gly Pro His Trp Xaa Ser
        195                 200                 205
```

<210> 29222
<211> 69
<212> PRT
<213> A.fumigatus

<400> 29222

```
Ala Ser Ser Tyr Cys Leu Pro Gly Ser Thr Thr Thr Arg Leu Pro Ala
1               5                   10                  15
Ser Gln Lys Ser Gln Arg Val Leu Gly Ile Gln Asp Val His Arg Leu
            20                  25                  30
Ala Leu Asp Thr Ile Glu Arg Ile Thr Glu Phe Glu Lys Leu Lys Gly
        35                  40                  45
Ser Pro Val Phe Asn Ala Arg His Asn Asn Cys Cys Ala Leu Leu Lys
    50                  55                  60
His His Ile Val His
65
```

<210> 29223
<211> 288
<212> PRT
<213> A.fumigatus

<400> 29223

```
Thr Thr Pro Phe Gly Thr Ser Arg Val Asp Pro Ala Gly Lys Lys Lys
1               5                   10                  15
Tyr Gly Ile Ala Lys Val Asn Tyr Arg Ile Ser Lys Leu Gln Arg His
            20                  25                  30
Thr Thr Ser Ile Gln Val Leu Lys His Lys Met Lys Pro Ser Leu Pro
        35                  40                  45
Leu Arg Arg Ile Cys Arg Gly Thr Asn Ile Thr Ile Arg Pro Pro Thr
    50                  55                  60
Ser Pro Ala Leu Val Pro Arg Ile Leu His Glu Gln Arg Thr Pro Pro
65                  70                  75                  80
Ala Pro Ser Thr Arg Ser Thr Pro Leu Thr Ala Thr Thr Arg Arg Ser
                85                  90                  95
Phe Asn Leu Ser Ser Leu Ser Ser Phe Phe Pro Pro Ser Asn Gly Asn
            100                 105                 110
Gly Asn Asp Asn Asn Lys Ser Arg Val Leu Thr Ala Thr Arg Thr Leu
        115                 120                 125
Pro Tyr Gln Pro Ser Ala Leu Phe Lys Val Ile Ser Ser Val Glu Ser
    130                 135                 140
Tyr Ser Gln Phe Leu Pro Phe Leu Thr Ala Ser Thr Val Thr His Arg
145                 150                 155                 160
Asp Pro Glu Thr Gly Tyr Pro Thr Arg Ala Phe Leu Thr Val Gly Tyr
                165                 170                 175
Gly Pro Leu Ser Glu Thr Phe Thr Ser Arg Val Asp Cys Asn Arg Asp
```

```
            180                 185                 190
Lys Trp Thr Val Glu Ala Arg Ser Gly Ala Lys Phe Gly Val Asp Ser
        195                 200                 205
Lys Asp Gly Gln Glu Gly Gly Ile Phe Pro Gly Ala Asn Glu Gly Ile
    210                 215                 220
Phe Glu Tyr Leu Ser Thr Lys Trp Glu Leu Val Pro Val Pro Gly Gly
225                 230                 235                 240
Ser Val Gln Thr Arg Val Gln Leu Glu Ile Gln Phe Glu Phe Arg Asn
                245                 250                 255
Gln Phe His Ala Ala Met Met Ser Ala Val Glu Gly Gln Met Ala Gly
            260                 265                 270
Val Met Ile Glu Ala Phe Glu Lys Arg Ile Arg Glu Val Glu Gly Arg
        275                 280                 285

<210> 29224
<211> 74
<212> PRT
<213> A.fumigatus

<400> 29224
Ile Ser Ser Cys Thr Arg Val Cys Thr Leu Pro Pro Gly Thr Gly Thr
1               5                   10                  15
Asn Ser His Phe Val Leu Lys Tyr Ser Lys Ile Pro Ser Phe Ala Pro
            20                  25                  30
Gly Lys Ile Pro Pro Ser Cys Pro Ser Phe Glu Ser Thr Pro Asn Leu
        35                  40                  45
Ala Pro Leu Arg Ala Ser Thr Val His Leu Ser Arg Leu Gln Ser Thr
    50                  55                  60
Arg Asp Val Lys Val Ser Leu Arg Gly Pro
65                  70

<210> 29225
<211> 89
<212> PRT
<213> A.fumigatus

<400> 29225
Arg Pro Pro Ser Ala Pro Gln Gln Arg Ser Ser Ser Pro His Glu Thr
1               5                   10                  15
Gly Ser Glu Thr Gln Thr Glu Ser Pro Ala Ala Pro Val Ser Ala His
            20                  25                  30
Phe Pro Gln Gly Pro Ala Pro Thr Pro Thr Leu Tyr Ser Asn Thr Gln
        35                  40                  45
Lys Ser Pro Arg Ser Arg Arg Glu Arg Ser Pro Pro Pro Ala His Pro
    50                  55                  60
Ser Ser Pro Pro Arg Thr Trp Pro Arg Cys Ala Pro Arg Gln Ser Thr
65                  70                  75                  80
Cys Pro Gly Cys Ser Pro Arg Ala Thr
                85

<210> 29226
<211> 130
<212> PRT
<213> A.fumigatus

<400> 29226
```

```
Met Ile Asp Glu Asp Glu Glu Asp Asp Glu Gly Ser Gly Glu Glu Glu
1               5                  10                  15
Ser Gly Lys Arg Arg Lys Ser Lys Lys Arg Arg Gln Arg Arg Val Trp
            20                  25                  30
Val Asn Gln Leu Leu Gly Arg Arg Met Arg Met Glu Phe Ala Glu Asp
        35                  40                  45
Ala Thr Thr Arg Tyr Lys Lys Arg Phe Gly Lys Asp Gly Glu Gly Lys
    50                  55                  60
Lys Lys Asp Glu Ser Val Ile Thr Glu Val Glu Asp Gly Pro Leu Glu
65                  70                  75                  80
Arg Glu Ser Thr Gly Asp Arg Pro Gln Gln Ser His Pro Glu Lys Pro
                85                  90                  95
Lys Arg Asn Asn Lys Pro Glu Tyr Ser Arg Tyr Ala Lys Glu Thr Val
            100                 105                 110
Gln Lys Leu Ser Gly Ala Ile Val Glu Pro Gln Gly Lys Lys Ile Thr
        115                 120                 125
Phe Asp
    130
```

<210> 29227
<211> 248
<212> PRT
<213> A.fumigatus

<400> 29227

```
His Glu Glu Thr Ser His Pro Val Phe Thr Tyr Ile Leu Phe Phe His
1               5                  10                  15
Arg Leu Arg Gln Pro Lys Met Ala Ser Arg Arg Arg Asn Ile Gly Ala
            20                  25                  30
Ser Arg Arg Arg Arg Arg Arg Asp Glu Glu Gly Glu Asp Glu Gly Ser
        35                  40                  45
Leu Glu Glu Glu Leu Glu Asp Asp Ser Leu Ser Glu Gly Ser Val Ile
    50                  55                  60
Ser His Pro Gly Asp Asp Asp Asp Asp Asp Asp Asp Asp Asp Ala Asp
65                  70                  75                  80
Gly Glu Gly Ser Asp Glu Ser Asp Gly Glu Ala Ser Ser Ser Pro His
                85                  90                  95
Leu Asp Arg Thr Asn Arg Pro Gln Val Asn Gly Leu Val Pro Glu Ile
            100                 105                 110
Asn Gln Arg Ser Gly Arg Arg His Ser Ser Ser Pro Gly Lys Arg His
        115                 120                 125
Ile Ala Thr Ala Val Ser Asp Thr Glu Ala Met Met Asn Gly Leu Thr
    130                 135                 140
Leu Ser Asp Gln Ala Ser Glu Val Ala Glu Ile His Phe Asp Asp Met
145                 150                 155                 160
Lys Gly Glu Ser Gly Ser Leu Thr Gly Arg Thr Pro Ser Ala Pro Pro
                165                 170                 175
Thr Glu Ala Lys Arg Gly Thr Phe Ala Glu Arg Lys Arg Arg Glu His
            180                 185                 190
Glu Arg Tyr Ala Lys Glu Arg Asp Glu Asn Pro Ala Phe Val Pro Thr
        195                 200                 205
Arg Gly Arg Phe Phe Leu His Asp Lys Arg Ser Thr Glu Pro Gly Pro
    210                 215                 220
Asn Gly His Arg Pro Phe Ser Lys Ser Lys Ser Arg Pro Tyr Gly Leu
225                 230                 235                 240
Ile Val Asp Gly Asn Val Arg Arg
```

245

<210> 29228
<211> 570
<212> PRT
<213> A.fumigatus

<400> 29228

```
Pro Glu Ser Ser Asn Gly Ile Arg Phe Ser Ile Thr Asp Leu Ser Pro
1               5                  10                  15
Pro Thr Ala Arg Leu Leu Pro Thr Ile Tyr Gln Asp Arg Val Gly Ile
            20                  25                  30
Ser Leu Tyr Asp Ala Gln Phe Ser Gln Thr Glu Asn Gly Gln Arg Val
        35                  40                  45
Arg Gly Pro Val Ser Gln Glu Ile Ile Glu Gln Val Val Asp Arg Leu
    50                  55                  60
Val Arg Phe Lys Ile Thr Cys Asp Asp Phe Cys Val Pro Pro Gly Asn
65                  70                  75                  80
Ile His Val Leu Ala Thr Glu Ala Thr Arg Thr Ala Pro Asn Ser Asp
                85                  90                  95
Glu Phe Arg Ala Arg Ile Lys Ala Arg Thr Gly Trp Glu Val Arg Met
            100                 105                 110
Leu Ser Lys Glu Glu Glu Gly Arg Ile Gly Ala Leu Gly Ile Ala Ser
        115                 120                 125
Ser Ser His Ser Val Ala Gly Leu Ala Met Asp Leu Gly Gly Gly Ser
    130                 135                 140
Thr Gln Ile Thr Trp Val Met Glu Glu Asp Gly Val Val Ser Thr Ser
145                 150                 155                 160
Pro Leu Gly Ser Phe Ser Phe Pro Tyr Gly Ala Ala Ala Leu Lys Leu
                165                 170                 175
Arg Trp Glu Glu Ala Lys Arg Gln Gly Gly Asp Ala Glu Ala Lys Leu
            180                 185                 190
Lys Glu Gln Met Thr Lys Asn Phe Gln Asp Ala Tyr Ala Arg Ile Gln
        195                 200                 205
Leu Pro Glu Arg Leu Val Glu Ala Ala Lys Arg Ser Gly Thr Phe Asp
    210                 215                 220
Leu Tyr Leu Cys Gly Gly Gly Phe Arg Gly Trp Gly Tyr Met Leu Met
225                 230                 235                 240
Asn Gln Ser Lys Val Asn Pro Tyr Pro Ile Pro Ile Ile Asn Gly Tyr
                245                 250                 255
Arg Ala Arg Arg Glu Asp Phe His Asp Thr Val Ser Val Leu Glu Thr
            260                 265                 270
Val Ser Asp Ser Glu Val Ser Val Phe Gly Val Ser Lys Arg Arg Ala
        275                 280                 285
Ser Gln Ile Pro Ala Val Ala Val Leu Val Asn Val Ile Met Asp Ala
    290                 295                 300
Leu Pro Pro Ile Thr His Ile Gln Phe Cys Gln Gly Gly Val Arg Glu
305                 310                 315                 320
Gly Phe Leu Phe Asp Arg Leu Pro Gln Glu Val Arg Ala Glu His Pro
                325                 330                 335
Leu Leu Ser Ala Thr Ser Pro Tyr Ala Pro Pro Ser Ala Glu Ala Ile
            340                 345                 350
Lys Asp Leu Leu Leu Gln Ala Leu Pro Thr Ser Ser Ser Pro Lys Ala
        355                 360                 365
Ser Leu Gln Ala Pro Glu Ser Phe Asp Ala Cys Leu Ile Ser Ala Leu
    370                 375                 380
```

```
Ala Asn Met Leu Tyr Ala His Ala Gln Val His Arg Ala Ser Arg Ser
385                 390                 395                 400
Ala Ala Ala Leu His Ser Thr Thr Thr Gly Ile Leu Ala Ser Ile Asn
                405                 410                 415
Asn Leu Thr His Ile Asp Arg Ala Leu Leu Ala Leu Ile Leu Cys Glu
            420                 425                 430
Arg Trp Glu Gly Asp Leu Pro Pro Ala Asp Gln Thr Phe His Tyr Gln
        435                 440                 445
Leu Ser Arg Cys Val Ser Ala Gln Glu Ala Trp Trp Cys Gln Tyr Leu
    450                 455                 460
Gly Arg Val Ala Ala Leu Ile Gly Asp Val Tyr Pro Ala Gly Arg Val
465                 470                 475                 480
Pro Glu Thr Gly Asp Arg Ile Gln Leu Glu Thr Thr Trp Thr Ser Thr
                485                 490                 495
Val Lys Lys Lys Glu Ser Cys Asp Met Leu Cys Leu Arg Ile Ile Phe
            500                 505                 510
Gly Asp Asp Ala Ala Ala Ala Ala Ala Thr Gly Arg His Met Leu Gln
        515                 520                 525
Glu Arg Ala Glu Glu Ile Glu Lys Ala Gly Lys Lys Lys Asn Trp Ile
    530                 535                 540
Asn Glu Tyr Gly Val Arg Val Gly Thr His Ile Phe Tyr Gln Ser Pro
545                 550                 555                 560
Ser Thr Ala Arg Ile Ser Gln Arg Asn Phe
                565                 570
```

<210> 29229
<211> 326
<212> PRT
<213> A.fumigatus

<400> 29229

```
Thr Thr Cys His Ser Ile Met Thr Glu Gln Val Arg Phe Val Thr Leu
1               5                  10                  15
Asp Val Phe Thr Ser Arg Pro Tyr Ala Gly Asn Pro Leu Ala Val Val
            20                  25                  30
Phe Leu Pro Asp Ser Asn Lys Pro Ala Val Thr Gln Gln Gln Lys Gln
        35                  40                  45
Ser Ile Ala Arg Glu Phe Asn Leu Ser Glu Thr Ile Phe Val His Ser
    50                  55                  60
Glu Lys Gly Glu Lys Arg Ile Ile Asp Ile Phe Thr Pro Asp Ser Glu
65                  70                  75                  80
Leu Pro Phe Ala Gly His Pro Thr Ile Gly Ala Ala Cys Trp Phe Leu
                85                  90                  95
Tyr Leu Ser Pro Asp Glu Gly Asp Lys Gly Val Val Lys Thr Leu Thr
            100                 105                 110
Thr Lys Ser Gly Asp Ile Pro Ile Ser Leu Gln Leu Gly Gln Pro Trp
        115                 120                 125
Pro Ala Val Thr Ala Arg Ile Ala His Asn Thr Arg Leu His Gln Ser
    130                 135                 140
Arg Phe Pro Leu Gln Gln Leu Leu Arg Leu His Pro Phe Leu Ser Gly
145                 150                 155                 160
Phe Phe Arg Ile Thr Gly Thr Val Glu Pro Ala Phe Pro Ile Phe Ser
                165                 170                 175
Ile Val Asn Gly Met Ser Gln Val His Val Glu Leu Pro Ser Leu Glu
            180                 185                 190
Ala Leu Ala Ala Val Thr Thr Ala Ser Gly Gly Glu Val Ile Ser Gly
```

```
        195                 200                 205
Gly Ser Gly Tyr Leu Asp Glu Gly Trp Asp Ala Gly Leu Cys Val Thr
    210                 215                 220
Tyr Phe Tyr Val Arg Asn Val Lys Asp Pro Gln Thr Gly Ala Asn Thr
225                 230                 235                 240
Ile Arg Thr Arg Ala Ile Phe Gly Asn Leu Glu Asp Pro Ala Thr Gly
                245                 250                 255
Ser Ala Ala Ser Gly Leu Ala Ala Tyr Leu Ser Leu Met Glu Arg Lys
            260                 265                 270
Pro Gly Gln Tyr Lys Tyr Asn Ile Val Gln Gly Val Glu Ile Gly Arg
        275                 280                 285
Arg Ser Glu Ile Gly Val Glu Val Val Val Asn Gln Asp Asn Lys Ile
    290                 295                 300
Asp Thr Val Glu Leu Gln Gly Gly Ala Val Lys Val Ser Glu Gly Asn
305                 310                 315                 320
Ile Leu Leu Pro Pro Lys
                325
```

<210> 29230
<211> 235
<212> PRT
<213> A.fumigatus

<400> 29230

```
Ser Leu Gln His Ser Phe Glu Asp Gln Ser Ser Val Val Asn Arg Met
1               5                   10                  15
Ser Ser Thr Gln Ala Pro Val Glu Pro Pro Lys Arg Arg Arg Ile Gly
            20                  25                  30
Val Leu Thr Ser Gly Gly Asp Ala Pro Gly Met Asn Gly Ala Val Arg
        35                  40                  45
Ala Val Val Arg Met Ala Ile Tyr Ser Asp Cys Glu Ala Tyr Ala Val
    50                  55                  60
Phe Glu Gly Tyr Glu Gly Leu Val His Gly Gly His Met Ile Arg Gln
65                  70                  75                  80
Leu His Trp Glu Asp Val Arg Gly Trp Leu Ser Lys Gly Gly Thr Leu
                85                  90                  95
Ile Gly Ser Ala Arg Ser Met Ala Phe Arg Glu Arg Ala Gly Arg Leu
            100                 105                 110
Lys Ala Ala Lys Asn Met Val Leu Arg Gly Ile Asp Ala Leu Val Val
        115                 120                 125
Cys Gly Gly Asp Gly Ser Leu Thr Gly Ala Asp Val Phe Arg Ser Glu
    130                 135                 140
Trp Pro Gly Leu Leu Glu Glu Leu Val Lys Asn Gly Glu Leu Thr Glu
145                 150                 155                 160
Glu Gln Ile Glu Pro Tyr Lys Val Leu Asn Ile Val Gly Leu Val Gly
                165                 170                 175
Ser Ile Asp Asn Asp Met Ser Gly Thr Asp Ala Thr Ile Gly Cys Tyr
            180                 185                 190
Ser Ser Leu Thr Arg Ile Cys Asp Ala Val Asp Asp Val Phe Asp Thr
        195                 200                 205
Ala Phe Ser His Gln Arg Gly Phe Val Ile Glu Val Met Gly Arg His
    210                 215                 220
Cys Gly Trp Leu Ala Phe Leu Pro Pro Arg Gly
225                 230                 235
```

<210> 29231

<211> 129
<212> PRT
<213> A.fumigatus

<400> 29231
Ala Leu Ala Val Thr Cys Leu Gly Val Thr Ser Ile Phe Ile Ser Ser
1 5 10 15
Leu Glu Lys Ser Phe Ser Ala Ala His Lys Ser Leu Thr Gln Gly Ala
20 25 30
Ser Val Ala Val Thr Met Ala Asp Asp Arg Phe Thr Leu Pro Leu Arg
35 40 45
Pro Leu Ile Glu Lys Arg Asp Arg Pro Asp Pro Leu Pro Leu Glu Ile
50 55 60
Ala Gln Ile Asn Ala Gln Trp Gly Ser Phe Arg Asp Val Ser Gln Glu
65 70 75 80
Ser Leu Arg Ala Lys Ile Glu Glu Glu Lys Ser Lys Glu Tyr Thr Ile
85 90 95
Glu Glu Glu Glu Gly Glu Gly Ala Gly Ala Glu Leu Asp Thr Thr Glu
100 105 110
Arg Leu Asp Gln Leu Tyr Lys Arg Arg Ala Glu Ile Ile Gln Phe Ala
115 120 125
Met

<210> 29232
<211> 157
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (97),(127)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29232
Ile Ala Ala Arg Ser Gly Ala Ser Ala Asp Glu Gly Ile Arg Gly Gly
1 5 10 15
Val Leu Pro Val Ser Gly Gly Leu Leu Asp Asn Thr Pro Gln Ala Ser
20 25 30
Asn Ser Ala Ile Ile Pro Phe Val Pro Gln Ser Met Ser Phe Gly Ile
35 40 45
Leu Leu Leu Trp Ile Thr Leu Trp Met Ser Pro Ala Ala Arg Trp His
50 55 60
Ile Ile Cys Arg Leu Cys Gln Gly Leu Leu Gln Pro Ser Ala Asp Gln
65 70 75 80
Met Val Tyr Lys Met Thr Ala Met Asp Pro Ser Pro Ala Ser Ser Ser
85 90 95
Xaa Leu Leu Glu Phe His Asn Lys Ser Pro His Tyr Ser Ser Leu Pro
100 105 110
Phe Val Leu His Leu Tyr Phe Thr Gln Phe Phe Leu Gln Tyr Xaa Thr
115 120 125
Leu Phe Thr His Ile Leu Thr Ile Gln Ser Ile Asn Met Tyr Gly Leu
130 135 140
Lys Ala Gly Asp Ser Phe Pro Ser Asp Val Val Phe Ser
145 150 155

<210> 29233
<211> 134
<212> PRT
<213> A.fumigatus

<400> 29233
Leu Ser Phe Ser Tyr Ile Pro Trp Ser Glu Asp Lys Gly Glu Ile Thr
1 5 10 15
Ala Cys Gly Ile Pro Ile Asn Tyr Asn Ala Ser Lys Glu Trp Ala Asp
20 25 30
Lys Lys Val Ile Leu Phe Ala Leu Pro Gly Ala Phe Thr Pro Val Cys
35 40 45
Ser Ala Arg His Val Pro Glu Tyr Ile Glu Lys Leu Pro Glu Ile Arg
50 55 60
Ala Lys Gly Val Asp Val Val Ala Val Leu Ala Tyr Asn Asp Ala Tyr
65 70 75 80
Val Met Ser Ala Trp Gly Lys Ala Asn Gln Val Thr Gly Asp Asp Thr
85 90 95
Val Cys Ser His Pro Lys Lys Glu Ile Leu Arg Phe His Tyr Leu Val
100 105 110
Val Val Thr Asn Ala Leu Ile Leu Tyr Phe Ser Thr Thr Gly Gly Arg
115 120 125
Arg Thr Ser Val Arg Ser
130

<210> 29234
<211> 312
<212> PRT
<213> A.fumigatus

<400> 29234
Ser Pro Ser Cys Ser Pro Ser Cys Thr Pro Gly Glu Asp Phe Leu Leu
1 5 10 15
Ala Ile Ala Leu Cys His Thr Cys Ile Pro Glu Lys Asn Glu Ser Gly
20 25 30
Ser Val Ser Phe Gln Ala Ala Ser Pro Asp Glu Leu Ala Leu Val Met
35 40 45
Ala Ala Gln Asp Leu Gly Tyr Leu Val Ile Asp Arg Gln Pro Asn Thr
50 55 60
Leu Thr Ile Arg Thr Tyr Pro Asn Gly Pro Glu Glu Glu His Gln Asp
65 70 75 80
Glu Val Tyr Glu Ile Leu Asp Val Ile Glu Phe Thr Ser Thr Arg Lys
85 90 95
Arg Met Ser Val Val Val Arg Met Pro Asp His Arg Ile Cys Leu Phe
100 105 110
Cys Lys Gly Ala Asp Ser Thr Leu Met Arg Leu Leu Lys Arg Ser Ser
115 120 125
Leu Ala His Glu Lys Ala Val Glu Ile Glu Arg Arg Ala Ser Lys Arg
130 135 140
Lys Ala Ala Glu Ala Asn Glu Val Met Arg Arg Asn Ser Glu His Gln
145 150 155 160
Ser Arg Lys Asp Ser Gly Val Arg Ala Ser Phe Ser Arg Pro Ser Phe
165 170 175
Ser Arg Pro Ser Phe Gly Arg Pro Ser Met Thr Lys Asn Arg Arg Ser
180 185 190
Ser Val Ser Gly Gln Asn Val Ser Val Leu Arg Glu Ser Ile Asp Val

```
        195                 200                 205
Trp Leu Arg Asp Arg Glu Thr Asp Gly Gly Leu Leu Thr Arg Glu Tyr
    210                 215                 220
Asp Asp Glu Tyr Tyr Ser Pro Arg Pro Ser Ala Gln Leu Gly Arg Gln
225                 230                 235                 240
Ser Thr Ser Phe Ser Asp Ser Gly Ser Ser Val Asn Glu Glu Asp Gln
                245                 250                 255
Asp Asp Leu Val Glu Glu Ala Leu Val Val Asn Glu Ser Ala Val Phe
            260                 265                 270
Glu Arg Cys Phe Gln His Leu Asn Asp Phe Ala Thr Glu Gly Leu Arg
        275                 280                 285
Thr Leu Met Tyr Gly His Arg Phe Leu Asp Asp Ser Thr Tyr His Glu
    290                 295                 300
Trp Glu Gly Gly Leu Ser Arg Ser
305                 310
```

<210> 29235
<211> 561
<212> PRT
<213> A.fumigatus

<400> 29235

```
Thr Ile Pro Arg Ile Thr Ser Gly Lys Ala Gly Tyr His Glu Ala Ser
1               5                   10                  15
Thr Ser Leu Ile Asp Arg Gln Gly Lys Ile Glu Lys Val Gly Ala Gln
            20                  25                  30
Ile Glu Glu Gln Leu Glu Leu Thr Gly Ala Thr Ala Ile Glu Asp Lys
        35                  40                  45
Leu Gln Lys Gly Val Pro Glu Ala Ile Asp Lys Leu Arg Arg Ala Asn
    50                  55                  60
Ile Lys Leu Trp Met Leu Thr Gly Asp Lys Arg Glu Thr Ala Ile Asn
65                  70                  75                  80
Val Gly His Ser Cys Arg Leu Val Lys Asp Tyr Ser Thr Leu Val Ile
                85                  90                  95
Leu Asp His Glu Thr Gly Asp Val Glu Arg Ser Ile Leu Lys Met Thr
            100                 105                 110
Ala Asp Ile Ser Arg Gly Ser Val Ala His Ser Val Val Val Ile Asp
        115                 120                 125
Gly Gln Thr Leu Ser Ile Ile Glu Ser Asp Glu Thr Leu Arg Ala Gln
    130                 135                 140
Phe Phe Lys Leu Ala Ile Leu Val Asp Ser Val Ile Cys Cys Arg Ala
145                 150                 155                 160
Ser Pro Lys Gln Lys Ala Phe Leu Val Lys Ser Ile Arg Leu Gln Val
                165                 170                 175
Lys Asp Ser Val Thr Leu Ala Ile Gly Asp Gly Ala Asn Asp Ile Ala
            180                 185                 190
Met Ile Gln Glu Ala His Val Gly Ile Gly Ile Thr Gly Lys Glu Gly
        195                 200                 205
Leu Gln Ala Ala Arg Ile Ser Asp Tyr Ser Ile Ala Gln Phe Arg Phe
    210                 215                 220
Leu Leu Lys Leu Leu Leu Val His Gly Arg Trp Asn Tyr Ile Arg Ala
225                 230                 235                 240
Cys Lys Tyr Thr Leu Gly Thr Phe Trp Lys Glu Met Leu Phe Tyr Leu
                245                 250                 255
Thr Gln Ala Leu Tyr Gln Arg Trp Asn Gly Tyr Thr Gly Thr Ser Leu
            260                 265                 270
```

```
Tyr Glu Pro Trp Ser Leu Ser Met Phe Asn Thr Leu Phe Thr Ser Leu
        275                 280                 285
Ala Val Ile Phe Leu Gly Ile Phe Thr Lys Asp Leu Ser Ala Ser Thr
    290                 295                 300
Leu Leu Ala Val Pro Glu Leu Tyr Thr Lys Gly Gln Arg His Gly Gly
305                 310                 315                 320
Phe Asn Ile Arg Ile Tyr Leu Gly Trp Thr Phe Met Ala Thr Cys Glu
                325                 330                 335
Ala Met Ile Val Phe Phe Val Met Tyr Gly Leu Phe Gly Asn Val Leu
            340                 345                 350
Phe Thr Asn Thr Gly Ser Asp Ile Phe Ser Ala Gly Leu Val Thr Tyr
        355                 360                 365
Ser Ala Cys Val Ile Ile Ile Asn Thr Lys Leu Gln Ala Leu Glu Val
    370                 375                 380
His Asn Lys Thr Tyr Leu Ser Leu Ile Val Ile Val Ile Ser Val Gly
385                 390                 395                 400
Gly Trp Phe Leu Trp Asn Leu Ile Leu Ser Arg Arg Tyr Gln Ile Glu
                405                 410                 415
Ser Gly Asp Gly Ile Tyr His Val Pro Cys Asn Phe Ile Leu Gln Ser
            420                 425                 430
Gly Arg Asp Leu Ala Phe Trp Ala Val Leu Phe Val Thr Val Val Ala
        435                 440                 445
Val Val Val Phe Glu Val Ser Val Ser Ala Ile Arg Ala Asn Leu Phe
    450                 455                 460
Pro Thr Asp Val Asp Ile Phe Gln Glu Tyr Glu Gln Asp Leu Asp Ile
465                 470                 475                 480
Arg Lys Arg Phe Glu Glu Ala Ala Ala Ser Glu Leu Gln Gln Gly Trp
                485                 490                 495
Asp Arg Gly Lys Lys Lys Ser Ser Phe Glu Leu Ala Arg Glu Ala Ala
            500                 505                 510
Glu Met Glu Ala Arg Glu Lys Gln Val Gln Glu Leu Leu Ala Arg Pro
        515                 520                 525
Arg Val Met Thr Lys Thr Gly Ser Gly Gln Ile Glu Met Gln Glu Ile
    530                 535                 540
Asp Leu Ser Glu Leu Asn Gly Ser Ser Arg Asp Val Ser Gly Gln Val
545                 550                 555                 560
Thr
```

<210> 29236
<211> 623
<212> PRT
<213> A.fumigatus

<400> 29236

```
Pro Ser Leu Gly Arg Pro Gly Ser Arg Ser His Pro Ala Ala Met Leu
1               5                   10                  15
Glu Gly Leu Val Ala Asn Leu Leu Asn Arg Phe Leu Gly Tyr Tyr Val
            20                  25                  30
Lys Asn Phe Asp Ala Lys Gln Leu Asn Ile Gly Ile Trp Ser Gly Asp
        35                  40                  45
Val Lys Leu Arg Asn Leu Glu Leu Arg Arg Glu Ala Leu Asp Gln Leu
    50                  55                  60
His Leu Pro Leu Asn Val Val Glu Gly His Leu Gly Glu Leu Thr Leu
65                  70                  75                  80
Ser Ile Pro Trp Ser Asn Leu Arg Gly Lys Pro Val Lys Val Glu Ile
```

```
                85                  90                  95
Glu Asp Val Phe Leu Leu Ala Ala Pro Lys Glu Asp Ala Asp Tyr Asp
            100                 105                 110
Pro Glu Glu Glu Glu Arg Arg Ala Tyr Asn Leu Lys Met Glu Lys Ile
        115                 120                 125
Glu Ser Ala Glu Ile Leu Arg Glu Arg Asn Thr Glu Gly Met Ser Gln
    130                 135                 140
Glu Glu Gln Arg Arg Asn Gln Ser Phe Thr Gln Ser Leu Val Thr Ala
145                 150                 155                 160
Val Val Asp Asn Leu Gln Ile Ser Ile Lys Asn Val His Phe Arg Tyr
                165                 170                 175
Glu Asp Ser Ile Ala Ser Pro Gly His Pro Phe Ala Val Val Leu Thr
            180                 185                 190
Leu Lys Glu Leu Ser Ala Val Ser Thr Asp Ser Glu Trp Asn Pro Thr
        195                 200                 205
Phe Ile Gln Ser Thr Ser Thr Thr Thr His Lys Leu Ala Thr Leu Gly
    210                 215                 220
Ala Leu Ser Val Tyr Trp Asn Thr Asp Ala Glu Leu Leu Gly Thr Gly
225                 230                 235                 240
Arg Gly Ser Asp Leu Gly Ala Glu Ala Gln Gly Ile Ser His Ala Glu
                245                 250                 255
Leu Ile Glu Lys Leu Arg Thr Phe Ile Glu Ser Glu Glu Ser Gln Gln
            260                 265                 270
Phe Met Leu Arg Pro Val Ser Gly Arg Ala Gly Leu Glu Leu Asp Lys
        275                 280                 285
Ser Gly Lys His Asp Arg Pro Ala Ile Lys Thr Arg Leu Leu Phe Asp
    290                 295                 300
Glu Leu Ser Phe Val Leu Asp Asp Asp Gln Tyr Arg Asp Ala Leu Met
305                 310                 315                 320
Leu Val Asp Leu Phe His Tyr Phe Leu Arg His Gln Glu Tyr Lys Lys
                325                 330                 335
Leu Gln Pro Lys Cys Arg Pro Lys Glu Asp Pro Arg Ala Trp Phe Arg
            340                 345                 350
Phe Ala Gly Glu Ala Val Leu Ser Lys Ile His Asp Arg Asn Arg Arg
        355                 360                 365
Trp Ser Trp Asp Tyr Ile Lys Glu Arg Arg Asp Asp Arg Ile Ala Tyr
    370                 375                 380
Ile His Leu Phe Lys Lys Lys Lys Arg Glu Glu Pro Leu Ser Pro Gln
385                 390                 395                 400
Glu Ala Glu Asp Phe Glu Arg Leu Glu Arg Lys Leu Ser Tyr Glu Asp
                405                 410                 415
Ile Arg Phe Trp Arg Ser Leu Ala Arg Asn Gln Leu Arg Lys Glu Asn
            420                 425                 430
Ile Gly Leu Lys Lys Pro Ala Arg Gln Gln Thr Trp Ser Glu Trp Ile
        435                 440                 445
Trp Gly Thr Lys Lys Glu Glu Ser Glu Glu Thr Thr Met Thr Glu Glu
    450                 455                 460
Gln Arg Gln Glu Leu Tyr Asn Ala Ile Asp Trp Asp Glu Lys Lys Ala
465                 470                 475                 480
Ile Ala Glu Ser Val Glu Val Pro Arg Glu Trp Val Lys Leu Gln Val
                485                 490                 495
Asn Ser Gly Leu Arg Ala Gly Ser Phe Thr Leu Arg Arg Asp Pro His
            500                 505                 510
Gly Lys Cys Ser Glu Val Met Lys Leu Val Phe Asp Asn Leu Arg Ala
        515                 520                 525
Lys Ala Leu Gln Arg Pro Asp Ser Phe Phe Ile Glu Val Asp Leu Gly
```

```
    530                 535                 540
Gly Leu Arg Val Tyr Asp Gly Thr Thr Glu Gly Ser Leu Phe Pro Gln
545                 550                 555                 560
Ile Val Lys Val Lys Asp Ser Leu Pro Gln Ser Glu Asp Ser Gln Thr
                565                 570                 575
Gln Pro Pro Asp Gly Gly Glu Leu His Pro Glu Ala Asn Glu Glu Tyr
            580                 585                 590
Glu Glu Ala Glu Asp Asn Leu Phe Gln Phe Gln Leu Glu Lys Asn Pro
        595                 600                 605
Leu Glu Gly Asp Ala Asp Ala His Ala Gly Val Gly Gly Thr Pro
    610                 615                 620
```

<210> 29237
<211> 445
<212> PRT
<213> A.fumigatus

<400> 29237

```
Lys Arg Gly Ser Phe Gln Pro Leu Trp Val Lys Thr Gln Cys Arg Val
1               5                   10                  15
Ala Asp His Lys Tyr Ile Gln Glu Ser Tyr Ile Glu Leu Pro His Asp
            20                  25                  30
Gly Ile Arg Thr Arg Asp Asp Leu Ser Gly Tyr Leu Ser Leu Glu Gly
        35                  40                  45
Pro Gly Tyr His Tyr Ser Gln Arg Asp Met Arg Gly Ala Ala Leu Pro
    50                  55                  60
Ile Glu Asn Ala Tyr Ser Asn Gln Ala Gln Leu Asn Tyr Thr Cys His
65                  70                  75                  80
Asp Ser Val Gln Ala Asp Ala Glu Val Leu Lys Val Val Arg Gln Lys
                85                  90                  95
Leu Leu Arg Asn Ile Ser Ser Ser Thr Arg Ala Glu Ala Leu Gly Asp
            100                 105                 110
Ala Glu Ala Gln Ala Pro Asn Ser Ile Arg Val Ser Leu Pro Ser His
        115                 120                 125
Asp Arg Lys Pro Ser Ser Ala Glu Ser Asp Ser Ser Lys Ala Ser Ser
    130                 135                 140
Lys Arg Ser Ile Lys Glu Glu Ala Thr Ala Phe Leu Gln Ser Val Val
145                 150                 155                 160
Glu Asn Ser His Leu Asp Ala Lys Gly Thr Arg Ser Leu Ala Val Thr
                165                 170                 175
Val Gln Ser Glu Glu Ser Ala Val Ala Arg Leu Gln Gln Gly Ser Gln
            180                 185                 190
Glu Thr Glu Tyr Val Lys Ser Glu Pro Val Ser Met Cys Asp Arg Asn
        195                 200                 205
Ala Ser Leu Glu Asp Thr Arg Leu Ile Asn Glu Gln Ile Asn Leu Gly
    210                 215                 220
Asp Lys Gly Thr Ile Ser Leu Leu Asn Ala Gly Thr Asn Glu Tyr Leu
225                 230                 235                 240
Leu Arg Asn Thr Asn His His Leu Val His Arg Ala Asp Ile Ile Lys
                245                 250                 255
Asp Asn Gln Gly Asn Thr Tyr His Lys Leu Phe Ile Ala Asn Ser Lys
            260                 265                 270
Ala Val Pro Pro Pro Pro Gly Leu Pro Ile Pro Leu Glu Gln Gln Lys
        275                 280                 285
Asp Ala Asp Ser Leu Phe Phe Asp Thr Leu Ala Pro Asn Arg Ala Arg
    290                 295                 300
```

```
Leu Glu Glu Ala Asn Ser Trp Phe His Thr Asp Asn Arg Gly Ala Ser
305                 310                 315                 320
Glu Leu Arg Gln Leu Val Ser Ser Ile Ala Tyr Asp Asn Val Glu Arg
                325                 330                 335
Glu Ala Leu Leu His Gly Asn Ser Arg Pro Thr Ser Glu Thr Thr Thr
            340                 345                 350
Ala Trp Gln Thr Thr Leu Leu Leu Gly Asn Val Ile Ala Asn Leu Gln
        355                 360                 365
Leu His Ala Ser Ser Asp Leu Thr Gln Gln Ala Asp Tyr Phe Ser Asp
    370                 375                 380
Tyr Ala Val Val Asp Ser Ala Cys Cys Glu Pro Ser His Gly Gly Arg
385                 390                 395                 400
Arg Ser Tyr Phe Phe Gln Asp Pro Ala Val Thr His Trp Lys Leu Pro
                405                 410                 415
Ala Asp Arg Ala Thr Pro Gly Thr Ala Lys Glu Ser Glu Tyr Glu Leu
            420                 425                 430
Ala Gly Pro Gln Ile Tyr Ser Gln Pro Ser Gly Thr Trp
        435                 440                 445
```

<210> 29238
<211> 394
<212> PRT
<213> A.fumigatus

<400> 29238

```
Arg Gly Leu Leu Gln Val Leu Ser Phe Leu Phe Leu Leu Leu Ala Ser
1               5                   10                  15
Gln Val Val Thr Glu His Thr Ser Asn Trp Ala Val Leu Val Ser Thr
            20                  25                  30
Ser Arg Phe Trp Phe Asn Tyr Arg His Leu Ala Asn Val Leu Ser Leu
        35                  40                  45
Tyr Arg Thr Val Lys Arg Leu Gly Ile Pro Asp Ser Gln Ile Ile Leu
    50                  55                  60
Met Leu Pro Asp Asp Met Ala Cys Asn Pro Arg Asn Ala Phe Pro Gly
65                  70                  75                  80
Thr Val Tyr Ser Asn Ala Asp Arg Ala Val Asp Leu Tyr Gly Asp Asn
                85                  90                  95
Ile Glu Val Asp Tyr Arg Gly Tyr Glu Val Thr Val Glu Asn Phe Ile
            100                 105                 110
Arg Leu Leu Thr Asp Arg Leu Asp Glu Asp Val Pro Arg Ser Lys Arg
        115                 120                 125
Leu Gly Ser Asp Ala Gly Ser Asn Val Leu Val Tyr Met Thr Gly His
    130                 135                 140
Gly Gly Asp Gln Phe Leu Lys Phe Gln Asp Ser Glu Glu Ile Gly Ala
145                 150                 155                 160
Trp Asp Leu Ala Asp Ala Phe Gly Gln Met Trp Glu Lys Lys Arg Tyr
                165                 170                 175
His Glu Leu Leu Phe Met Ile Asp Thr Cys Gln Ala Asn Thr Met Tyr
            180                 185                 190
Thr His Phe Tyr Ser Pro Asn Ile Ile Ala Thr Gly Ser Ser Ala Leu
        195                 200                 205
Asp Gln Ser Ser Tyr Ser His His Ala Asp Asn Asp Val Gly Val Ala
    210                 215                 220
Val Ile Asp Arg Trp Thr Tyr Tyr Val Leu Glu Phe Leu Glu Thr Gln
225                 230                 235                 240
Val Thr Ser Ala Asn Ser Lys Ala Thr Leu Gly Asp Leu Phe Asp Ser
```

```
                245                 250                 255
Tyr Asp Glu Ser Lys Ile His Ser Gln Pro Gly Val Arg Trp Asp Leu
            260                 265                 270
Phe Pro Gly Gly Glu Gln Glu Gly Arg Leu Arg Thr Val Val Asp Phe
        275                 280                 285
Phe Gly Asn Val Gln Asn Val Glu Val Glu His Ala Asn Ala Thr Glu
    290                 295                 300
Pro Gly Ser Leu Lys Glu Asp Leu Ile Glu Ile Ala Arg Leu Val Glu
305                 310                 315                 320
Lys Trp Arg Lys Arg Asp Arg Asp Phe Ala Ser Leu Arg Glu Pro Leu
                325                 330                 335
His Glu Asn Lys Thr Asp Ala Pro Pro Ser Ser Gln Phe Thr Lys Ala
            340                 345                 350
Arg Asn Val Ala Pro Val Arg Met Ala Ala Glu Ser Ser Trp Glu Lys
        355                 360                 365
Arg Leu Val Gly Ala Ser Val Leu Gly Ala Cys Ala Ala Val Trp Leu
    370                 375                 380
Ala Gly Ser Ile Leu Gly Arg Pro Ser Val
385                 390
```

<210> 29239
<211> 85
<212> PRT
<213> A.fumigatus

```
<400> 29239
Arg Phe Phe Ile Ser Pro Lys Tyr His Ser Ala Asn Cys Thr Ala Ser
1               5                   10                  15
Ala Cys Lys Pro Phe Gly Pro Ser Ile Asn Tyr Phe Glu Cys Asp Arg
            20                  25                  30
Leu Ser Ile Leu Gln Lys Tyr Lys Ala Met Ser Leu Asp Trp Ser Lys
        35                  40                  45
Met His Lys Asp Ile Phe Thr Ile Ala Pro Ala Tyr Lys Ala Ile Phe
    50                  55                  60
Leu Phe Leu Ile Glu Pro Phe Asn Asn Ser Arg Phe Ser Leu Ala His
65                  70                  75                  80
Leu Ala Gln Leu Gly
                85
```

<210> 29240
<211> 61
<212> PRT
<213> A.fumigatus

```
<400> 29240
Arg Glu Ala Gly Ile Val Lys Trp Phe Asn Glu Glu Lys Glu Tyr Cys
1               5                   10                  15
Phe Ile Ser Arg Ser Asn Gly Glu Asp Val Phe Val His Phe Arg Pro
            20                  25                  30
Ile Gln Gly His Gly Phe Val Phe Leu Lys Asp Gly Gln Ala Val Thr
        35                  40                  45
Phe Glu Val Val Asp Gly Arg Thr Lys Gly Phe Ala Gly
    50                  55                  60
```

<210> 29241
<211> 243

<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (228)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29241
Asn Leu Ser Arg Thr Phe Arg Leu Cys Gly Glu His Glu Arg Ile Arg
1 5 10 15
Arg Lys Ser Thr Thr Asp Pro Asn Ala Val Asp Phe Gly Asp Val Pro
20 25 30
Phe Asp Ile Pro Ile Thr Arg Ser Leu Thr Ala Ala Asn Thr Ser Gly
35 40 45
Val Pro Ala Thr Phe Cys Leu Glu Arg Pro Asp His Gly Ser Glu Gln
50 55 60
Lys Thr Pro Ser Trp Leu Glu Tyr Lys Ile Glu Ala Pro Thr His His
65 70 75 80
Glu Glu Asp Lys Lys Arg Lys Thr Asn Glu Arg Thr Leu Phe Pro Gly
85 90 95
Glu Leu Ala Asn Ile Asp Ile Thr Ala His Val Arg Asp Ile Glu His
100 105 110
Val Arg Leu Leu Asn Asn Gly Gln Leu Lys Leu Glu Asp Ile Leu Val
115 120 125
Leu Arg Val Thr Gly Gly Arg Asp His Phe Ile Ser Ala Tyr Gly Gln
130 135 140
Trp Leu Pro Thr Cys Phe Gly Arg Ser Val Glu Glu Leu Thr Met Met
145 150 155 160
Pro Glu Ala Gly Ala Arg Ser Leu Leu Lys Arg Asp Lys Ser Glu Lys
165 170 175
Glu Arg Ser His Val Glu Thr Gly Arg Leu Ser Ala Pro Arg Glu Leu
180 185 190
Phe Arg Leu Thr Glu Ala Ile Ser Lys Gln Ser Glu Arg Ala Ile Ala
195 200 205
Glu Trp Gly Met Thr Lys Asn Asp Ser Asp Glu Lys Leu Pro Pro Trp
210 215 220
Ala Lys Glu Xaa Gly Cys Gly Trp Pro Phe Asp Pro Lys Thr Trp Thr
225 230 235 240
Leu Lys Gly

<210> 29242
<211> 99
<212> PRT
<213> A.fumigatus

<400> 29242
Ala Ser Arg Thr Gly Phe Gly His His Ser Lys Phe Phe His Ala Ala
1 5 10 15
Pro Lys Thr Cys Arg Gln Pro Leu Pro Ile Ser Arg Asp Glu Met Ile
20 25 30
Ala Thr Ala Gly His Ala Lys Asp Lys Asp Val Leu Lys Leu Glu Leu
35 40 45
Thr Ile Val Gln Gln Thr Asn Met Leu Asp Ile Ser Asn Met Cys Gly
50 55 60

```
Tyr Ile Asn Val Gly Glu Leu Pro Gly Lys Gln Ser Thr Phe Val Cys
65                  70                  75                  80
Phe Pro Phe Leu Ile Phe Leu Met Val Ser Gly Cys Phe Asn Phe Val
                85                  90                  95
Phe Gln Pro
```

<210> 29243
<211> 550
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (17)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29243

```
Pro Leu Pro Ser Leu His Met Thr Pro Gln Phe Val Ser Pro Val Pro
1               5                  10                  15
Xaa Ser Val Ser Ser Ala Ala Ala Ser His Thr Ser Asn Asp Pro Arg
            20                  25                  30
Asp Gly Glu Ser Gln Val Thr Arg Ala Leu Ala Gly Met Asn Leu Ser
        35                  40                  45
Ala Ala Asn Gly Asp Val Leu Pro Val His Pro Gln Pro Val Lys Ala
    50                  55                  60
Thr Thr Thr Arg Ala Thr Val Ala Asn Arg Leu Thr Arg Met Phe Ser
65                  70                  75                  80
Asn Thr Gly Lys Met Pro Ser Lys Glu Pro Lys Glu Ser Arg Glu Pro
                85                  90                  95
Asp Pro Ala Arg Asp Ser Ser Asp Ser Ser Thr Glu Ser Ile Asn Ala
            100                 105                 110
Pro Thr Asn Gly Ser Ala Ala Pro Ser Arg Pro Thr Ser Arg Pro Ser
        115                 120                 125
Ser Arg Ala Pro Ser Arg Gln Thr Ser Thr Lys Gly Asp Asn Glu Lys
    130                 135                 140
Glu Lys Lys Thr Lys Pro Thr Asn Gly Lys Asp Gln Arg Glu Gly Ser
145                 150                 155                 160
Ile Val His Lys Arg Phe Glu Met Phe Pro Asp Gly Thr His Cys His
                165                 170                 175
His Leu Lys Ser Ala Arg Arg Gln Glu Lys Leu Thr Asp Leu Leu Arg
            180                 185                 190
Asp Met Leu Gly Gly Gly Ser Arg Lys Lys Asp Asp His Val Asp Asp
        195                 200                 205
Gln Gln Leu Ser Leu Met Ser Thr Trp Ile Asp Gln Phe Lys Thr Glu
    210                 215                 220
Arg Asp Lys Leu Ala Ala Asp Lys Lys Gly Gly Pro Asn Ala Thr Ala
225                 230                 235                 240
Ser Leu Val Asp Lys Tyr Gly Lys Cys Gln Glu Ile Val Gly Arg Gly
                245                 250                 255
Ala Phe Gly Ile Val Arg Ile Ser His Lys Val Asp Pro Lys Asp Ser
            260                 265                 270
Arg Val Glu Gln Leu Tyr Ala Val Lys Glu Phe Arg Arg Arg Pro Gln
        275                 280                 285
Glu Thr Ala Lys Lys Tyr Gln Lys Arg Leu Thr Ser Glu Phe Cys Ile
    290                 295                 300
```

```
Ser Ser Ser Leu Arg His Pro Asn Val Ile His Thr Leu Asp Leu Leu
305                 310                 315                 320
Gln Asp Ala Lys Gly Asp Tyr Cys Glu Val Met Glu Tyr Cys Ala Gly
                325                 330                 335
Gly Asp Leu Tyr Thr Leu Val Leu Ala Ala Gly Lys Leu Glu Val Ala
            340                 345                 350
Glu Ala Asp Cys Phe Phe Lys Gln Leu Met Arg Gly Val Glu Tyr Met
        355                 360                 365
His Glu Met Gly Val Ala His Arg Asp Leu Lys Pro Glu Asn Leu Leu
    370                 375                 380
Leu Thr Thr His Gly Ala Leu Lys Ile Thr Asp Phe Gly Asn Gly Glu
385                 390                 395                 400
Cys Phe Arg Met Ala Trp Glu Lys Glu Ala His Met Thr Ala Gly Leu
                405                 410                 415
Cys Gly Ser Ala Pro Tyr Ile Ala Pro Glu Glu Tyr Val Glu Lys Glu
            420                 425                 430
Phe Asp Pro Arg Ala Val Asp Val Trp Ala Thr Gly Val Ile Tyr Met
        435                 440                 445
Ala Met Arg Thr Gly Arg His Leu Trp Arg Val Ala Arg Lys Asp Glu
    450                 455                 460
Asp Glu Phe Tyr Gln Arg Tyr Leu Glu Gly Arg Lys His Glu Asp Gly
465                 470                 475                 480
Tyr Ala Pro Ile Glu Thr Leu His Arg Val Arg Thr His Arg Gly Cys
                485                 490                 495
Leu Arg Gly Ser Pro Ala Leu Thr Phe Ser Gln Ala Arg Cys Arg Asn
            500                 505                 510
Val Ile Tyr Ser Ile Leu Asp Pro Asn Pro Ser Arg Arg Ile Asn Ala
        515                 520                 525
Ser Gln Val Leu Lys Ser Glu Trp Val Arg Glu Ile Lys Leu Cys Lys
    530                 535                 540
Ala Gly Glu Glu Gly Phe
545                 550
```

<210> 29244
<211> 292
<212> PRT
<213> A.fumigatus

<400> 29244

```
Ser Cys Leu Val Asn Ser Cys Val Thr Cys Glu Ile Ala Leu Arg Tyr
1               5                   10                  15
Thr Ile Met Ile Asp Phe Asn Val Asp Thr Glu Ala Gly Pro Ala Val
            20                  25                  30
Val Arg Phe Gly Leu Pro Pro Thr Ser Leu Phe Lys Phe Pro Pro Ser
        35                  40                  45
Glu Leu Pro Glu Pro Leu Pro Ala Pro Leu Ile Ser Glu Pro Thr Trp
    50                  55                  60
Asn Gln Pro Phe Asn Ile Pro Pro Glu Leu Tyr Lys Gln Leu Leu Asp
65                  70                  75                  80
Val Arg Val Pro Ile Thr Ile Ala Ser Val Tyr Ala Val Thr Val Val
                85                  90                  95
Ile Ile Asn Arg Ile Asn Lys Ser Arg Gly Tyr Lys Pro Trp Gly Phe
            100                 105                 110
Ser Gln Thr Arg Leu Phe Lys Leu Phe Val Ile Leu His Asn Val Phe
        115                 120                 125
Leu Ala Ile Tyr Ser Ala Trp Thr Phe Val Gly Met Phe Gln Ala Phe
```

```
    130                 135                 140
Arg Asn Ser Trp Pro His Arg Glu Asp Pro His Gly Val Val Gly Val
145                 150                 155                 160
Leu Asp Ser Leu Cys Lys Ile Asn Gly Pro Arg Gly Tyr Gly Asn Ala
                165                 170                 175
Ala Ile Tyr Asp Ser Val Thr Asp Gln Trp Lys Leu Pro Asn Pro Glu
            180                 185                 190
Phe Gln Leu Ala Ala Gly Gly Val Pro Asp Pro Thr Asp Val Gly Arg
        195                 200                 205
Met Trp Asn Gln Gly Leu Ala Tyr Leu Gly Trp Ile Phe Tyr Leu Ser
    210                 215                 220
Lys Phe Tyr Glu Val Leu Asp Thr Ala Ile Ile Leu Ala Lys Gly Lys
225                 230                 235                 240
Lys Ser Ser Thr Leu Gln Thr Tyr His His Ala Gly Ala Met Met Cys
                245                 250                 255
Met Trp Ala Gly Ile Arg Tyr Ile Ala Pro Pro Ile Leu Ile Phe Thr
            260                 265                 270
Leu Val Asn Ser Gly Ile His Ala Leu Met Val Cys Lys Tyr Arg Ser
        275                 280                 285
Tyr Asn Arg Leu
    290

<210> 29245
<211> 74
<212> PRT
<213> A.fumigatus

<400> 29245
Tyr Thr Tyr Tyr Thr Leu Thr Ala Leu His Ile Arg Val Pro Gly Val
1               5                   10                  15
Ile Lys Arg Ser Leu Thr Thr Met Gln Ile Thr Gln Phe Val Val Gly
            20                  25                  30
Thr Thr Trp Ala Ala Ser Tyr Leu Phe Val Ser Tyr Thr Leu Pro Gly
        35                  40                  45
Lys Val Pro Thr Ala Ser Ala Ala Ala Gly Ser Ala Thr Ser Val Ile
    50                  55                  60
Glu Ala Ala Ala Ala Asn Gly Leu Gly Cys
65                  70

<210> 29246
<211> 392
<212> PRT
<213> A.fumigatus

<400> 29246
Arg Phe Phe Ile Glu Thr Ala Ile Met Gln Ser Gln Ser Gln Gln His
1               5                   10                  15
Ser Ala Ser Ala Asp Ser Gly Gln Ala Pro Gln Ala Gln Ser Gly Gln
            20                  25                  30
Phe Ala Arg Asp Ser Arg Ala Pro Phe Ala Ala Gly Tyr Gln Gln Asn
        35                  40                  45
Gly His Pro Ser Gln Pro Glu Gly Tyr His Asp Gly Ser Ala Pro Leu
    50                  55                  60
Gln Ala Asp Gln Asn Phe Gln Asn Gln Arg Ser Cys Ser Lys Tyr Ser
65                  70                  75                  80
Thr Ile Lys Gly Ser Met Pro Phe Thr Met Ser Pro Asn Phe Asp Leu
```

```
                85                  90                  95
Ser Gly Ala Asn Arg Ala Pro Tyr Asn Gly Gln Phe Val Leu Leu Pro
            100                 105                 110
Ser Gly Pro Met Leu Asn Gly Ile Pro Pro Ile Ser Ser Phe Asn Pro
        115                 120                 125
Thr Ser Val Leu Gly Thr Asn Gln Leu Gly Ser Thr Ser Tyr Leu Pro
    130                 135                 140
Ala Met Tyr Pro Ser Ala Ser Pro Asn Phe Pro Met Gly Pro Ala Thr
145                 150                 155                 160
Met Gln Gly Tyr Ser Phe Pro Phe Val Ala Asp Asn Asn Leu Gln Asn
                165                 170                 175
Leu Ala Gly Gln Lys Arg Asn Gly Trp Val Ala Ser Glu Asn Gln Lys
            180                 185                 190
Val Thr Gly Gln Ser Thr Ser Glu Thr Pro Gly Asn Gln Cys Glu Phe
        195                 200                 205
Tyr Pro Gly Pro Ala Val Ser Thr Ile Asp Gly Pro Ser Ile Pro Leu
    210                 215                 220
Leu Asn Tyr Asn Gly Pro Pro Gln Pro Cys Leu Pro Tyr Gln Val Met
225                 230                 235                 240
Lys Thr Pro Asn Gly Tyr Met Leu Gln Asp Leu Glu Ser Ile Thr Gln
                245                 250                 255
Gln Glu Pro Pro Ile Pro Arg Ala Val Pro Ala Met Trp Thr Asn Pro
            260                 265                 270
Ser Glu Val Thr Leu Ala Lys Cys Leu Glu Asn Arg Glu Gly Ile Thr
        275                 280                 285
Asn Val Tyr Ile Arg Gly Phe Leu Pro Gln Thr Thr Asp Glu Met Leu
    290                 295                 300
His Ser Tyr Ala Ala Arg Phe Gly Lys Ile Asp Arg Cys Lys Ala Ile
305                 310                 315                 320
Val Asp Leu Asp Thr Gly Leu Cys Lys Gly Tyr Val Lys Ala Ala Ser
                325                 330                 335
Ser Met Ser Ala Cys Gln Leu Ile Ser Leu Pro Asp Ser Val Leu Ser
            340                 345                 350
Ser Phe Thr Thr Leu Ser His Ala Arg Thr Ala Ser Gly Ala Phe Ser
        355                 360                 365
Ile Leu Asp Ile Lys Gln Val Leu His Lys Tyr Cys Glu Ser Met Pro
    370                 375                 380
Thr Arg Asp Ser Gln Thr Leu Thr
385                 390
```

<210> 29247
<211> 212
<212> PRT
<213> A.fumigatus

<400> 29247

```
Arg Val Tyr Lys Gly Phe Gln Gly Asn Asn Asp Ala Arg Leu Ser Ile
1               5                   10                  15
Glu Asp Pro Asn Asn Pro Asp Asn Asp Val Ser Gly Gly Thr Arg Glu
            20                  25                  30
Ile His Leu Ile Phe Arg Ser Phe Ser Arg Ala Phe Gln Leu Leu Lys
        35                  40                  45
Glu Arg Met Val Ser Ser Ala Val Ser Gly Asp Thr Lys Ala Ser Ile
    50                  55                  60
Leu Gln Ser Ile Ile Ala Ala Asn Tyr Glu Glu Tyr Thr Gln Gln Arg
65                  70                  75                  80
```

```
Ala His Leu Arg Ala Val Phe Glu Thr His Pro Arg Phe Ala Gln Tyr
                85                  90                  95
Arg Arg Ala Pro Thr Pro Pro Pro Pro Pro Ser Glu Ser Pro Pro Pro
            100                 105                 110
Pro Pro Ala Asp Leu Ala Pro Leu Pro Pro Asn Leu Pro Ala Lys Pro
        115                 120                 125
Pro Ser Ala Lys Tyr Ser Lys Ala Pro Pro Ala Pro Ala Ser Lys Asp
    130                 135                 140
Ser Lys Gly Ser Lys Glu Lys Met Thr Lys Met Gln Arg Lys Gln Gln
145                 150                 155                 160
Ala Ser Arg Glu Arg Ala Ala Arg Leu Arg Arg Leu Arg Pro Asp Ile
                165                 170                 175
Pro Ala Ile Pro Asn Ser Ile Ser Asn Glu Gln Ala Leu Ser Leu Gly
            180                 185                 190
Gly Tyr Lys Thr Gln Ser Glu Met Asp Arg Asp Leu Ala Ser Arg Glu
        195                 200                 205
Lys Glu Thr Lys
    210
```

<210> 29248
<211> 116
<212> PRT
<213> A.fumigatus

<400> 29248

```
Asn Glu Arg Val Gln Asp Gly His Leu Ala Gly Val Gly Ala Leu Asn
1               5                   10                  15
Trp Ile Tyr Ile Pro Ile Met Leu His Ser Tyr Gln Cys Ile Pro Arg
            20                  25                  30
Thr Ser Pro Pro Tyr Pro Asp Pro Lys Thr Pro Gly Ser Gln Pro Pro
        35                  40                  45
Tyr Leu Pro Arg Ser Val His His Arg Tyr Ser Tyr Arg Ala Pro Ser
    50                  55                  60
Pro Thr Asn Pro Ala Pro Leu Pro Pro Pro His Cys Arg Ser Cys Asp
65                  70                  75                  80
Gly Tyr Ser Pro His Arg Arg Ala Arg Pro His Gly Arg Gln Pro Pro
                85                  90                  95
Trp His Pro Ala Pro Ser Gly Pro Arg Pro His Gln His Pro Pro Ala
            100                 105                 110
Ala Cys Ser Gly
        115
```

<210> 29249
<211> 109
<212> PRT
<213> A.fumigatus

<400> 29249

```
Cys Phe Thr Arg Ile Ser Val Tyr Leu Glu His Pro Leu His Ile Gln
1               5                   10                  15
Ile Gln Lys Leu Arg Val Pro Asn Arg His Ile Cys Arg Val Gln Tyr
            20                  25                  30
Ile Ile Asp Thr Arg Ile Glu Pro Arg Pro Arg Arg Ile Gln Pro Arg
        35                  40                  45
Cys Arg Arg Arg Ile Val Asp His Ala Met Asp Ile Leu Arg Ile Val
    50                  55                  60
```

```
Gly Pro Asp Pro Met Val Gly Ser Pro Arg Gly Ile Gln Leu His Leu
65                  70                  75                  80
Ala Arg Ala His Thr Asn Thr Pro Gln Leu His Val Leu Asp Asp Val
                85                  90                  95
Val Asp Val Gln Val Gly Asp Leu Arg Arg Arg Arg Gln
            100                 105
```

<210> 29250
<211> 76
<212> PRT
<213> A.fumigatus

<400> 29250

```
Phe Ala Cys Ala Ser His Lys Leu Ile Pro Glu Ser Ser Ile Glu Arg
1               5                   10                  15
Leu Leu Gly Glu Asn Pro Met Gln Thr Leu Pro Val Gly Tyr Asn Lys
            20                  25                  30
Asp Glu Leu Val Ser Gln Ile Asn Ala Asn Pro Glu Arg Ala Glu Gln
        35                  40                  45
Leu Ile Asn Glu Ile Glu Ser Met Glu Gly Asn Ala Gly Ala Ile Ile
    50                  55                  60
Gly Ala Ile Thr Glu Val Cys Leu Cys Val Arg Asn
65                  70                  75
```

<210> 29251
<211> 192
<212> PRT
<213> A.fumigatus

<400> 29251

```
Arg Lys Gln Val Met His Asn Leu Cys Asn Gln Lys Glu Thr Met Thr
1               5                   10                  15
Leu Lys Asn Ile Cys Asn Ser Leu Ser Arg Arg Pro Gln Ala Leu Asp
            20                  25                  30
Val Val Leu Ile Phe Arg Asn Pro Lys Gln Val Leu Gln Pro Leu Cys
        35                  40                  45
Ala Leu Leu Asp Ser Trp His Trp Asp Glu Asp Gln Gly Glu Tyr Gln
    50                  55                  60
Pro Val Tyr Asp Glu Phe Gly Ser Ile Leu Leu Leu Val Leu Ala Phe
65                  70                  75                  80
Lys Tyr Arg Phe Asp Leu Arg Pro Ala Asp Leu Gly Ile Ser Ser Ser
                85                  90                  95
Asp Ser Phe Val Leu Arg Leu Leu Glu Arg Gly Ser Cys Ser Gln Lys
            100                 105                 110
Leu Asp Ala Leu Asp Glu Lys Gln Asn Lys Asn Leu Gly Ser Trp Ile
        115                 120                 125
Ala Ala Leu Phe Ile Ala Glu Gly Ile Ser Glu Glu Thr Met Ser Ala
    130                 135                 140
Cys Ser Pro Gln Glu Phe Tyr Leu Leu Val Ala Thr Leu Phe Ser Gln
145                 150                 155                 160
Ser Leu Glu Ala Cys Glu Thr Gly Lys Leu Glu Phe Asp Thr Leu Lys
                165                 170                 175
Gly Gly Phe Glu Cys Met Ser Leu Gly Leu Asp Leu Leu Glu Arg Tyr
            180                 185                 190
```

<210> 29252

<211> 274
<212> PRT
<213> A.fumigatus

<400> 29252
Thr Ser Leu Leu Ala Arg Trp Lys Ser Ser Ser Lys Met Cys Ala Arg
1 5 10 15
Asp Thr Arg Arg Ala Pro Thr Ser Asn Arg Ser Ser Thr Thr Trp Ser
20 25 30
Arg Ala Tyr Arg Ser Ser Trp Trp Ala Ala Ala Thr Val Pro Asn Trp
35 40 45
Arg Val Gly Arg His Ile Pro Ala Ala Ala Ala Gly Gln His Pro Gln
50 55 60
His Val Pro Val Val Gly Asp Met Glu His Lys Pro Arg Gly Gln His
65 70 75 80
Gly Thr Ser Ser Val His Pro Ser Pro Asp Asp Arg Arg Arg Ala Asp
85 90 95
Val Gly Gly Val Ala Arg Ala Thr Cys Ala Asp Arg Gly Ala Glu Ala
100 105 110
Pro Asp Arg Gly Arg Gln Arg Pro Pro Gly Ala Gly Leu Gly Arg Asp
115 120 125
Ala Asp Leu Arg Ala His Gly Gly Asp Leu Phe Cys Gly Ala Glu Gln
130 135 140
Pro Pro Ala Arg Gly Pro Glu Gln Gly Gly Ala Ala Ala Val Arg Asp
145 150 155 160
Pro Asp Pro Pro Arg Arg Ala Gly Ala Pro Ala Arg Glu Arg Ala Gln
165 170 175
Asp Leu Gly Lys Gly Pro Pro Ala Arg Gly Gly Ala Arg Ala Val Val
180 185 190
Pro Ala Gly Gln Arg Pro Thr Gly Ala Ala Val Ala Gly Pro Gln Pro
195 200 205
Gly Arg Gln Gln His His Pro Glu His Ala Ala Gly Gly Cys Trp Cys
210 215 220
Gly Arg Gly Pro Asp Gly Ala Gly Cys His Gly Gly Cys Arg Pro Trp
225 230 235 240
Gly Arg Ala Arg Arg Cys Gly Glu Tyr Pro Ser His Asp Arg Gln Cys
245 250 255
Gly Gly Gly Ser Gly Ala Gly Phe Val Gly Asp Gly Ala Arg Tyr Glu
260 265 270
Tyr Arg

<210> 29253
<211> 61
<212> PRT
<213> A.fumigatus

<400> 29253
Arg Arg Ala Asp Asp Asn Val Thr Ile Val Thr Tyr Thr Pro Ile Thr
1 5 10 15
Lys Asp Arg Pro Ala Arg Glu Pro Asn Met Ile Val Thr Phe Asp Ile
20 25 30
Gly Ser Asn Lys Tyr Leu Pro Phe Thr Pro Thr Ile Pro Trp Thr Ser
35 40 45
Val Pro Val Ser Gln Pro Ser Ser Arg Gln Gln Pro Leu
50 55 60

<210> 29254
<211> 226
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (226)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29254
Ser Tyr Gln Ser Ala Asn Met Arg Val Thr Val Met Phe Ile Ser Leu
1 5 10 15
Ala Ala Ile Gln Leu Val Val Cys Gln Phe Ser Phe Asn Gly Ala Gly
20 25 30
Asn Ser Asn Leu Ser Thr Ala Thr Arg Ser Thr His Ser Lys Asp Gly
35 40 45
Lys Pro Asp Gly Ser His Leu Ala Arg Pro Glu Ile Arg Phe Gly Glu
50 55 60
Trp Ile Val Lys Arg Asp Thr Thr Thr Ile Ala Asp Ala Val Thr Ser
65 70 75 80
Thr Thr Ala Ile Glu Thr Val Thr Ser Ala Thr Thr Arg Asp Ser His
85 90 95
Ala Thr Thr Thr Ser Asp Ser Arg Thr Thr Ser Ser Ser Glu Thr Ser
100 105 110
Ser Ser Phe Thr Thr Thr Thr Ala Ala Ala Thr Thr Thr Ser Thr Thr
115 120 125
Thr Ser Ser Thr Ser Ser Ser Thr Ala Thr Ser Ser Ser Ser Ala Ser
130 135 140
Ile Ala Ala Ser Thr Thr Thr Thr Thr Ala Thr Arg Thr Thr Ile Thr
145 150 155 160
Ser Thr Thr Thr Pro Thr Pro Thr Glu Ser Ala Glu Leu Lys Glu Trp
165 170 175
Asn His Arg Gly Thr Ile Ala Ala Ile Val Thr Phe Ser Ile Leu Gly
180 185 190
Ser Val Phe Val Gly Ala Cys Ile Ala Arg Cys Phe Arg Asn Trp Ala
195 200 205
Lys Lys Arg His Met Ser Ser Pro Arg Gly Trp Lys Glu Gln Leu Thr
210 215 220
Ile Xaa
225

<210> 29255
<211> 112
<212> PRT
<213> A.fumigatus

<400> 29255
His Arg Glu Gln Gln Val Ser Pro Leu Tyr Thr Asn Asn Thr Leu Asp
1 5 10 15
Lys Arg Thr Gly Ile Thr Thr Val Val Ala Ala Ala Thr Ile Val Lys
20 25 30
Ser Ile Ser Asn Val Ile Leu Ala Ala Asn Ala Gly Leu Glu Ile Tyr
35 40 45
Glu Asp Ile Ala Ala Met Thr Lys Ser Glu Ser Asn Gln Asn Ser Cys

```
    50                  55                  60
Ser Leu Val Tyr Gly Thr Asp Ser Asp Arg Thr Tyr Val Glu Gly Tyr
65                  70                  75                  80
Ala Tyr Glu Ala Thr Thr Ser Gly Glu Asn Cys Asp Thr Thr Ala Lys
                85                  90                  95
Lys Lys Thr Ile Ile Ala Ala Val Lys Cys Ala Lys Gln Leu Asn Thr
            100                 105                 110
```

<210> 29256
<211> 171
<212> PRT
<213> A.fumigatus

<400> 29256

```
Met Val Ser Cys Ser Phe Gln Pro Arg Gly Glu Asp Ile Cys Arg Phe
1               5                   10                  15
Phe Ala Gln Leu Arg Lys His Arg Ala Met Gln Ala Pro Thr Lys Thr
            20                  25                  30
Glu Pro Arg Met Leu Lys Val Thr Met Ala Ala Ile Val Pro Arg Trp
        35                  40                  45
Phe His Ser Phe Asn Ser Ala Asp Ser Val Gly Val Gly Val Val Val
    50                  55                  60
Glu Val Met Val Val Leu Val Ala Val Val Val Val Val Glu Ala Ala
65                  70                  75                  80
Met Asp Ala Asp Asp Asp Asp Val Ala Val Leu Leu Glu Val Leu Glu
                85                  90                  95
Val Val Val Glu Val Val Val Ala Ala Ala Val Val Val Val Lys Asp
            100                 105                 110
Glu Glu Val Ser Glu Leu Leu Val Val Leu Glu Ser Glu Val Val Val
        115                 120                 125
Ala Trp Glu Ser Leu Val Val Ala Glu Val Thr Val Ser Ile Ala Val
    130                 135                 140
Val Asp Val Thr Ala Ser Ala Ile Val Val Val Ser Arg Phe Thr Ile
145                 150                 155                 160
His Ser Pro Asn Arg Ile Ser Gly Leu Ala Arg
                165                 170
```

<210> 29257
<211> 154
<212> PRT
<213> A.fumigatus

<400> 29257

```
Arg Leu Asp Val Leu Leu Thr Val Thr Ser Val Thr Thr Leu Asp Val
1               5                   10                  15
Val Leu Glu Leu Ala Gly Ala Glu Ala Thr Ser Gly Val Gly Glu Leu
            20                  25                  30
Glu Gly Pro Glu Glu Val Val Gly Leu Leu Glu Val Gly Ala Asn Ser
        35                  40                  45
Val Asp Leu Val Asp Gln Ile Leu His Ala Asp Asn Ala Val Leu Ala
    50                  55                  60
Glu Gly Leu Leu Asn Asp Leu Val Val Gly Lys Arg Asp Thr Leu Leu
65                  70                  75                  80
Val Asp Leu Ser Val Thr Thr Leu Val Asp Glu Leu Thr Asp Thr Leu
                85                  90                  95
Glu Val Gly Val Thr Val Ser Asp Val Trp Val Asp Asp Gly Gln His
```

```
            100                 105                 110
Leu Leu Gly Gly Leu Gly Glu Thr Asp Glu Gly Thr Val Val Asp Leu
        115                 120                 125
Asp Gln Thr Glu Lys Leu Gln Asp Leu Ala Arg Leu Arg Ser Asn Leu
    130                 135                 140
Val Asp Thr Ala Asp Ser Leu Ala Pro Gly
145                 150
```

<210> 29258
<211> 70
<212> PRT
<213> A.fumigatus

<400> 29258

```
Gln Ala Asn Lys Lys Lys Arg Glu Ala Ile Phe Lys Arg Ala Glu Ala
1               5                   10                  15
Tyr Val Lys Glu Tyr Arg Asp Ala Glu Arg Glu Lys Ile Arg Leu Ala
            20                  25                  30
Arg Val Ala Arg Gln Gln Gly Asn Phe Tyr Val Pro Asp Glu Pro Lys
        35                  40                  45
Leu Ala Phe Val Ile Arg Ile Lys Gly Tyr Val Ser Leu Glu His Ser
    50                  55                  60
Val Ser Leu Pro Trp Cys
65                  70
```

<210> 29259
<211> 158
<212> PRT
<213> A.fumigatus

<400> 29259

```
Ile Arg Ser Ile Asn Lys Ile Ala Pro Gln Pro Arg Lys Ile Leu Gln
1               5                   10                  15
Leu Leu Arg Leu Val Gln Ile Asn Asn Gly Thr Phe Val Arg Leu Thr
            20                  25                  30
Lys Ala Thr Gln Glu Met Leu Thr Ile Ile Asn Pro Tyr Ile Ala Tyr
        35                  40                  45
Gly Tyr Pro Asn Leu Lys Ser Val Arg Glu Leu Ile Tyr Lys Arg Gly
    50                  55                  60
Tyr Gly Lys Val Asn Lys Gln Arg Val Pro Leu Thr Asp Asn Gln Val
65                  70                  75                  80
Ile Glu Glu Ala Leu Gly Lys Tyr Gly Ile Val Cys Met Glu Asp Leu
                85                  90                  95
Ile His Glu Ile Tyr Thr Val Gly Pro Asn Phe Lys Gln Ala Asn Asn
            100                 105                 110
Phe Leu Trp Pro Phe Lys Leu Ser Asn Pro Thr Gly Gly Phe Arg Thr
        115                 120                 125
Arg Lys Phe Lys His Tyr Ile Glu Gly Gly Asp Thr Gly Asn Arg Glu
    130                 135                 140
Glu Asn Ile Lys Ser Ser Pro Arg Gly Trp Thr Asp Ser Arg
145                 150                 155
```

<210> 29260
<211> 152
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (102)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29260
His Tyr Leu Asp Ile Tyr Ile Ser Ala Pro Ala Thr Ile Ala Ser Leu
1 5 10 15
Leu His His Thr Pro Ile Ser Thr Pro Ile Glu Pro Pro Ser Pro Ala
20 25 30
Met Ala Tyr Asn Asn Arg Pro Asp Ala Ser Thr Ala Phe Thr Phe Asp
35 40 45
Asn Asp Asp Arg Phe Val Asn Gln Gln Pro Lys Gly Pro Asp Pro Leu
50 55 60
Ser Ala Asn Trp Ser Tyr Asp Ser Ala Ile Asp Leu Phe Ser Leu Asn
65 70 75 80
Thr Met Leu Pro Glu Thr Phe Pro Leu Asp Ile Pro Asn Asp Met Leu
85 90 95
Leu Asp Pro Lys Asp Xaa Pro Thr Asp Leu Phe Ala Pro Pro Ala Asp
100 105 110
Ile Ser Gly Phe Ala Ile Ser His Ser Gly Glu Asp Ser Leu Ser Ser
115 120 125
Val Cys Leu Val Ser Leu Leu Phe Tyr Val Phe Tyr Phe Ile Thr Asp
130 135 140
Lys Asp Ser Pro Gly Ser Gly Lys
145 150

<210> 29261
<211> 158
<212> PRT
<213> A.fumigatus

<400> 29261
Ser Pro Ala Asp Asn Ile Ser Ser Cys Ile Tyr Ser Thr Glu Lys Arg
1 5 10 15
Glu His Thr Gly Gly Lys Pro Glu Ile Ile Thr Pro Arg Gly His Gln
20 25 30
Ala Arg Pro Pro Arg Gln Arg Arg Ile Pro Ala His Asp Leu Leu Gly
35 40 45
Arg Leu Pro Val His Asn Lys Val Leu Gln Leu Leu Ala Arg Asn Gly
50 55 60
Asp Ile Asp Ser Arg Gly Ala Leu Arg Leu Gln Leu Gln Thr Asp Leu
65 70 75 80
Ala Gly Val Val His Lys His Thr Val Pro Leu Arg Ala Asp Ile Lys
85 90 95
Gly Asn Val Leu Val Arg Gln Leu Arg Arg Gly Pro Ala Val Leu Val
100 105 110
Pro Asp Val Asp Ala Leu Pro Val Leu Asn Glu Gly Ala Lys Pro Leu
115 120 125
Ser Glu Ser Val Gln Leu Leu Ala Asp Ala Glu Val Gln Phe Gly Glu
130 135 140
His Val Ser Leu Ala Leu Glu Glu Asp Ala Val Val Pro Ala
145 150 155

<210> 29262

<211> 62
<212> PRT
<213> A.fumigatus

<400> 29262
```
Gly Glu Met Val Cys Pro Val Val Leu Phe Met Trp Leu Ile Cys Leu
1               5                  10                  15
Tyr Ile Gln Glu Gly Ile Arg Ile Asp Trp Met Ser Asn Val Glu Arg
            20                  25                  30
Leu His Ile Gln Asp Glu Thr Val Asp Leu Leu Leu Asn Lys Phe Gln
        35                  40                  45
Arg His Arg Gly Asp Thr Leu Asn Ser Arg Glu Leu Gln Phe
    50                  55                  60
```

<210> 29263
<211> 287
<212> PRT
<213> A.fumigatus

<400> 29263
```
Arg Gly Pro Ala Gln Arg Leu Phe Leu Arg Gly Leu Arg Arg Pro Ser
1               5                  10                  15
Arg Ala Ser Leu Glu Ser Asn Leu Cys Thr Gly Gly Ser Leu Cys Leu
            20                  25                  30
Cys Ser His Ser Arg Ala Leu Val Asp Ile Ile Arg Ala Gly Gly Leu
        35                  40                  45
Asp Lys Gly Pro His Tyr Arg Leu Asn Thr Ser Ser Gly His Ala Lys
    50                  55                  60
Ile Asp His Val Ala Lys Gln Lys Leu Ser Tyr Thr Ser Gly Asp Leu
65                  70                  75                  80
Glu Leu Asn Ile Asn Thr Ala Pro Asn Glu Leu Asp Phe Val Phe Ser
                85                  90                  95
Ser Ala Asp Lys Gly Lys Leu Thr Gly His Ser Trp Arg Ser Ile Gly
            100                 105                 110
Tyr Val Gly Asp Gln Thr Thr Asp Arg Ser Arg Trp Asp Asp Gly Ile
        115                 120                 125
Phe Phe Glu Arg Gln Gly Tyr Met Leu Ala Glu Leu Asp Leu Gly Val
    130                 135                 140
Gly Glu Lys Leu Tyr Gly Leu Gly Glu Arg Phe Gly Pro Phe Val Lys
145                 150                 155                 160
Asn Gly Gln Arg Val Asp Ile Trp Asn Glu Asp Gly Gly Thr Ser Ser
                165                 170                 175
Glu Leu Ala Tyr Lys Asn Ile Pro Phe Tyr Ile Ser Ser Lys Gly Tyr
            180                 185                 190
Gly Val Phe Val Asn Asn Pro Gly Lys Val Ser Leu Glu Leu Gln Ser
        195                 200                 205
Glu Arg Thr Thr Arg Val Asn Ile Ser Ile Pro Gly Glu Glu Leu Glu
    210                 215                 220
Tyr Phe Val Val Tyr Gly Lys Thr Pro Lys Glu Ile Val Gly Arg Tyr
225                 230                 235                 240
Thr Ala Leu Thr Gly Arg Pro Ser Leu Val Pro Ser Trp Ser Tyr Asn
                245                 250                 255
Leu Trp Leu Thr Thr Ser Val Phe Pro Phe Phe Cys Arg Ile Tyr Thr
            260                 265                 270
Thr Ala Asp Val Val Arg Arg Ala Ser Gly Pro Ile Lys Thr Asp
        275                 280                 285
```

<210> 29264
<211> 202
<212> PRT
<213> A.fumigatus

<400> 29264
Glu Ala Pro Glu Tyr Gly Val Gly Ala Ser Asn Ser Ser Ala Lys Arg
1 5 10 15
Trp Ala Arg Asp Met Ser Gly Pro Val Lys Arg Ser Asp Gln Met Ser
20 25 30
Trp Met Leu Leu Gly Ser Ala Leu Ser Leu Ala His Glu Leu Gly Ile
35 40 45
Tyr Glu Thr Gly Asp Lys Ala Arg Asp Ala Phe Val Ala Tyr Glu Arg
50 55 60
Phe Met Thr Lys Asp Gln Met Arg Leu Arg Arg Gln Arg Ala Gln Arg
65 70 75 80
Leu Leu Tyr Val Tyr Ile Asn Gln Leu Ala Trp Arg Ile Gly Cys Val
85 90 95
Ser Leu Met Pro Gln Gly Leu Ser His Ser Ile Leu Asn Arg Gln Thr
100 105 110
Ser Arg Glu Leu Ser Gln Tyr Gly Glu Glu Trp Leu Thr Phe Met Asp
115 120 125
Ser Trp Met Asp Leu Thr Lys Leu Ala Lys Ser Val Thr Asp Met Phe
130 135 140
Phe Pro Ser Val Thr Phe Ala Arg Gln Gln Leu Gln Ser Gly Arg Tyr
145 150 155 160
Ile Asp Leu Leu Asp His Phe Arg Pro Leu Leu Asp Lys Trp Lys Glu
165 170 175
Arg Tyr Leu Gln Pro Gln Cys Lys Leu Pro Tyr Leu Arg Met Phe Arg
180 185 190
Leu Phe Phe Gly Gly Phe His Glu Asp Ser
195 200

<210> 29265
<211> 61
<212> PRT
<213> A.fumigatus

<400> 29265
His Phe Arg Cys Thr Val Thr Ser Val Lys Asp Gly Asp Ala Met Ser
1 5 10 15
Ala Glu Ser Gly Ser Ala Leu Cys Lys Ala Pro Gly Asn Leu Asp Ile
20 25 30
Ser Ser Ala Asn Leu Gln Lys Thr Trp Leu Gly Leu Glu Val Tyr Ser
35 40 45
Lys Thr Met Gly Ser Ser Met Lys Arg Leu Phe Glu Gln
50 55 60

<210> 29266
<211> 260
<212> PRT
<213> A.fumigatus

<400> 29266
Leu Ala Asn Gln Ser Ile Leu Asn Ala Tyr Leu Leu Leu Trp Ile Ile

```
1               5                   10                  15
Ser Gly Leu Leu Leu Val Thr Ser Met Leu Ser Trp Ile Arg Pro Ser
            20                  25                  30
Ala Arg Leu Ser Phe Phe His Ser Lys Asp Asn Lys Leu Leu Leu Thr
        35                  40                  45
Lys Lys Pro Gly Glu Ser Gly Val Lys Gln Gln Val Ala Leu Ala Asp
    50                  55                  60
Val Cys Arg Ser Ala Thr Pro Thr Lys Cys His Leu Asn Pro Phe Leu
65                  70                  75                  80
Phe Asn Gly His Leu Gln Thr Ala Trp Thr Ala Val Lys Phe Asp Asp
                85                  90                  95
Val Pro Val Tyr Tyr Lys Arg Arg Met Phe Glu Ala Asp Asn Ser Met
            100                 105                 110
Tyr Lys Gly His Phe Ala Val Asp Phe Val Val Glu Pro Tyr Glu Thr
        115                 120                 125
Pro Arg Asp Asn Ala Glu Ala Thr Asp Glu Ala Arg Arg Tyr Thr Leu
    130                 135                 140
Pro Ser Gly Leu Pro Glu Arg Thr Ser Phe Phe Ser Glu Glu Glu Phe
145                 150                 155                 160
Gln Ala Leu Pro Ser Asp Asp Thr Lys Pro Met Leu Val Leu Leu His
                165                 170                 175
Gly Leu Ser Gly Gly Ser His Glu Ile Tyr Leu Arg His Val Leu Ala
            180                 185                 190
Pro Leu Ile Ala Asp Gly Asn Trp Glu Ala Cys Val Val Asn Ser Arg
        195                 200                 205
Gly Cys Ser Gln Thr Lys Ile Thr Thr Gly Val Leu Tyr Asn Ala Arg
    210                 215                 220
Ala Thr Trp Asp Val Arg Gln Thr Val Lys Trp Leu Arg Lys Ala Phe
225                 230                 235                 240
Phe Gln Ile Asp Pro Cys Ser Glu Leu Gly Ser Leu Leu Ala Gln Ile
                245                 250                 255
Phe Leu Pro Met
            260
```

<210> 29267
<211> 129
<212> PRT
<213> A.fumigatus

<400> 29267

```
Ser Val Arg Pro Arg Thr Phe Ser Gln Asn Asn Phe Tyr Ile Ile Leu
1               5                   10                  15
Leu Leu Ile Ile Pro Ser Gly His Cys Asn Val Gln Pro Gly Asp Thr
            20                  25                  30
Leu Arg Lys Gly His Thr Ile Glu Thr Gln His Arg Ser Ile Pro Cys
        35                  40                  45
Leu Pro Phe Glu Ser His Ser Ser Arg Cys Arg Leu Lys Met Ile Arg
    50                  55                  60
Leu Val Leu Gln Leu Thr Leu Arg Phe Asn Val Glu Leu Ile Ala Leu
65                  70                  75                  80
Gln Ile Ala Ser Val Asp Ala Leu Pro Phe Gln Glu Met Thr Gln Thr
                85                  90                  95
Pro Tyr Gly Val Met Leu Thr Thr Ser Trp Gly Gly His Leu Gly Trp
            100                 105                 110
Phe Glu Leu Gly Gly Asp Arg Trp Phe Val Lys Pro Val Cys Ile Phe
        115                 120                 125
```

Leu

<210> 29268
<211> 106
<212> PRT
<213> A.fumigatus

<400> 29268
Leu Ser Cys Ser Gly Ala Leu Cys Ser Ala Trp Gly Ile Val Met Phe
1 5 10 15
Ile Phe Leu Pro Asp Ser Pro Val Ser Ala Pro Gly Leu Thr Pro Arg
20 25 30
Glu Arg Arg Ile Ala Val Glu Arg Leu Arg Glu Asn Gln Thr Gly Val
35 40 45
Glu Asn Lys His Leu Lys Pro Tyr Gln Val Leu Glu Ala Phe Met Asp
50 55 60
Tyr Lys Leu Tyr Ile Phe Phe Met Leu Gly Cys Val Cys Glu Tyr Tyr
65 70 75 80
Cys Ile Leu Cys Ser His Ser Ser Ala Leu Ile Cys Lys Ala Thr Ser
85 90 95
Pro Met Ala Ala Ser Pro Thr Ser Ala His
100 105

<210> 29269
<211> 75
<212> PRT
<213> A.fumigatus

<400> 29269
Leu Cys Cys Arg Pro Thr Tyr Ser Leu Gly Ile Trp Ser Met Ile Val
1 5 10 15
Ser His Leu Ile Glu Val Val Leu Ile Ser Thr Leu Gly Leu Leu Leu
20 25 30
Arg Trp Glu Asn Lys Lys Arg Asp Arg Ile Gln Ser Gln Met Gln Gly
35 40 45
Gly Leu Glu Gly Arg Asp Leu Gly Ser Thr Ala Phe Leu Asp Leu Thr
50 55 60
Asp Arg Glu Asn Leu Lys Tyr Val Phe His Pro
65 70 75

<210> 29270
<211> 93
<212> PRT
<213> A.fumigatus

<400> 29270
Ile Pro Tyr Gly Val Leu Ile Ala Leu Ser Ile Leu Leu Cys Val Tyr
1 5 10 15
Leu Asn Asp Arg Phe Glu Asn Arg Arg Cys Val Phe Ile Leu Leu Phe
20 25 30
Leu Leu Pro Asn Ile Ala Gly Ala Phe Gly Leu Arg Phe Val Pro Leu
35 40 45
Asp Gln Gln Val Gly Arg Leu Ile Cys Tyr Tyr Leu Thr Gly Pro Tyr
50 55 60
Asn Ala Ala Phe Val Leu Ile Leu Ser Met Gln Ile Ala Asn Thr Ala

65 70 75 80
Gly Thr Ala His Ser Ile Cys Arg Ser Ser Ser Glu Pro
85 90

<210> 29271
<211> 98
<212> PRT
<213> A.fumigatus

<400> 29271
Phe Phe Arg Thr Leu Pro Ser Ala Met His Phe Ser Thr Leu Ile Arg
1 5 10 15
Tyr Val Gly Val Ile Val Ile Leu His Trp Ala Arg Leu Met Cys Asp
20 25 30
Phe Asn Val Gln Thr Thr Leu Ser Tyr Ala Ala Ile Phe Gly Ile Val
35 40 45
Glu Asp Leu Lys Leu His Gly Thr Gln Tyr Ser Trp Leu Ser Ser Leu
50 55 60
Phe Tyr Phe Gly Phe Leu Ala Trp Ala Phe Pro Thr Asp Phe Leu Leu
65 70 75 80
Gln Arg Leu Pro Ile Gly Met Cys Ser Ile Gln Thr Cys Arg Arg Ile
85 90 95
Gly Leu

<210> 29272
<211> 124
<212> PRT
<213> A.fumigatus

<400> 29272
Arg Glu Val Pro Gly Arg Gln His Leu His Val Val Arg Thr Ala Ser
1 5 10 15
Thr Pro Gly Asn Ser Ser Pro Phe Phe Pro Lys Ser Ile Ile Leu Met
20 25 30
Tyr Ile Arg Gly Val Phe Phe Met Ile Gln Ala Ala Cys His Asn Phe
35 40 45
Thr Thr Leu Ala Phe Phe Arg Ala Leu Gly Gly Ala Asp Glu Ala Cys
50 55 60
Ala Asp Leu Ala Phe Met Leu Ile Thr Ser Met Phe Tyr Thr Arg Lys
65 70 75 80
Glu Gln Pro Val Arg Ile Gly Leu Trp Tyr Thr Ala Asn Gly Phe Gly
85 90 95
Ile Ala Leu Gly Gly Leu Leu Gly Tyr Gly Ile Gly Asn Leu Lys Gly
100 105 110
Ala Leu Pro Ser Trp Lys Tyr Glu Phe Leu Val Met
115 120

<210> 29273
<211> 181
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (20)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29273
Arg Asp Arg Phe Pro Pro Lys Gln Gly Tyr Glu Arg Gly Glu Leu Arg
1 5 10 15
Ser Lys Ser Xaa Thr His Ala Pro Met Ala Thr Glu Val Arg Thr Phe
20 25 30
Tyr Thr Pro Ser Ala Thr Thr His Ile Ser Ser His Ala Pro Ala Ala
35 40 45
Val Asp Glu Leu Ile Ser Lys Tyr Ser Ser Thr Met Val Thr Ala Ser
50 55 60
Ser Ile His Ser Ala Ser His Leu Thr Leu Lys Asn Pro Arg Arg Asn
65 70 75 80
Ile Leu Gln Arg Val Val Asp His Ile Gln Leu Gly Tyr Tyr Arg Tyr
85 90 95
Glu Val Thr Phe Gly Leu Tyr Val Met Thr Pro Gly Glu Lys Leu Val
100 105 110
Ala Asn Thr Phe Val Ile Val Val Leu Ser Leu Leu Phe Trp Ala Leu
115 120 125
Val Leu Tyr Phe Pro Ser Leu Leu Tyr Gln Lys Leu Ser Arg Leu Val
130 135 140
Trp Leu Leu Thr Gly His Ser Gly Glu Glu Met Gly Ala Ala Phe Gly
145 150 155 160
Ile Leu Asp Ser His Val Ser Pro Ala Ser Ser Ala Phe Ser Ala Ala
165 170 175
Ala Ser Pro Ser Leu
180

<210> 29274
<211> 72
<212> PRT
<213> A.fumigatus

<400> 29274
Ile Thr Pro Leu Pro Phe Leu Ser Leu Ser Gly Phe Ser Ser Phe Leu
1 5 10 15
Tyr Ser Pro Leu Leu Tyr Arg Asn Ala Thr Leu Ser Leu Phe Phe Ala
20 25 30
Cys Tyr Ile Lys Lys His Ser Arg Ser Phe Ser Val Val Leu Phe Lys
35 40 45
Arg Leu Asp Ser Ser Val Leu Ala Phe Ser Leu Phe Arg Leu Ser Arg
50 55 60
His Pro Phe Cys Gln Pro Ile Thr
65 70

<210> 29275
<211> 91
<212> PRT
<213> A.fumigatus

<400> 29275
Ile Leu His Pro Asn Thr Val His Ala Ser Lys Ile Val Ile Tyr Phe
1 5 10 15
Leu Gly Gly Phe Gln Thr Gln Ala Lys His Val Ser Ser Leu Pro Ser
20 25 30
Ile Tyr Ile Leu His Asn Ser Thr Tyr Asn Leu Ser Ala Lys Leu Arg

```
        35                  40                  45
Gln Pro Trp Leu Ser Gly Cys Asn Thr Phe Leu Gln Asn His Val Ile
    50                  55                  60
Thr Gly Ile Ile Arg Asn Pro Leu Ser Val Trp Ser Asn Lys Ser Cys
65                  70                  75                  80
Leu His His Gly Ala Gly Arg Val Arg Ser Ile
                85                  90
```

<210> 29276
<211> 76
<212> PRT
<213> A.fumigatus

<400> 29276

```
Leu Ser Ser Ser Gln Ala His Leu Asp Cys Gly Leu Ile Arg Asn Thr
1               5                   10                  15
Ser Pro Asn Val Ser Lys Lys Cys Gln Ala Leu Leu Ala Ser His Val
            20                  25                  30
Lys Val Asp Trp Lys Pro Tyr Lys Cys Ala Cys Gly Gly Gln Arg Gln
        35                  40                  45
Ala Ala Pro Lys Leu Lys Leu Gly Glu Thr Val Ser Pro Tyr Thr Gly
    50                  55                  60
Gly Val Tyr Ser Val Thr Ser Thr Phe Ser Gln Trp
65                  70                  75
```

<210> 29277
<211> 193
<212> PRT
<213> A.fumigatus

<400> 29277

```
Glu Pro Arg Asn Leu Leu Gln Thr Phe Val Glu Asp Gln Thr Phe Asp
1               5                   10                  15
Pro His Tyr Gln Ser Val Thr Met Trp Ser Ser Ile Ala Ala Phe Pro
            20                  25                  30
Val Leu Val Pro Val Ala Leu Ala Cys Leu Gly Tyr Glu Gly Gly Val
        35                  40                  45
Pro Thr Pro Thr Ala His His Ser Asn Ser Ala Val Ile Glu Val Ala
    50                  55                  60
Ala Gly Gln Val Phe Asp Ala Gly Trp Ala Lys Tyr Asp Arg Gly Ser
65                  70                  75                  80
Gly Ala Cys Lys Gly Gln Ser Glu Gly Asp Trp Lys Asp Ala Val Phe
                85                  90                  95
Tyr Leu His Ser Gly Ala Thr Leu Lys Asn Val Ile Ile Gly Ala Asn
            100                 105                 110
Gln Ala Glu Gly Val His Cys Asp Gly Pro Cys Thr Leu Gln Phe Val
        115                 120                 125
Trp Phe Glu Asp Val Cys Glu Asp Ala Ile Thr Ile Val Ser Leu Gln
    130                 135                 140
Ala His Ile His Ile Tyr Ser Val Arg Phe Asp Asp Arg Val Glu Lys
145                 150                 155                 160
Arg Gln Gly Gly Pro Gly Asp Leu Asp His Arg Arg Trp Cys Leu Ser
                165                 170                 175
Cys Leu Gly Gln Asp Arg Pro Ala Gln Arg Leu Trp Tyr Cys Gln Cys
            180                 185                 190
Glu
```

<210> 29278
<211> 76
<212> PRT
<213> A.fumigatus

<400> 29278
Ile Ile Asn Phe Tyr Ala Glu Asp Tyr Gly Lys Val Tyr Arg Ser Cys
1 5 10 15
Gly Asn Cys Asp Lys Gln Cys Lys Arg Asn Val Tyr Val Glu Gly Thr
20 25 30
Thr Ala Arg Asn Gly Gly Glu Val Val Gly Ile Asn Leu Asn Tyr Gly
35 40 45
Asp Thr Ala Thr Leu Lys Asn Val Cys Ala Asp Ser Ala His Pro Cys
50 55 60
Val Phe Lys His Ala Pro Leu Glu Gly Lys Ala Leu
65 70 75

<210> 29279
<211> 151
<212> PRT
<213> A.fumigatus

<400> 29279
Arg His Asp Asn Thr Ile Asp Ser Thr Phe Glu Met Asn Cys Pro Ile
1 5 10 15
Cys Ser Arg Val Ser Ser Ser Arg Leu Arg Phe Tyr Cys Pro Thr Cys
20 25 30
Ala Cys Asn Gln Ile Tyr Thr Leu Arg Ile Asp Asn Ala Arg Ala Leu
35 40 45
Leu Glu Lys Glu Thr Leu Gly Arg Gln Val Glu Lys Ala Leu Leu His
50 55 60
Gln Thr Ser Pro Thr Leu Ser Tyr His Arg Phe Glu Glu Cys Ser Thr
65 70 75 80
Gln Ser Pro Asp Lys Val Pro Ser Pro Gln Asp Val Leu Gln Ile Ile
85 90 95
Thr Ala Lys Ala Glu Ser Ser Ile Arg Lys Lys Asp Leu Ala Leu Gln
100 105 110
Ile Gln Gln Leu Lys Ser Glu Ile Arg Asp Arg Gln Leu Gly Ile Ser
115 120 125
Arg Arg Glu Leu Thr Leu Ala Arg Arg Thr Ser Asp Ala Glu Ser Ser
130 135 140
Lys Phe Pro Leu Gly Lys Ser
145 150

<210> 29280
<211> 505
<212> PRT
<213> A.fumigatus

<400> 29280
Ser Ala Ile Arg Phe Ala Met Ala Ala Pro Leu Pro Pro Ala Val Lys
1 5 10 15
Thr Ser Ser Asn Cys Asp Leu Ser Leu Pro Lys Trp Lys Glu Phe Leu
20 25 30

```
Asp Leu Val Gln Ser Arg Leu Ser Gln Met Leu Thr Lys Pro Arg His
        35                  40                  45
Trp Ala Ala Ala Phe Pro Leu His Val Leu Leu Leu Cys Val Ser Ser
    50                  55                  60
Lys Glu Val Phe Leu Ser Gln Trp Leu Ser Val Ile Gln Ser Leu Pro
65                  70                  75                  80
Ala Arg Leu Lys Asp Arg Pro Thr Arg Gly Pro Ala Leu Gln Ala Met
                85                  90                  95
Cys Arg Leu Leu Trp Thr Tyr Phe Phe Arg Tyr Thr Asp Ser Pro Thr
            100                 105                 110
Val Thr Leu Arg Lys Val Glu Glu Val Ala Arg Ile Ala Leu Pro Ala
        115                 120                 125
Gly Lys Arg Ser Tyr Leu Ser Thr Asp Pro Ala Val Ala Glu Pro Leu
    130                 135                 140
Ile Gln Leu Val Arg Met Ile Gly Phe Lys His Pro Asp Val Cys Phe
145                 150                 155                 160
Arg Asn Ile Ile Phe Pro Leu Ile Asn Ser Asp Leu Phe Leu Ser Gly
                165                 170                 175
Arg Glu Leu Lys Ile Glu Gln Met Glu Pro Glu Lys Met Val Ile Gly
            180                 185                 190
Ile Arg Ser Phe Leu Ala Ile Val Thr Asp Leu Glu Asn Cys Asp Gln
        195                 200                 205
Leu Cys Pro Pro Phe Pro Thr Gly Ser Ile Pro Asn Pro Phe Thr Asp
    210                 215                 220
Ile Ser Ala Pro Thr His Leu His Arg Pro Gln Leu Leu Thr Asp Pro
225                 230                 235                 240
Arg Leu Pro Gly Ser Met Glu Ser Lys Asp Thr Ala Leu Ser Leu Pro
                245                 250                 255
Val Asn Thr Ser Arg Leu Ser Asp Asn Val Lys Glu Tyr Tyr Thr Arg
            260                 265                 270
Phe Cys Asp Ile Leu Gly Lys Ile Thr Leu Leu Cys Asp Asn Thr Phe
        275                 280                 285
Gly Gly Gln Ala Thr Leu Asp Glu Lys Phe Gly Gly Thr Thr Pro Lys
    290                 295                 300
Thr Pro Ile Ser Glu Ala Phe Ser Phe Gly Arg Arg Asp Asp His Pro
305                 310                 315                 320
Ser Ile Gly Asp Gln Arg Gln Gly Phe Tyr Asp Leu Phe His Val Ala
                325                 330                 335
Val Gln Ala Leu Pro Arg Cys Leu Ser Asp Arg Ile Pro Phe Asn Ser
            340                 345                 350
Leu Ile Asn Leu Leu Cys Thr Gly Thr Ala His Val Gln Ser Asn Ile
        355                 360                 365
Ala Ser Ser Ser Ala Glu Ser Leu Lys Ala Ile Ala Arg Gln Ser His
    370                 375                 380
Ala Gln Gln Val Thr Ile Gly Phe Ala Arg Phe Ile Phe Asn Phe Asp
385                 390                 395                 400
Ala Arg Tyr Ser Thr Met Ser Asp Glu Gly Met Leu Gly Pro Gly His
                405                 410                 415
Ile Glu Ser Thr Leu Arg Leu Tyr Val Gln Leu Leu Gln Ile Trp Ile
            420                 425                 430
Glu Glu Ile Lys Gln Lys Thr Lys Gly Ala Thr Thr Asp Pro Val Asp
        435                 440                 445
Lys Ser Gly Thr Gly Ser Arg Ala Leu Gln Leu Asp Leu Ser Thr Val
    450                 455                 460
Leu Ala His Val Glu Glu Ile Glu Ser His Gly Leu Phe Phe Leu Cys
465                 470                 475                 480
```

```
Ser Gln Ser Arg Arg Val Arg Ala Phe Ala Ile Thr Val Leu Arg Leu
                485                 490                 495
Ile Thr Glu Phe Asp Arg Ala Leu Gly
            500                 505

<210> 29281
<211> 167
<212> PRT
<213> A.fumigatus

<400> 29281
Leu Ala Val Arg Asn Pro Val Phe Cys Asn Asp Ile Leu Thr Thr Asn
1               5                   10                  15
Leu Pro Arg Trp Pro Arg Val Ala Asp Thr Thr Val Glu Glu Thr Lys
            20                  25                  30
Ala His Met Met Lys Lys Val Phe Lys Asp Pro Asp Ala Ala Gly Ala
        35                  40                  45
Val Gly Arg Leu Phe Phe Phe Val Ile Ile Pro Lys Asn Glu Pro Asp
    50                  55                  60
Arg Ile Ile Gly Ser Leu Gly Val Asn Ser Leu Ser Pro Ala Pro Ser
65                  70                  75                  80
Val Gly Tyr Ala Met His Pro Ser Tyr Trp Gly Arg Gly Tyr Ala Ser
                85                  90                  95
Glu Ala Leu Arg Gly Val Ile Asp Ala Trp Trp Lys Leu Pro Arg Val
            100                 105                 110
Asp Gly Leu Gly His Glu Glu Lys Leu Phe Ala Ala Val Asn Ile Ala
        115                 120                 125
Asn Lys Gly Ser Val Lys Val Leu Gln Arg Asn Gly Phe Lys Ile Tyr
    130                 135                 140
Lys Glu Val Val Leu Glu Gly Asp Thr Val Ala Cys Met Glu Leu Glu
145                 150                 155                 160
Ser Ala Cys Arg Ala Ile Pro
                165

<210> 29282
<211> 102
<212> PRT
<213> A.fumigatus

<400> 29282
Ser Ile Leu Gly Tyr Asp Gln Gly Val Phe Ser Gly Ile Val Glu Asn
1               5                   10                  15
Glu Asp Phe Leu Tyr Thr Met His His Pro Gly Asp Ser Leu Met Gly
            20                  25                  30
Ile Ile Val Ser Ile Tyr Asn Leu Gly Cys Phe Thr Gly Cys Ile Phe
        35                  40                  45
Asn Phe Val Val Ala Glu Trp Leu Gly Arg Arg Arg Ala Met Trp Val
    50                  55                  60
Ala Met Thr Trp Ile Ile Val Arg Cys Cys Asp Asn Ser Ser Leu Arg
65                  70                  75                  80
Arg Leu Ser Asp Gln Thr Ser Arg Leu Val Pro Arg Cys Lys His Gln
                85                  90                  95
His Phe Leu Leu Pro Thr
            100

<210> 29283
```

<211> 70
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (47)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29283
Leu Asp Gln Lys His Ile Gln Ala Arg Pro Ser Phe Asp Arg Pro Ser
1 5 10 15
Gly Val Ser Ile Val Asn Pro Tyr Met Tyr Ser Ala Asn Ser Arg Asp
20 25 30
Ser Leu Leu Ala Tyr Gly Met Ser Ser Pro Gly Ala Gly Arg Xaa Asp
35 40 45
Gly Ser Ala Met Gln Pro Thr Ala Ala Leu Ser Gly Gly Glu Lys Ala
50 55 60
Glu Ile Phe Asp Val Asn
65 70

<210> 29284
<211> 108
<212> PRT
<213> A.fumigatus

<400> 29284
Pro Asp Glu Gln Ile Gly Ala Ser Leu Gln Thr Ser Ala Phe Ser Val
1 5 10 15
Ala His Leu Met Val Gly Arg Phe Val Thr Gly Ile Gly Thr Gly Ile
20 25 30
Glu Thr Ser Thr Val Pro Met Tyr Gln Ala Glu Leu Cys Glu Ala Ser
35 40 45
Lys Arg Gly Lys Leu Val Cys Ser Glu Pro Leu Leu Val Gly Val Gly
50 55 60
Ile Val Ile Ser Tyr Phe Phe Asp Tyr Gly Met Ser Phe Val Gly Gly
65 70 75 80
Gln Ile Ala Trp Arg Leu Pro Ile Ala Cys Gln Leu Ile Phe Ala Phe
85 90 95
Val Ser Arg Ile Leu Arg Gln Ala Arg Gly Ala Ile
100 105

<210> 29285
<211> 69
<212> PRT
<213> A.fumigatus

<400> 29285
Gln Cys Val Lys Val Val Ile Ile Leu Val Phe Gly Leu Pro Glu Ser
1 5 10 15
Pro Arg Tyr Cys Tyr Lys Glu Gln Arg Asn Asp Glu Ala Leu Gln Ile
20 25 30
Leu Ser Asp Val Asn Gly Leu Pro Lys Asp Asp Pro Lys Ile Val Ala
35 40 45
Glu Gln Lys Glu Ile Leu Glu Ala Leu Glu Leu Glu Thr Lys His Gly
50 55 60

Gly Tyr Lys Trp Arg
65

<210> 29286
<211> 375
<212> PRT
<213> A.fumigatus

<400> 29286
Pro Gly Ile Thr Ser Tyr Lys Pro Ile Ile Asp Lys His Val Gly Ile
1 5 10 15
Leu Leu Thr Arg Leu Pro Ser Gln Ser Lys Gly Pro Leu Pro Glu Ala
20 25 30
Lys Asn Asn Gly Thr Thr Ala Val Asn Met Ala Pro Ile Val His Gln
35 40 45
Cys Thr Leu Asp Ala Met Leu Glu Leu Val Phe Gly Pro Arg Leu Ser
50 55 60
Glu His Pro Tyr Ser Asp Thr Pro Ala Gly Glu Gly Val Cys Ser Asn
65 70 75 80
Leu Arg Ile Met Thr Lys Met Ala Trp Ser Phe Ser Leu Trp Pro Ala
85 90 95
Phe Gly Trp Leu Met Asn Thr Arg Pro Val Asn Ala Met Leu Arg Arg
100 105 110
Pro Thr Tyr Ser Lys Gln Gly Glu Leu Thr Gly Met Ala Gly Leu Met
115 120 125
Gly Val Ala Met Pro Arg Leu Leu Arg Asn Pro Gln Gln Val Val Ala
130 135 140
Ser Ser Gln Pro Ser Ile Val Lys Gly Trp Leu Glu Val Pro Pro Asp
145 150 155 160
Asp Ala Thr Arg Met Thr Pro Ala Glu Val Ala Ser Glu Ala Ser Asn
165 170 175
Leu Ile Ile Ala Gly Pro Gly Ser Thr Ala Ala Ala Leu Thr Ala Val
180 185 190
Ile Phe Tyr Leu Gly Thr Lys Asp Gly Gln Gly Trp Gln Glu Arg Ile
195 200 205
Arg Glu Gln Ile Arg Ala Ser Gln Ser His Asp Leu Gly Pro Ser Ser
210 215 220
Leu Glu Leu Gln Ala Val Ile Lys Glu Thr Leu Arg Leu Ser Ala Pro
225 230 235 240
Phe Pro Thr Ala Phe Pro Arg Val Ile Arg Pro Gly Ala Glu Met Ala
245 250 255
Ile Pro Ser Leu Ala Ala Pro Leu Pro Val Gly Thr Thr Val Ser Ala
260 265 270
Asn Thr Phe Val Leu Gly Arg Ser Arg Glu Leu Trp Gly Asn Asp Ala
275 280 285
Asp Arg Trp Glu Pro Arg Arg Trp Leu Gly Ser Glu Gln His Arg Arg
290 295 300
Glu Met Glu Thr Lys Phe Val Ala Phe Ser Lys Gly Ser Arg Ser Cys
305 310 315 320
Ile Gly Arg Glu Leu Ala Leu Leu Leu Leu Ala Gln Ala Val Ile Gly
325 330 335
Ile Val Gln Gln Trp Lys Phe Arg Ser Arg Gly Gln Leu Gln Gly Lys
340 345 350
Ser Phe Leu Glu Met Gln Tyr Asp Glu Cys Trp Ile Lys Phe Glu Pro
355 360 365
Leu Asp Leu Ser Leu Ser Ala

370 375

<210> 29287
<211> 191
<212> PRT
<213> A.fumigatus

<400> 29287
Pro Thr Ile Gly Arg Leu Gln Leu Thr Glu Val Phe Cys His Ser Ala
1 5 10 15
Ile Val Asp Asn Ile Leu Cys Leu His Ser Tyr Phe Asn Leu Gly Asn
20 25 30
Gly Pro Thr Ile Glu Gly Thr Lys Ala Gln Leu Ser Thr Ala Asp Tyr
35 40 45
Leu Pro Leu Asp Ser Thr Gly Ile Pro Leu Gly Asn Ile Asp Lys Phe
50 55 60
Pro Leu Asp Val Ser Lys Pro Phe Val Leu Gly Ala Ala Glu Pro Asp
65 70 75 80
Ile Asp Asp Val Phe Leu Met Glu Thr Asp Pro Ser Lys Val Val Leu
85 90 95
Asp Thr Arg Ser Gln Pro Leu Lys Leu Leu Ala Gln Phe Ser His Pro
100 105 110
Asp Thr Gly Leu His Leu Glu Val His Ser Thr Glu Pro Ala Phe Gln
115 120 125
Phe Tyr Thr Gly Lys Tyr Ile Asn Val Pro Ala Met Asp Gly Leu Pro
130 135 140
Ala Arg Val Ala Arg Ala Gly Phe Cys Val Glu Pro Ser Arg Tyr Val
145 150 155 160
Asn Ala Pro Asn Glu Pro Gly Trp Arg Ser Met Val Leu Leu Thr Lys
165 170 175
Gly Gln Ile Phe Gly Cys Lys Thr Val Tyr Lys Ala Trp Lys Ala
180 185 190

<210> 29288
<211> 214
<212> PRT
<213> A.fumigatus

<400> 29288
Leu Leu Leu Arg Thr Gly Thr Ser Thr Pro Pro Arg Tyr Arg Asn Pro
1 5 10 15
Leu Phe Tyr Asn Asn Ser His Ala Gln Leu Asn Tyr Leu Thr Pro Leu
20 25 30
Ser Pro Phe Pro Thr Ser Asp Lys Ile Pro Asn Lys Ile Gly Arg Arg
35 40 45
Pro Asp Ile Met Ser Gly Glu Ser Glu Phe Ala Phe Leu Pro Leu Gly
50 55 60
Ala Ile Ile Gln Glu Phe Arg Val Gly Gly Lys Asn Ile Val Leu Gly
65 70 75 80
Phe Asn Thr Gln Glu Gln Tyr Asp Lys Tyr Asn Ser Ala His Phe Gly
85 90 95
Ala Thr Ile Gly Arg Val Ala Asn Arg Ile Lys Asp Ala Val Ile His
100 105 110
Asn Leu Asn Asp Arg Asp Tyr Ile Leu Ala Lys Asn Asn Gly Pro Asn
115 120 125
Ser Leu His Gly Gly Gly Lys Gly Trp Gly Lys Cys Val Phe Asp Gly

```
    130                 135                 140
Pro Gln Thr Val Lys His Asp Gly Lys Asp Ala Leu Leu Phe Lys Tyr
145                 150                 155                 160
Leu Ser Lys Asp Gly Glu Glu Gly Phe Pro Gly Thr Val Glu Val Arg
                165                 170                 175
Val Trp Tyr Thr Ala Ser Lys Glu Asp Ser Lys Thr Val Leu Thr Thr
            180                 185                 190
Glu Tyr Glu Val Glu Phe Val Gly Asn Glu Cys Glu Glu Thr Val Val
        195                 200                 205
Asn Met Thr Asn His Arg
    210
```

<210> 29289
<211> 114
<212> PRT
<213> A.fumigatus

<400> 29289

```
Thr Val Ser Pro Lys Leu Lys Ile Arg Gln Thr Ala Asn Asn Phe Gly
1               5                   10                  15
Leu Ile Asn Arg Thr Tyr Ala Thr Asp Pro Asp Asn Glu Asn Thr Lys
            20                  25                  30
Leu Thr Gln Trp Gln Arg Phe Tyr His His Ile His Ala Leu Asn Lys
        35                  40                  45
His Ala Pro His Lys Thr Glu Tyr Lys Val Phe Phe Phe Gly Arg His
    50                  55                  60
Gly Glu Gly Trp His Asn Ala Ala Glu Ser Leu Tyr Arg Thr Pro Ala
65                  70                  75                  80
Trp Asn Val Cys His Thr Pro Leu Ala Gln Pro Phe Phe Phe Phe Phe
                85                  90                  95
Phe Phe Phe Phe Phe Phe Phe Leu Phe Phe Phe Phe Phe Leu Phe
            100                 105                 110
Leu Leu
```

<210> 29290
<211> 61
<212> PRT
<213> A.fumigatus

<400> 29290

```
Ile Ala Asn Lys Ser Lys Met Lys Cys Ala Leu Ser Leu Leu Thr Leu
1               5                   10                  15
Gly Leu Ala Ala Thr Thr Gln Ala Ala Tyr Tyr Glu Tyr Thr Thr Ala
            20                  25                  30
Thr Gly Tyr Phe Leu Gln Asp Glu Ala Ser Thr Asp Pro Ser Thr Phe
        35                  40                  45
Asp Tyr Val Arg Pro Pro Ser Leu Ile Tyr Pro Lys Leu
    50                  55                  60
```

<210> 29291
<211> 225
<212> PRT
<213> A.fumigatus

<400> 29291

```
Gly Lys Leu Lys Met Pro Val Pro Trp Ile Lys Gly Pro Gly Gln Val
1               5                  10                  15
Trp Thr Tyr Pro Ser Leu Cys Gly Lys Ile His Pro Lys Gly Lys Leu
            20                  25                  30
Ser Asn Arg Ser Gly Pro Leu Glu Trp Pro Pro Arg Leu Ser Arg Gly
        35                  40                  45
Ile Phe Gln Gly Phe Met Ala Ile Gly Lys Val Val Ser Ala Leu Ile
    50                  55                  60
Thr Glu Thr Ser Ile Ile Val Lys Pro Ser Pro Phe Thr Pro Tyr Thr
65                  70                  75                  80
Ala Leu Asn Leu Pro Glu Leu Ala Ile Pro Phe Val Pro Pro Gly Val
                85                  90                  95
Phe Gln Ala Leu Ser Gly Asp Asp Gln Leu Gly Pro Trp Met Thr Arg
            100                 105                 110
His Pro Gly Ile Leu Lys Val Ser Phe Thr Gly Ser Thr Leu Thr Gly
        115                 120                 125
Lys Arg Ile Ala Leu Ala Gly Ala Glu Thr Phe Lys Gln Cys Thr Leu
    130                 135                 140
Glu Leu Gly Gly Asn Asp Pro Ala Ile Ile Cys Lys Asp Val Asp Leu
145                 150                 155                 160
Asp Ala Leu Val Pro Lys Val Gly Ser Pro Leu Val His Gly Ile Gly
                165                 170                 175
Gly Ser Glu Pro Trp Ala Ser Arg Arg Gln Val Ala Asp Val Gly Ser
            180                 185                 190
Asp Gln Gly Arg Ser Ser Leu Leu Phe Glu Leu Gln Pro Gly Met His
        195                 200                 205
Asp Asp Gln Thr Ala Leu Cys Thr Arg Glu His Val Arg Gly Ile Pro
    210                 215                 220
Arg
225
```

<210> 29292
<211> 218
<212> PRT
<213> A.fumigatus

<400> 29292

```
Gly Asp Gln Asn Leu Gly Gln Val Glu Asp Lys Leu Leu Met Leu Asp
1               5                  10                  15
Pro Thr Arg Val Ala Pro Leu Cys Phe Leu Asn Ser Ser Gln Val Cys
            20                  25                  30
Met Met Ile Lys Arg Leu Tyr Val His Glu Ser Met Tyr Glu Ala Phe
        35                  40                  45
Arg Asp Lys Leu Ala Ala His Val Lys Thr Leu Pro Val Gly Asn Gly
    50                  55                  60
Val Gln Pro Asp Val Phe Leu Gly Pro Val Gln Thr Glu Met Gln Tyr
65                  70                  75                  80
Asn Lys Ala Arg Asp Leu Leu Ser Ser Ile Ser Ala Glu Gly Leu Arg
                85                  90                  95
Pro Ala Leu Gly Gly Thr Val Glu Glu Ser Ala Gly Ser Phe Ile His
            100                 105                 110
Pro Thr Ile Val Asp Asn Pro Pro Asp Thr Ala Arg Val Val Thr Glu
        115                 120                 125
Glu Ala Phe Ala Pro Ile Leu Pro Leu Leu Lys Trp Gln Thr Glu Glu
    130                 135                 140
Glu Val Ile Ala Arg Ala Asn Ala Asp Pro Ala Gly Leu Gly Gly Ser
```

```
145                 150                 155                 160
Val Trp Ser Arg Asp Leu Asp Gln Ala Gln Arg Leu Ala Ser Arg Leu
                165                 170                 175
Glu Cys Gly Ser Val Trp Ile Asn Ser His Phe Ala Val Ala Pro His
            180                 185                 190
Val Pro Phe Gly Gly Arg Lys Glu Ser Gly Ser Gly Val Glu Trp Gly
        195                 200                 205
Val Asp Gly Leu Lys Ala Tyr Cys Asn Pro
    210                 215
```

<210> 29293
<211> 466
<212> PRT
<213> A.fumigatus

<400> 29293

```
Arg Val Pro Pro Thr His Gln Phe Pro His Val Leu Gln Pro Val Val
1               5                   10                  15
Ser Gly Leu Asp Cys Glu Gln Arg Leu Ser Thr Gly Ser Ser Val Gly
            20                  25                  30
Thr Gly Val Arg Asp Ala Ser Cys Phe Gly Ile Trp Ala Ile Ser Arg
        35                  40                  45
Lys Tyr Thr Thr Gln Glu Leu Leu Thr Leu Asp Thr Gln Thr Ile Ser
    50                  55                  60
Thr Ala Ser Arg Gln Asp Glu Lys Ser Val Leu Gln Met Leu Ala Thr
65                  70                  75                  80
Glu Leu Val Cys Ala Ala Cys Met Asp Pro Ser Gly Asn Ile Arg Arg
                85                  90                  95
Gly Ala Ser Ala Ala Leu Gln Glu Leu Ile Gly Arg His Pro Asn Thr
            100                 105                 110
Ile Thr Glu Gly Ile Pro Leu Val Gln Val Val Asp Tyr His Ala Val
        115                 120                 125
Ala Arg Arg Ser Arg Ala Met Ile Asp Val Ala Lys Ala Thr Ala Ala
    130                 135                 140
Leu Ser His His Tyr Trp Ser Pro Leu Val Glu Ser Leu Leu Gly Trp
145                 150                 155                 160
Arg Gly Ile Gly Ser Pro Asp Ala Glu Ser Arg Arg Gln Ala Ala Lys
                165                 170                 175
Ala Ile Gly Glu Leu Ser Ile His Gln Ser Cys Arg Thr Ile Ser Val
            180                 185                 190
Val Leu His Arg Leu Arg His Lys Leu Ser Ser Leu Pro Arg Gly Asp
        195                 200                 205
Val Glu Ala Arg His Gly Cys Leu Leu Ser Ile Ser Ala Thr Val Asp
    210                 215                 220
Ala Phe Asn Ala His Lys Ala Thr Ala Ala Ala Ser Lys Glu Lys Ser
225                 230                 235                 240
Glu Ala Ile Leu Val Ala Arg Gln Val Thr Asp Leu Trp Asp Ile Phe
                245                 250                 255
Ser Ser Ala Val Gly Pro Thr Lys Asp Asp Leu Thr Leu Gln Ile Ser
            260                 265                 270
Arg Pro Glu Leu Thr Ala Glu Ala Thr Ser Cys Leu Ile Arg Ser Leu
        275                 280                 285
Ser Gln Ser Val Thr Gln Gly Ile Glu Pro Thr Cys Ser Gln Pro Ser
    290                 295                 300
Ser Thr Ala Leu Asp Arg Ala His Gly Thr Leu Leu Leu Cys Leu Ser
305                 310                 315                 320
```

```
Arg Ser Glu Asp Ile Ala Ile Glu Thr Ser Ser Glu Ala Val Ser Glu
                325                 330                 335
Phe Phe Pro Leu Leu Pro Ser Ser Gln Gln Glu Glu Thr Ile Gln Asp
            340                 345                 350
Trp Phe Ala His Ile Arg Ala Thr Trp Lys Leu Pro Thr Gly Arg Gly
        355                 360                 365
Gln Ile Ser Ala Leu Gly Ala Val Phe Arg Gln Leu Glu Pro Asp Asn
    370                 375                 380
Ile Phe Arg Gln Phe Val Ile Glu Thr Leu Leu Arg Cys Thr Asp Lys
385                 390                 395                 400
Glu Glu Leu Ile Glu Lys Arg Val Ala Ala Val Lys Gly Leu Thr Thr
                405                 410                 415
Gly Val Leu Pro Tyr Ile Cys Glu Phe Asn Ile Tyr Gln Met Lys Gln
            420                 425                 430
Tyr Ala Asp Phe Arg Ala Ala Ile Thr Glu Asp Ile Ala Asn His Ile
        435                 440                 445
Ile Ser Phe Leu Asn Asp Tyr Thr Thr Asp Arg Arg Gly Asp Leu Gly
    450                 455                 460
Pro Cys
465

<210> 29294
<211> 241
<212> PRT
<213> A.fumigatus

<400> 29294
Ala Leu Glu Glu Glu Asp Pro Leu Pro Ala Leu His Thr Ala Glu Ala
1               5                   10                  15
Ala His Leu Leu Asp Gly Gly Cys Glu Glu Ala Arg Glu Gly Thr Ala
            20                  25                  30
Gln Gly Ser Gly Gly Glu Glu Glu Gly Asp Ala Asn Leu Glu Phe Val
        35                  40                  45
Ala Ala Val Glu Val Arg Gln Glu Glu Asn Asn Ala Arg Lys Glu Ser
    50                  55                  60
Thr Phe Lys Gln Ala Glu Glu Glu Pro Thr Cys Glu Glu Ala Gly Val
65                  70                  75                  80
Val Met His Leu Arg Leu Glu Arg Arg His Glu Ala Pro Glu Cys Ala
                85                  90                  95
Glu Ser Gly Gln Glu Asp Thr Gly Ala Asp Asp Leu Gln Gln Glu Val
            100                 105                 110
Gly Gly Lys Phe Arg Gln Asp Val Gly Asp Ile Gly Asp Gly Asn Arg
        115                 120                 125
Cys Ala Val Arg Thr Arg Pro Pro Ala Ile Glu Asp Gly Ala His Asn
    130                 135                 140
Ile Pro Val Leu Tyr Cys Arg Ser Val Lys Trp Arg Ser Phe Ser Arg
145                 150                 155                 160
Pro Ala Tyr Ala Arg Leu Ser Asn Arg Ser Gly Gly Asp Gly Glu Met
                165                 170                 175
Thr His His Ser Cys Val Ser Asn Ile Cys Thr Ile Gln Pro Ser Gln
            180                 185                 190
Gln Val Gln His Gln Gly His Gly His Lys Gln Lys Val Gln Pro Glu
        195                 200                 205
Lys Ser Leu Ala Val Glu Leu Gln Cys Leu Leu Val Gln Asn Asn Leu
    210                 215                 220
Leu Ile Gly Asp Leu Leu Leu Gly Leu Arg Ile Phe Asn Met Ile Ala
```

225 230 235 240
Lys

<210> 29295
<211> 319
<212> PRT
<213> A.fumigatus

<400> 29295
Val Glu Ser Ser Arg Ala Thr Val Ala Asp Lys Phe Leu Ala Ile Ser
1 5 10 15
Thr Lys Arg Arg Arg Leu Val Ser Lys Leu Tyr Lys Ile Phe Ser Cys
20 25 30
Pro Arg Ala Leu Ala Ser Cys Arg Ile Ser Thr Met Thr Asp Gln Lys
35 40 45
Ser Phe Cys Asp His Val Glu Asp Pro Glu Ala Lys Lys Glu Val Ala
50 55 60
Asp Glu Glu Val Val Leu Asp Glu Glu Thr Leu Lys Leu Asp Arg Gln
65 70 75 80
Thr Leu Leu Arg Leu Asp Leu Leu Leu Met Pro Met Thr Leu Met Leu
85 90 95
Tyr Leu Leu Ala Trp Leu Asp Arg Ala Asn Val Gly Asn Ala Arg Val
100 105 110
Val Ser His Leu Pro Val Thr Ser Arg Ser Val Ala Lys Pro Ser Ile
115 120 125
Gly Arg Ser Gly Lys Gly Pro Pro Phe Asp Arg Ser Ala Ile Gln Asp
130 135 140
Arg Tyr Val Val Cys Thr Val Leu Asp Cys Trp Trp Pro Gly Ser Asp
145 150 155 160
Cys Ala Ala Ile Thr Val Thr Tyr Val Pro Tyr Val Leu Ser Glu Leu
165 170 175
Pro Ser Asn Leu Leu Leu Lys Ile Ile Gly Pro Arg Ile Leu Leu Pro
180 185 190
Thr Leu Cys Thr Leu Trp Gly Leu Val Thr Thr Leu Gln Ser Gln Val
195 200 205
His Asn Tyr Ser Gly Leu Leu Ala Cys Arg Phe Phe Leu Gly Leu Leu
210 215 220
Glu Gly Gly Leu Phe Pro Gly Ile Val Leu Phe Leu Ser Asn Phe Tyr
225 230 235 240
Arg Arg His Glu Leu Gln Val Arg Ile Ala Leu Phe Phe Ser Ala Ala
245 250 255
Ser Leu Ser Gly Ala Phe Ser Gly Leu Leu Ala Ala Ala Ile Gln Gln
260 265 270
Met Ser Gly Leu Arg Gly Met Lys Gly Trp Gln Trp Ile Phe Leu Leu
275 280 285
Glu Gly Leu Phe Thr Val Cys Phe Gly Ile Phe Ser Phe Leu Val Leu
290 295 300
Pro Asn Gly Pro Val Phe Thr Arg Arg Trp Gln Glu Gln Arg Gln
305 310 315

<210> 29296
<211> 175
<212> PRT
<213> A.fumigatus

<400> 29296
Phe Gln Asp Leu Asn Met Ser Leu Val Asn Leu Ala His Val Cys Ser
1 5 10 15
His Leu Asn Asn Ala Ser Lys Ala Arg Leu Gly Leu Thr Ser Ile Pro
20 25 30
His Ser Asn Leu His Leu Lys Leu Cys Leu Ala Leu Gln Asn Ser Gly
35 40 45
Tyr Leu Ser Ser Val Val Arg Gly Gly Pro Thr Pro Pro Pro Pro His
50 55 60
Ile Leu Leu Gly His Pro Ala Pro Asn Asp Glu Val Glu Gly Ile Glu
65 70 75 80
Pro Leu Thr Gln Ala Asn Ile Ala Ser Arg Arg Leu Trp Leu Gly Leu
85 90 95
Lys Tyr Trp Gln Ser Glu Pro Val Leu Gly Lys Met Ser Met Val Ser
100 105 110
Lys Pro Thr Arg Arg Ile Thr Ile Asp Val Ala Gly Leu Arg Arg Val
115 120 125
Ile Arg Gly Glu Lys Ser Asp Tyr Val Glu Gly Leu Arg Thr Pro Gly
130 135 140
Glu Ser Leu Tyr Leu Ser Thr Asp Arg Gly Ile Leu Glu Ser Arg Glu
145 150 155 160
Cys Val Glu Lys Lys Ile Gly Gly Leu Val Leu Cys Arg Val Arg
165 170 175

<210> 29297
<211> 83
<212> PRT
<213> A.fumigatus

<400> 29297
Tyr Ser Ala Ala Gly Ile Tyr Lys Tyr Leu Ile Arg Gly Ile Gly Ser
1 5 10 15
Phe Ala Asp Ile His Ser Tyr Phe Thr Ala Pro Thr Pro Lys Pro Gln
20 25 30
Tyr His Arg Phe Asp Lys Gly Ser Tyr Leu Tyr Leu Tyr Lys Asn Ala
35 40 45
Ser Gln Gln Lys Leu Arg Ile Glu Val Ala Asn Asn Pro Gly Ser Ser
50 55 60
Asp Gln Asp Ala Phe Asn Gly Cys Gln Phe Ser Asp Cys Ile Leu Gln
65 70 75 80
Ser Lys Arg

<210> 29298
<211> 387
<212> PRT
<213> A.fumigatus

<400> 29298
Gly Leu Leu Phe His Phe Ile Leu Cys Ile Gly Ile Asp Thr Leu Asn
1 5 10 15
Ala Thr Val Tyr Ile Ile Ile Phe Cys His Thr Tyr Phe Ser Gly His
20 25 30
Ser Gly Ser Gly Pro Arg Tyr Pro Leu Arg Lys Ala Ala Pro Ala Val
35 40 45
Ser Phe Pro Met Phe Val Phe Arg Leu Leu Leu Leu Thr Ser Arg Asn

```
    50                  55                  60
Gln Arg Cys Gly Ile His Asp Pro Gly Asp Gly Pro Gln Ile Ile Trp
65                  70                  75                  80
Arg His Val Gly Cys Glu Arg Gln Leu His Val Arg Ile Pro Gly Arg
                85                  90                  95
Asp Asp Gly Ile Gly Ile His Leu Glu Val Asp Arg Ala Val Phe Leu
            100                 105                 110
Ser Gly Leu Phe Leu Leu Ala Leu Asp Ala His Thr Arg Pro Glu Leu
        115                 120                 125
Ala Lys Arg Gln Pro Val Leu Asp Ile Ala Phe Lys Val Ala Val Asp
    130                 135                 140
Leu Lys Gln Ile Ile Cys Ser Pro Ser Ala Ser Ser Ser Lys Thr Asn
145                 150                 155                 160
Lys Asp Thr Lys Tyr Lys Ser Ala Arg Ser Thr Ala Pro Pro Thr Leu
                165                 170                 175
Pro Pro Ser Pro Pro Ser Pro Arg Thr Asn Ala Pro Ser Thr Ala Ser
            180                 185                 190
Ser Pro Gly Pro Ala Asp His Ser Thr Gln Asn Ala Ala Pro Ser Val
        195                 200                 205
Pro Ser Arg Ala Cys Ser Pro Arg Ser Pro Arg Pro Ala Pro Pro Leu
    210                 215                 220
Tyr Pro Pro Ala Ser Pro Pro Pro Ala Ala Ala Glu Thr Pro His Thr
225                 230                 235                 240
His Arg Trp Asp Pro Asp Ser Pro Arg Lys Pro Pro Ala Ala Pro Thr
                245                 250                 255
Asn Pro Ser Pro Ser Ser Arg Pro Cys Ala Gly Ala Ser Thr Arg Asp
            260                 265                 270
Ala Gln Arg Thr Ala Gly Gly Ser Pro Trp Pro Ala Pro Pro Pro Ala
        275                 280                 285
Arg Cys Thr Pro Gly Pro Pro Ser Pro Ala Thr Ala Gly Ser Ala Gln
    290                 295                 300
Thr Ser Thr Pro Ser Gly Asn Gly Gly Thr Gly Arg Pro Arg Pro Gly
305                 310                 315                 320
Arg Ala Arg Pro Ser Ser Arg Cys Ala Ala Arg Arg Arg Ala Gly Ser
                325                 330                 335
Pro Pro Leu Arg Arg Ala Ser Ala Pro Cys Arg Arg Ala Trp Ser Pro
            340                 345                 350
Ala Leu His Ala Arg Ser Pro Arg Arg Ala Ala Arg Gly Gln Ser Thr
        355                 360                 365
Asp Arg Arg Ala Leu Gly Pro Pro Ser Pro Ala Pro Ser Arg Ile Arg
    370                 375                 380
Gly Ala Trp
385
```

<210> 29299
<211> 109
<212> PRT
<213> A.fumigatus

<400> 29299

```
Thr Gly Cys Arg Trp Arg Arg Gly Thr Arg Arg Thr Thr Ser Arg Arg
1               5                   10                  15
Trp Arg Trp Pro Arg Arg Ser Thr Arg Gly Ser Leu Cys Ile Ala Ser
            20                  25                  30
Arg Arg Ala Arg Ala Trp Ser Gly Arg Trp Arg Trp Ile Cys Arg Arg
        35                  40                  45
```

```
Arg Trp Trp Leu Pro Arg Gly Ile Trp Ile Pro Ser Met Gly Met Trp
    50                  55                  60
Cys Phe Gly Cys Cys Arg Gly Arg Arg Ser Arg Trp Val Glu Gly Arg
65                  70                  75                  80
Cys Trp Pro Arg Arg Ser Arg Thr Thr Ser Ala Arg Trp Asn Gly Arg
                85                  90                  95
Gly Ser Ile Leu Cys Arg Val Ile Arg Trp Thr Trp Gly
            100                 105
```

<210> 29300
<211> 93
<212> PRT
<213> A.fumigatus

<400> 29300

```
Trp Thr Thr Asp Asp Leu Phe Glu Ile Asn Arg Tyr Leu Glu Arg Asn
1               5                   10                  15
Ile Lys Tyr Arg Leu Ala Phe Arg Glu Phe Gly Thr Cys Met Gly Ile
            20                  25                  30
Gln Cys Gln Glu Glu Gln Thr Thr Glu Lys Asp Arg Ser Val Asp Leu
        35                  40                  45
Lys Val Tyr Ala Asp Ala Ile Ile Ala Ala Trp Asp Pro Tyr Met Glu
    50                  55                  60
Leu Ser Leu Ala Ser Asp Val Thr Pro Asp Asp Leu Arg Pro Ile Thr
65                  70                  75                  80
Arg Ile Met Tyr Ala Ala Ala Leu Ile Pro Gly Gly Glu
                85                  90
```

<210> 29301
<211> 96
<212> PRT
<213> A.fumigatus

<400> 29301

```
Lys Tyr Arg Asp Val Ile Tyr Lys Leu Leu Gly Phe Thr Ala Ala Met
1               5                   10                  15
Val Val Gly Pro Ile Gly Met Tyr Phe Val Thr Val Asn Ser Gly Gly
            20                  25                  30
Met Ser Phe Phe His Gln Thr Ser Asn Phe Ser Leu Phe Glu Thr Leu
        35                  40                  45
Thr Arg Ile Ala Ser Pro Thr Val Ala Gly Ile Thr Ala Ala Ile Thr
    50                  55                  60
Ala Asn Leu Val Leu Phe Gly Tyr Ile Tyr Val Ala Trp Leu Asp Asp
65                  70                  75                  80
Arg Glu Glu Arg Glu Ala Ala Ser Lys Arg Asn Glu Lys Lys Ala Gln
                85                  90                  95
```

<210> 29302
<211> 259
<212> PRT
<213> A.fumigatus

<400> 29302

```
Ser Arg Arg Cys Ala Leu Pro Ala Val Lys Thr Pro Gln Ser Thr Asp
1               5                   10                  15
Arg Ile Gly Trp Ile Lys Glu Leu Thr Thr Cys Ser Tyr Leu Met Val
```

```
            20                  25                  30
Ile Tyr Thr Pro Arg Leu Cys Asn Asp Val Ala Phe Leu Pro Pro Gln
        35                  40                  45
Gln Asp Glu Ala His Ala Ile Glu Cys Arg Glu Ile Leu Ser Glu Glu
    50                  55                  60
Glu Val Ser Asp Trp Glu Ala Asn Arg Glu Tyr His Leu Ala Gln Gln
65                  70                  75                  80
Leu Val Glu Ser Ala Ile Thr Pro Glu Phe Pro Val Val Gly Asp Ile
                85                  90                  95
Glu Val Gly Ala His Lys Trp Val Gly Ser Glu Gly Lys Gln Ile Glu
            100                 105                 110
Lys Gly Arg Val Ala Ser Ile Gly Glu Glu Lys Ile Glu Val Val Ala
        115                 120                 125
Lys Arg Gln Asn Gly Glu Ile Thr Arg Leu Ser Lys Glu Glu Leu Lys
    130                 135                 140
Lys Tyr Gly Leu Asp Pro Glu Lys Ile Glu Thr Leu Lys Ser Arg Leu
145                 150                 155                 160
Glu Glu Leu Ala Lys Gly Lys Asp Trp Thr Leu Glu Ile Val Glu Ser
                165                 170                 175
Asn Gly Glu Arg Gly Leu Val Gly Thr Val Asp Ser Asn Asp Asp Glu
            180                 185                 190
Lys Glu Asp His Ala Ala Gln Gly Ser Ile Ser Gln Pro Ala Gln Gly
        195                 200                 205
Thr Thr Ala Asp Lys Gly Glu Ser Asn Ala Glu Thr Gly Glu Glu Lys
    210                 215                 220
Lys Lys Ala Asp Glu Lys Ile Asp His Tyr Glu Pro Glu Lys Ser Gly
225                 230                 235                 240
Pro Thr Thr Asp Asp Ala Asp Asp Gly Ser Glu Glu Ile Phe Phe Lys
                245                 250                 255

Asp Glu Leu
```

<210> 29303
<211> 174
<212> PRT
<213> A.fumigatus

<400> 29303

```
Arg Ser Trp Cys Tyr Ser Lys Cys His Arg Arg Tyr Tyr Ser Leu Leu
1               5                   10                  15
Lys Ile Leu Ser Arg Ala Pro Asn Ala Glu Ile Gln Thr Ala Gly Ala
            20                  25                  30
Ser Asn Gly Pro Lys Arg Asn Ala Arg Ser Met Gly Thr Thr Gly Gln
        35                  40                  45
Pro Ala Ile Val Tyr Leu Pro Ser Gly Thr Tyr Leu Met Lys Ser Ser
    50                  55                  60
Val Gln Phe Phe Val Gly Thr Val Leu Val Gly Asp Pro Thr Asn Pro
65                  70                  75                  80
Pro Val Leu Lys Ala Ala Pro Asp Phe Arg Asp Asp His Ile Val Phe
                85                  90                  95
Ala Lys Asp Pro Asn Val Glu Gly Thr Asn Asn Phe Tyr Ile Gly Leu
            100                 105                 110
Lys Asn Val Ile Leu Asp Ser Thr Ser Val Asp Thr Ala Arg Thr Ile
        115                 120                 125
Ala Leu Val Asp Trp Thr Val Ser Gln Ala Thr Gln Leu Thr Asn Val
    130                 135                 140
```

```
Val Phe Asn Met Pro Thr Gly Ser Asn Ala His Val Gly Leu Thr Thr
145                 150                 155                 160
Gln Tyr Asp Tyr Asn Ser Asn Ile Ile Val Val Gly Thr Leu
                165                 170
```

<210> 29304
<211> 184
<212> PRT
<213> A.fumigatus

<400> 29304

```
Glu Leu Ile Gln Ser Arg Asn Arg Ala Val Glu Leu Thr Asn Phe Lys
1               5                   10                  15
Tyr Ser Ala Gly Asn Ala Asn Lys Asn His Val Glu Gly Gln Thr Val
            20                  25                  30
Val Thr Lys Arg Val Thr Asp Leu Leu Val Gly Gly Lys Asn Tyr Phe
        35                  40                  45
Ile Met Pro Pro Pro Thr Tyr Ser Glu Phe Pro Val Glu Gln Val Leu
    50                  55                  60
Asn Ile Lys Thr Val Ser Asp Lys Pro Val Tyr Gly Asp Gly Val Thr
65                  70                  75                  80
Asp Asp Thr Gln Asn Ile Asn Asp Ile Leu Ala Gln Asn Arg Asp Cys
                85                  90                  95
Lys Val Ile Tyr Phe Pro Ala Gly Thr Tyr Ile Val Thr Asp Thr Ile
            100                 105                 110
Phe Val Pro Ala Asn Ile Arg Ile Val Gly Asp Pro Tyr Ala Ser Ala
        115                 120                 125
Ile Ser Ala Ser Gly Ser Lys Phe Thr Asp Ile Asn Ala Val Arg Pro
    130                 135                 140
Met Ile Arg Phe Gly Tyr Pro Gly Asp Ile Gly Val Leu His Val Ser
145                 150                 155                 160
Asp Met Met Phe Thr Val Ala Asp Val Leu Pro Gly Cys Gln Val Val
                165                 170                 175
Arg Met Pro Pro Asp Thr Arg Ser
            180
```

<210> 29305
<211> 340
<212> PRT
<213> A.fumigatus

<400> 29305

```
Gln Thr Asp Val Ser Leu Cys Lys Leu Val Asp Leu Pro Arg Met Val
1               5                   10                  15
Thr Asp Ala Asn Leu Leu Asp Ser Ile Ile Lys Leu Leu Gly Gln Gly
            20                  25                  30
Thr Phe Gly Lys Val Val Glu Ala Tyr Asp Arg Gln Arg Lys Thr Arg
        35                  40                  45
Cys Ala Val Lys Ile Ile Arg Ser Ile Gln Lys Tyr Arg Asp Ala Ser
    50                  55                  60
Arg Ile Glu Leu Arg Val Leu Ser Thr Leu Ala Ser Asn Asp Lys Thr
65                  70                  75                  80
Asn Arg Asn Lys Cys Ile His Leu Arg Asp Cys Phe Asp Phe Arg Asn
                85                  90                  95
His Ile Cys Ile Val Thr Asp Leu Leu Gly Gln Ser Val Phe Asp Phe
            100                 105                 110
```

```
Leu Lys Gly Asn Gly Phe Val Pro Phe Pro Ser Ser Gln Ile Gln Asn
        115                 120                 125
Phe Ala Arg Gln Leu Phe Thr Ser Val Ala Cys Glu Ser Pro Tyr Gly
    130                 135                 140
Phe Leu Trp Ser Leu Ala Ser Phe Ile Leu Ile Ile Pro Val Leu His
145                 150                 155                 160
Asp Leu Asn Leu Ile His Thr Asp Leu Lys Pro Glu Asn Ile Leu Leu
                165                 170                 175
Val Ser Asn Ala Tyr Gln Thr Phe Thr Tyr Asn Arg Thr Ile Pro Ser
            180                 185                 190
Ser Ser His Ala Val Ser Arg Asn Ala Arg Gln Arg Arg Val Leu Leu
        195                 200                 205
Asp Ser Glu Ile Arg Leu Ile Asp Phe Gly Ser Ala Thr Phe Asp Asp
    210                 215                 220
Glu Tyr His Ser Ser Val Val Ser Thr Arg His Tyr Arg Ala Pro Glu
225                 230                 235                 240
Ile Ile Leu Asn Leu Gly Trp Ser Phe Pro Cys Asp Ile Trp Ser Ile
                245                 250                 255
Gly Cys Ile Leu Val Glu Phe Phe Thr Gly Asp Ala Leu Phe Gln Thr
            260                 265                 270
His Asp Asn Leu Glu His Leu Ala Met Met Glu Ala Val Ile Gly Ser
        275                 280                 285
Lys Ile Asp Thr Lys Leu Val Lys Gln Ala Thr Gln Gly Gly Arg Asn
    290                 295                 300
Gly Thr Gln Asn Gln Ala Ala Lys Tyr Val Leu Asn His Tyr Ala Ser
305                 310                 315                 320
Val Arg Thr Leu Met Leu Thr Ser Ala Gln Ile Leu Gln Pro Lys Gln
                325                 330                 335
Ala Gly Leu Ser
            340

<210> 29306
<211> 177
<212> PRT
<213> A.fumigatus

<400> 29306
Lys Asn Gly Ile Pro Lys Glu Val Ile Val Ile Asp Asp Thr His Pro
1               5                   10                  15
Pro Glu Gln Ser Lys Gly Lys Ser Gly Thr Met Ala Ala Ala Ala Pro
            20                  25                  30
Asn Gly Gly Met Ala Gln Pro Ala Gly Lys Lys Arg Arg Thr Gly Ile
        35                  40                  45
Glu Ser Ala Tyr Asp Leu Gly Tyr Tyr Asp Arg Pro Ser Phe Ser Thr
    50                  55                  60
Asn Pro Gln Gln Tyr Gly Glu Glu Ser Ser Ala Ala Ser Ile Cys Thr
65                  70                  75                  80
Asp Arg Thr Thr Ser Leu His Thr Thr Ala Pro Thr Ser Leu Gly Ser
                85                  90                  95
Gln Gly Ser Thr Gly Ala Thr Asn Gly Val Phe Tyr Glu Asp Ala Asn
            100                 105                 110
Val Gly Gln Lys Arg Lys Arg Val Thr Thr Arg Arg Ser Ala Arg Glu
        115                 120                 125
Glu Gln Lys Arg Arg Glu Leu Glu Thr Ala Gly Asp Ala Phe Leu Ser
    130                 135                 140
Tyr Ile Pro Pro Pro Lys Pro Pro Ile Lys Ala Lys Glu Val Pro Val
```

```
145                 150                 155                 160
Pro Val Val Arg Asp Val Ser Ile Asp Gly Ser Val Ser Gly Cys Thr
                165                 170                 175
Ile


<210> 29307
<211> 63
<212> PRT
<213> A.fumigatus

<400> 29307
Ala Lys Trp Val Leu Val Gly Glu Asn Ile Lys Asp Trp Arg Gly Lys
1               5                   10                  15
Lys Thr Asp Asn Thr Trp Leu Thr Met Phe Gly Tyr Cys Tyr Leu Cys
            20                  25                  30
Arg Tyr Cys Leu Gly Arg Phe Tyr Asp Asn Pro Pro Thr Asn Leu Lys
        35                  40                  45
Ala Arg Gln Lys Gly Ser Val Arg Arg Leu Gly Leu Ile Arg Arg
    50                  55                  60

<210> 29308
<211> 509
<212> PRT
<213> A.fumigatus

<400> 29308
Phe Gly Arg Ser Ser Arg Leu Leu Gly Pro Leu Trp Arg Arg Ala Ile
1               5                   10                  15
Gly Asp Asp Leu Tyr His Thr Ile Arg Gln Gly Leu Leu Lys Arg Ile
            20                  25                  30
Arg Asp Lys Glu Pro Ser Val Arg Val Gln Ala Val Leu Gly Leu Gly
        35                  40                  45
Arg Leu Ala Gly Asn Glu Glu Glu Asp Asp Asp Asp Asn Asp Asp Ser
    50                  55                  60
Ser Lys Ala Leu Leu Glu Lys Leu Ile Asp Ile Met Gln Asn Asp Thr
65                  70                  75                  80
Ser Ala Glu Val Arg Lys Thr Leu Leu Leu Asn Leu Pro Leu Val Pro
                85                  90                  95
Ala Thr Leu Pro Tyr Leu Leu Glu Arg Ala Arg Asp Leu Glu Ala Thr
            100                 105                 110
Thr Arg Arg Ala Leu Tyr Ser Arg Leu Leu Pro Thr Leu Gly Asp Phe
        115                 120                 125
Arg His Leu Ser Leu Ser Met Arg Glu Lys Leu Leu Arg Trp Gly Leu
    130                 135                 140
Arg Asp Arg Asp Glu Ser Val Arg Lys Ala Thr Gly Lys Leu Phe Tyr
145                 150                 155                 160
Asp Arg Trp Ile Glu Asp Cys Ala Gly Thr Asn Asn Asp Ser Glu Asn
                165                 170                 175
Gly Pro Ser Thr Gln Arg Ser Pro Pro Asn Ile Pro Ala Leu Leu Glu
            180                 185                 190
Leu Leu Glu Arg Ile Asp Val Val Ser Ser Gly Met Asp Ser Gly Ile
        195                 200                 205
Ala His Glu Ala Met Gly Ser Phe Trp Glu Gly Arg Pro Asp Tyr Arg
    210                 215                 220
Glu Ala Val Val Phe Asp Glu Pro Phe Trp Glu Ser Leu Thr Ala Glu
```

```
225                 230                 235                 240
Ser Ala Phe Leu Leu Arg Ser Phe Asn Asp Phe Cys Arg Val Glu Asn
                245                 250                 255
Glu Gly Lys Phe Asp Arg Leu Ala Asp Glu Lys Ile Pro Glu Val Thr
            260                 265                 270
Ala Phe Ala His Phe Leu Lys Lys Tyr Met Thr Glu Leu Leu Gln Arg
        275                 280                 285
Lys Lys Met Ala Lys Asp Thr Ser Glu Ala Asn Asp Asp Asp Thr Val
    290                 295                 300
Glu Asn Glu Phe Ile Val Glu Gln Leu Leu His Ile Ala Ile Thr Leu
305                 310                 315                 320
Asp Tyr Ser Asp Glu Val Gly Arg Arg Lys Met Phe Ser Leu Leu Arg
                325                 330                 335
Glu Ser Leu Ala Val Pro Glu Leu Pro Glu Glu Cys Thr Lys Leu Thr
            340                 345                 350
Val Glu Thr Leu Arg Cys Val Cys Gly Pro Ala Ala Ala Ala Glu Ser
        355                 360                 365
Glu Phe Cys Ser Val Val Leu Glu Ala Ile Ala Glu Val His Asp Thr
    370                 375                 380
Ile Ala Thr Glu Asp Ser Phe Val Ser Ala Lys Ser Glu Ile Ser Asp
385                 390                 395                 400
Ala Thr Ser Ser Arg Gln Arg Ser Val Thr Pro Ala Asp Ser Glu Ala
                405                 410                 415
Glu Val Pro Phe Asn Lys Glu Glu Ala Lys Ala Lys Val Leu Arg Glu
            420                 425                 430
Ile Val Val Asn Met Lys Cys Leu His Ile Ala Gln Cys Met Leu Gln
        435                 440                 445
Asn Val Glu Gly Asn Leu Gln Gln Asn Met Asn Leu Val Thr Met Leu
    450                 455                 460
Asn Asn Leu Val Val Pro Ala Val Arg Ser His Glu Ala Pro Ile Arg
465                 470                 475                 480
Glu Arg Gly Ile Val Cys Leu Gly Leu Cys Cys Leu Leu Asp Lys Val
                485                 490                 495
Ser Phe Leu His Ile Asn Ile Phe Pro Gln Gln Ser Gly
            500                 505
```

<210> 29309
<211> 342
<212> PRT
<213> A.fumigatus

<400> 29309

```
Ser Lys Leu Leu Leu Thr Asn Thr Phe Thr Pro Phe Gly Ala Asn Ile
1               5                   10                  15
Pro Gln Ala Ile Gln Glu Tyr Asn Glu Ser Ala Val Glu Thr Leu Leu
            20                  25                  30
Gln Ser Leu Ile Val Ser Phe Phe His Pro Arg Thr Arg Glu Asn Pro
        35                  40                  45
Ala Phe Arg Gln Ala Leu Ala Tyr Phe Phe Pro Val Tyr Cys His Ser
    50                  55                  60
Arg Leu Glu Asn Thr Gln His Met Arg Lys Val Thr Val Pro Val Ile
65                  70                  75                  80
Arg Ala Val Leu Asn Ala Ala Glu Glu Tyr Tyr Ser Leu Glu Ala Glu
                85                  90                  95
Glu Asp Ser Asp Gly Glu Ile Asp Glu Thr Val Gly Gln Arg Glu Leu
            100                 105                 110
```

```
Lys Ala Leu Met Ala Gly Val Val Gly Met Leu Ala Glu Trp Thr Asp
        115                 120                 125
Glu Arg Arg Val Val Gly Leu Gly Gly Glu Lys Ile Leu Ala Gly Val
    130                 135                 140
Pro Thr Ser Ser Ser Pro Cys Gly Phe Val His Leu Ala Leu Val Lys
145                 150                 155                 160
Asp Ile Leu Glu Arg Val Leu Gly Ile Ser Thr Gly Pro Asn Arg Cys
                165                 170                 175
Ser Lys Glu Glu Lys Lys Leu Leu Phe Ser Leu Leu Ser Lys Leu Tyr
            180                 185                 190
Ile Ser Pro Pro Val Val Pro Ser Arg Ser Gly Ser Arg Met Pro Glu
        195                 200                 205
Gly Asp Asp Gln Phe Arg Ser Ser Ile Gln Ser Ala Ser Gly Gly Glu
    210                 215                 220
Ile Ser Pro Glu Asn Val Ala Leu Ala Gln Glu Val Lys Glu Leu Leu
225                 230                 235                 240
Asp Glu Thr Ile Gln Glu Gly Val Ala Ala Glu Ala Ala Gly Arg Asn
                245                 250                 255
Ala Leu Val Lys Val Lys Asn Ala Val Leu Lys Leu Leu Ala Ala Ala
            260                 265                 270
Gln Gly Ile Arg Ser Asp Ser Val Arg Pro Arg Glu Gly Thr Glu Glu
        275                 280                 285
Pro Glu Ser Asp Ala Met Ser Ile Arg Ser Gly Ser Val Gln Pro Ser
    290                 295                 300
Ile Glu His Pro Gly Lys Arg Arg Arg Met Phe Ser Val Glu Pro Ser
305                 310                 315                 320
Ile Met Glu Glu Asp Glu Asn Asp Asp Ser Arg Gly Thr Ile Ile Lys
                325                 330                 335
Ser Glu Ala His Asp Asp
            340
```

<210> 29310
<211> 253
<212> PRT
<213> A.fumigatus

<400> 29310

```
Pro Gln Leu Leu Leu His Thr Thr Pro Thr Pro Ile Lys Leu Pro Tyr
1               5                   10                  15
Ser Tyr Leu Ser Leu Lys Thr Thr Ser His Gln Gln Pro His Leu Pro
            20                  25                  30
Ser Pro Pro Ser His Asn Gln Lys Lys Lys Lys Lys Lys Met Thr Ser
        35                  40                  45
Lys Lys Pro Pro Ser Pro Ala Asp Phe Pro Thr Asn Leu Thr Val Thr
    50                  55                  60
Ile Thr Pro Pro Gln Ser Pro Pro Arg Ala Thr His Pro Ala Pro Pro
65                  70                  75                  80
Asn Ile Leu Leu Leu Leu His Gly Leu Gly Asp Thr Ala Ala Ala Phe
                85                  90                  95
Thr Ser Phe Ala Arg Ala Leu Asn Leu Pro Glu Thr Thr Ile Val Thr
            100                 105                 110
Ile Gln Ala Pro Thr Ser Ala Pro Leu Arg Pro Gly Arg Leu Pro Leu
        115                 120                 125
Gly Arg Arg Arg Leu Leu Arg Pro Gly Asp Arg Arg Ala Arg Tyr Gly
    130                 135                 140
Arg Arg Val Gln Ala Leu Asp Gly Pro Ala Arg Arg Arg Gly His Pro
```

```
145                 150                 155                 160
Gly Cys Ala Gly Ala Glu Met Arg Ile Ser Ala Ala Gly Asp Pro Asp
                165                 170                 175
Pro Gly Val Arg Pro Gly Arg Asp Gly Gly Leu Gly Cys Cys Glu Gly
            180                 185                 190
Asp Gly Arg Gly Glu Asp Ala Gly Arg Glu Cys Glu Cys Glu Cys Trp
        195                 200                 205
Trp Cys Cys Gly Gly Tyr Val Ser Val Arg Gly Asp Phe Asp Arg Gly
    210                 215                 220
Ala Val Ser Pro Val Trp Lys Tyr Gly Trp Ser Glu Glu Pro Asp Ala
225                 230                 235                 240
Gly Val Ala Gly Gly Trp Ala Gly Ala Asp Gly Cys Glu
                245                 250
```

<210> 29311
<211> 60
<212> PRT
<213> A.fumigatus

<400> 29311

```
Thr Pro Ile Ser Arg Leu Thr Tyr Cys Thr Ile Pro Phe Ser Thr Ile
1               5                   10                  15
Tyr Ile Thr His Val Ile Ser Thr Leu Pro Ser Gly Thr Pro Cys Gln
            20                  25                  30
Leu Arg Asn Arg Arg Ala Lys Asn Cys Ile Thr Gly Ile Ile Ser Ser
        35                  40                  45
Arg Phe Arg Gly Ile Pro Ser Pro Leu Arg Ala Tyr
    50                  55                  60
```

<210> 29312
<211> 94
<212> PRT
<213> A.fumigatus

<400> 29312

```
Leu Ile Thr Pro Arg Lys Ile Tyr Phe Ser Val Arg Leu Pro His Ser
1               5                   10                  15
Leu Asn Phe Asp Leu Pro Thr Met Leu Glu Ile Ile Thr Ser Val Asn
            20                  25                  30
Leu Gln Val Thr Thr Met Ser Asp Ile Leu Ser Asp Met Trp Glu Ser
        35                  40                  45
Lys Val Glu Val Tyr Arg Pro Asp Ala Leu Arg Pro Ala Val His Gly
    50                  55                  60
Arg Arg Asn Ala Thr Asp Thr Gln Thr Ser Lys Leu Ile Gln Leu Gly
65                  70                  75                  80
Ser Leu Arg Leu Met Phe His Thr Ala Ser Leu Thr Pro Pro
                85                  90
```

<210> 29313
<211> 941
<212> PRT
<213> A.fumigatus

<400> 29313

```
Arg Ile Thr Leu Ser Thr Val Trp Thr Arg Gly Arg Phe Asn Asn Pro
1               5                   10                  15
```

```
Gln Ile His Ala Ser Leu Ser Val Arg Asp Ser Leu Phe Ala Gly Glu
            20                  25                  30
Arg Ser Arg Thr Asn Pro Arg Arg Ser Arg Cys Trp Arg Glu Ser Leu
        35                  40                  45
Asp Glu Ser Arg Thr Glu Asn Glu Gly Leu Thr Asp Arg Leu Ser Arg
    50                  55                  60
Ser Thr Lys Glu Thr Arg Ser Leu Lys His Gln Leu Gln Leu Leu Glu
65                  70                  75                  80
Gly Gly Thr Ser Ser Ala Leu Thr Glu Leu Ala Lys Glu Arg Asp Glu
                85                  90                  95
Ala Leu Glu Asn Ile Ser Asp Val Arg Arg Lys Leu Glu Gln Ala Gln
            100                 105                 110
Lys Lys Ala Arg Ser Arg Glu Glu Glu Leu Glu Arg Thr Gln Gly Leu
        115                 120                 125
Leu Asp Arg Glu Arg Glu Ser Trp Glu Gly Glu Arg Arg Asn Leu Glu
    130                 135                 140
Arg Lys Val His Val Val Glu Gly Arg Leu Lys Val Val Leu Asn Glu
145                 150                 155                 160
Val Ala Ala Ala Gln Ala Ala Ala Ser Ala Pro Pro Val Ser Ser Lys
                165                 170                 175
Ser Gly Thr Pro Glu Pro Val Arg Pro Ser Thr Thr Glu Arg Trp Ser
            180                 185                 190
Asp Ser Ala Ser Val His Ser Ser Ser Gln Gly Arg Arg Arg Thr Ser
        195                 200                 205
Val Thr Ser Val Ser Ser Glu Asp Asp Ala Asp Phe His Asn Val Arg
    210                 215                 220
Tyr Ser Thr Ala Ser Leu Ala Asn Ala Arg Asp Ser Lys Pro Asn Gly
225                 230                 235                 240
Val Ser Leu Ala Gln Glu Leu Ala Phe Asp Glu Glu Glu Glu Phe Asp
                245                 250                 255
Asn Glu His Asp Asp Ser Ile Leu Asp Ser Pro Glu Ala Leu Pro Glu
            260                 265                 270
Glu Arg Pro Thr Ser Val His Ser His Met Ser Leu Ser Met Ser Leu
        275                 280                 285
Lys Ala Arg Lys Ile Leu Gly Leu Ser Ile Asp Ser Ser Ile Asp Cys
    290                 295                 300
His Thr Val Phe Asp Arg Gly Leu Asn Ser Pro Ala Lys Val Ser Ser
305                 310                 315                 320
Pro Thr Cys Glu Tyr Arg Asp Thr Gly Ile Gln Tyr Ser Pro Pro Pro
                325                 330                 335
Ser Pro Gln Leu Pro Pro Glu Ser Pro Leu Glu His Ser Ser Gln Ala
            340                 345                 350
Leu Pro Leu Ala Tyr Gln Ala Lys Asp Ser Gly Thr Ser Thr Leu Thr
        355                 360                 365
Ile Asp Met Lys Ser Thr Ser Cys Gln Thr Val Gly Asn Leu Pro Ser
    370                 375                 380
Pro Pro Trp Thr Pro Gln Val Ala Glu Thr Pro Ile Thr Ala Gly Pro
385                 390                 395                 400
Gln Pro Ala Ala Thr Ala Ser Thr Ser Thr Gln Thr Asp Leu Val Pro
                405                 410                 415
Ala Pro Ala Ala Ser Glu Gln Asp Ala Val Ala Asn Pro Thr Lys Ser
            420                 425                 430
Val Pro Thr Ala Ile Glu Val Pro Met Ile Ala Ile His Pro Pro His
        435                 440                 445
Ser Glu Pro Ser Ser Pro Arg Gly Ser Val Val Leu Pro Pro Gln Thr
    450                 455                 460
```

```
Lys Thr Val Ser Cys Gln Thr Thr Phe Lys Thr Ile Ile Asp Ser Arg
465                 470                 475                 480
Ser Val Ala Ile Gln Thr Glu Glu Ile Arg Ile Asp Lys Arg Pro Val
                485                 490                 495
Lys Leu Pro Ala Ser Leu Leu Pro Ser Ala Ile Pro Asp Val Pro Leu
            500                 505                 510
Asn Val Ser Arg Ala Glu Ser Asn Ser Asp Ser Pro Ile Gln Pro Tyr
        515                 520                 525
Arg Pro Pro Ser Arg Arg Leu Glu His Gly Glu Ser Lys Pro Pro Pro
    530                 535                 540
Leu Pro Ala Lys Ala Pro Ser Arg Ser Lys Pro Pro Ala Thr Val Gln
545                 550                 555                 560
Ala Tyr Pro Gly Asn Asn Asp Asn Gly Pro Leu Ser Ala Asp Ser Lys
                565                 570                 575
Ser Asp Leu Arg Arg Pro Phe Arg Ser Ser Ser Leu Phe Ala Gly Phe
            580                 585                 590
Glu Asp Glu Asn Asp Glu Pro Arg Glu Ala Thr Arg Asp Ile Phe Thr
        595                 600                 605
Asp Asp Glu Leu Leu Asn Arg Pro Phe Ala Ser Tyr Lys Leu Lys Lys
    610                 615                 620
Gly Lys Leu Ile Ser Ala Gln Glu Arg Ser Ser Leu Asp Asp Thr Leu
625                 630                 635                 640
Leu Ala Glu Leu Asp Asp Ser Gln Val His Gly Asn Leu Glu Pro Ser
                645                 650                 655
Glu Ser Ser Pro Gln Gly Gln Arg Arg Gly Val Thr Gly Ser Gly Asn
            660                 665                 670
Glu Arg Asp Ala Arg Thr Ala Thr Arg Val Pro Asn Ala Ala Ala Gly
        675                 680                 685
His Arg Arg Arg Ala Arg Ser Pro Ser Glu Pro Ser Ile Asp Ser Gly
    690                 695                 700
Ser Gly Ala Ser Ser Ile Ala Pro Pro Phe Pro Val Pro Ile Arg Leu
705                 710                 715                 720
Ser Ser Arg Lys Phe Pro Gly Asn Gly Ser Asp Gly Arg Gln Ser Pro
                725                 730                 735
Thr Pro Ser Asn Pro Arg Asn Phe Ser Asp Arg Gly Arg Ala Pro Ile
            740                 745                 750
Val Arg Arg Pro Thr Leu Arg Arg Val Arg Ser Ala Ala Ala Met Ser
        755                 760                 765
Gln Ser Glu His Pro Glu Arg Pro Pro Ser Gln Ser Ser Pro Ser Ser
    770                 775                 780
Tyr Gly Leu Glu Ser Pro Gln Tyr Pro Pro Leu Pro Phe Asp Asp Ile
785                 790                 795                 800
Thr Ala Pro Arg Asp Arg Met Ala Val Glu Arg Arg Ser Met Gln Arg
                805                 810                 815
Pro Ser Ile Thr Arg Pro Phe Ala His Glu Arg Gln Asp Ser Asn Ala
            820                 825                 830
Thr Thr Ser Val Gln Pro Thr Ser Val Val Asp Ala Ile Ala Gln Thr
        835                 840                 845
Met Ile Gly Glu Trp Met Tyr Lys Tyr Val Arg Arg Arg Arg Ser Phe
    850                 855                 860
Gly Gly Val Gly Glu Pro Lys Asp Ser Trp Glu Gly Lys Asn Ala Asp
865                 870                 875                 880
Glu Val Ser Ala Asn Ile Thr Asn Ser Gly Val Arg His Arg Arg Trp
                885                 890                 895
Val Trp Leu Ala Pro Tyr Glu Arg Ala Val Met Trp Ser Ser Arg Gln
            900                 905                 910
```

```
Pro Thr Ser Gly Pro Ala Met Leu Gly Lys Ser Gly Arg Lys Arg Lys
        915                 920                 925
Phe Pro Ser Phe Phe Leu Glu Arg Val Met Ser Pro Arg
    930                 935                 940

<210> 29314
<211> 87
<212> PRT
<213> A.fumigatus

<400> 29314
Glu His Cys Ile Gly Gly Gly Ser His Arg Lys Leu Gly Glu Gly His
1               5                   10                  15
Gly Pro Val Pro Gly His Val Arg Cys Pro Gly Glu Glu Thr Arg Asn
            20                  25                  30
Val Ser Arg Thr Pro Ser Cys Tyr Thr Glu Pro Phe Lys Leu Met Asn
        35                  40                  45
Val Tyr Ser Tyr Val Trp Gly Asp Asp Val Ala Lys Ala Lys Thr Gln
    50                  55                  60
Cys Glu Ser Leu Asp Tyr Leu Phe Gln Leu Ala Val Glu Met His Lys
65                  70                  75                  80
Leu Gly Leu Pro Trp Val Lys
                85

<210> 29315
<211> 97
<212> PRT
<213> A.fumigatus

<400> 29315
Val Val Ala Phe Tyr Arg Thr Phe Pro Ser Gly Asp Ser Val Gly Asp
1               5                   10                  15
Asn Phe Leu Val Arg Ala Gly Arg Arg Val Pro Gly Arg Trp Phe Arg
            20                  25                  30
Asn Ser Ala Asn Ile Glu Gln Ile Lys Gly Ile Pro Gly Gly Gln Gly
        35                  40                  45
Glu Gly His Ala Gly Phe Leu Arg His Asn Leu Gly Phe Leu Ser Ile
    50                  55                  60
Glu Asn Thr Ala Leu Glu Glu Asp Leu Thr Glu Ser Leu Glu Lys Ala
65                  70                  75                  80
Met Asp Gln Tyr Pro Asp Thr Tyr Ala Val Leu Val Arg Arg His Gly
                85                  90                  95
Met

<210> 29316
<211> 75
<212> PRT
<213> A.fumigatus

<400> 29316
Asn Pro Leu Pro Asn Leu Phe Leu Ser Ile Phe Asp Lys Pro Phe Ser
1               5                   10                  15
Asp Phe Asn Ser Leu Phe Gly Gln Gly Phe Tyr Leu Lys Val Ile Phe
            20                  25                  30
Tyr Leu Ala Ser Arg Thr Ser Asn Pro Phe Gln Asp Asn Pro His Thr
```

```
        35                  40                  45
Thr Ala Val Phe Lys Ala Arg Met Gln Val Glu Val Phe Asn Thr Tyr
    50                  55                  60
Ser Arg Tyr Arg Ile Ala Met Ile Ala Val Phe
65                  70                  75

<210> 29317
<211> 145
<212> PRT
<213> A.fumigatus

<400> 29317
Ser Pro Leu Ser Ser Glu Ala Ala Gly Arg Arg Ala Val Leu Ser Asp
1               5                   10                  15
Ile Gly Val Leu Pro Pro Gly Arg Asp Arg Met Leu Ala Pro Leu Gln
            20                  25                  30
Val Pro Arg Leu Thr Arg Ile Lys Leu Ile Ala Arg Ser Arg Arg Ser
        35                  40                  45
Met Ile Gly Ser His Pro Val Gly Pro Ser Pro Val Leu Met Thr Val
    50                  55                  60
Glu Leu Gly Gln Gly Pro Tyr Lys Glu Val Leu Ala Thr Ser Glu Asp
65                  70                  75                  80
Gly Asp His Ser Asp Ala Ile Ser Gly Val Arg Ile Glu Asp Phe Asp
                85                  90                  95
Leu His Pro Cys Leu Glu Asp Ser Arg Gly Val Trp Ile Val Leu Glu
            100                 105                 110
Arg Ile Gly Gly Pro Gly Gly Gln Val Glu Asp His Phe Glu Val Glu
        115                 120                 125
Ala Leu Ala Glu Glu Arg Val Glu Ile Gly Glu Trp Phe Val Glu Asp
    130                 135                 140
Ala
145

<210> 29318
<211> 61
<212> PRT
<213> A.fumigatus

<400> 29318
Ser Pro Thr Ser Leu Tyr Leu Pro Tyr Leu Leu Val Thr Leu Thr Tyr
1               5                   10                  15
Thr Thr Ile Asp Ser Ser Pro Tyr Ser Asn Ile Tyr Leu Leu Pro Leu
            20                  25                  30
Gln Asn Tyr Ser Gln Asn Ser Leu Thr Gly Leu Asp Tyr Tyr Leu Pro
        35                  40                  45
Leu Arg Leu Ile Ser Leu Tyr Ile Ile Lys Val Ile Ser
    50                  55                  60

<210> 29319
<211> 125
<212> PRT
<213> A.fumigatus

<400> 29319
Phe His Ser Gln Lys Asn Lys Glu Lys Met Gly Ser Gly Ile Pro Leu
1               5                   10                  15
```

```
Thr Asp Ala Asp Arg Trp Asp Trp Leu Ile Ser Leu Arg Asn Ala Ala
            20                  25                  30
Ile Lys Ala Leu Ser Pro Ser Glu Ala Asn Asn Phe His Pro Pro Ser
        35                  40                  45
Gly Val Val Val Ala Cys Ser Ala Leu Lys Gln Lys Tyr Arg Asp Val
    50                  55                  60
Met Arg Val Ala Ala Tyr Gly Thr Pro Ser Val Gln Ile His Phe Val
65                  70                  75                  80
Tyr Leu Lys Leu Asp Glu Asn Ala Leu Leu Gln Arg Val Ala Ala Arg
                85                  90                  95
Gln Ala His Tyr Met Lys Ser Thr Met Val Gln Ser Gln Leu Gln Asp
            100                 105                 110
Leu Glu Glu Pro Lys Gly Glu Trp Glu Cys Ala Asp His
        115                 120                 125
```

<210> 29320
<211> 90
<212> PRT
<213> A.fumigatus

<400> 29320

```
Gly Ser Pro Arg Ser Ala Gly Val Phe Pro Ser Cys Leu Ile Pro Pro
1               5                   10                  15
Phe Ala Leu Leu Gln Lys Thr Arg Gln His His Ile Pro Val Val Arg
            20                  25                  30
Leu Asp Arg Ser Phe Val Leu Lys Met Ala Ala Asp Trp Gln His Thr
        35                  40                  45
Glu His Asp Met Lys Asp Glu Gly Ser Thr Leu Gln Ser Pro Gly Phe
    50                  55                  60
Asp Leu Asp Phe Thr Asp Thr Ala Gly Asp Gly Pro Gln Glu Glu Asp
65                  70                  75                  80
Val Arg Asp Gln Lys Gly Asp Asn Leu Trp
                85                  90
```

<210> 29321
<211> 77
<212> PRT
<213> A.fumigatus

<400> 29321

```
Ser Asn Asp Gln Thr Pro Leu Gly Leu Phe Leu Thr Ser Gly Lys Cys
1               5                   10                  15
Leu Ala Ala Ala Gly Pro Gly Gly Val Val Ala Tyr Val Ile Met
            20                  25                  30
Gly Thr Val Ile Ser Ser Val Ile Ser Ser Leu Gly Glu Met Thr Ala
        35                  40                  45
Leu Met Pro Val Asn Ala Pro Met Met Glu Phe Pro Arg Arg Phe Leu
    50                  55                  60
Asp Arg Gly Val Gly Leu Ala Val Gly Trp Ile Tyr Trp
65                  70                  75
```

<210> 29322
<211> 71
<212> PRT
<213> A.fumigatus

<400> 29322
Ser Val Asn Val Phe Glu Leu Arg Phe Pro Gly Arg Pro Leu Gln Ala
1 5 10 15
Cys His Asp Thr Ala Pro Asn Gln Gly Gly Thr Thr Val Lys Pro Val
20 25 30
Gly Thr Lys Ser Lys His Pro Phe Ser Gly Lys Gly Phe Leu Thr Leu
35 40 45
Ile Gly Leu Asp Ser Glu Trp Glu Phe Pro Val Leu Leu Phe Lys Leu
50 55 60
Gly Leu Thr Gly Val Arg Ile
65 70

<210> 29323
<211> 197
<212> PRT
<213> A.fumigatus

<400> 29323
Ile Gly Thr Gly Tyr Thr Ala Val Thr Gly Glu Phe Val Val Pro Thr
1 5 10 15
Pro Ser Val Pro Ser Gly Gly Ser Ser Ser Lys Gln Tyr Cys Ala Ser
20 25 30
Ala Trp Val Gly Ile Asp Gly Asp Thr Cys Ser Ser Ala Ile Leu Gln
35 40 45
Thr Gly Val Asp Phe Cys Ile Gln Gly Ser Ser Val Ser Phe Asp Ala
50 55 60
Trp Tyr Glu Trp Tyr Pro Asp Tyr Ala Tyr Asp Phe Ser Gly Ile Ser
65 70 75 80
Ile Ser Ala Gly Asp Thr Ile Arg Val Thr Val Asp Ala Thr Ser Lys
85 90 95
Thr Ala Gly Thr Ala Thr Val Glu Asn Val Thr Lys Gly Lys Thr Val
100 105 110
Thr His Thr Phe Thr Gly Gly Val Asp Gly Asn Leu Cys Glu Tyr Asn
115 120 125
Ala Glu Trp Ile Val Glu Asp Phe Glu Ser Asn Gly Ser Leu Val Pro
130 135 140
Phe Ala Asn Phe Gly Thr Val Thr Phe Thr Gly Ala Gln Ala Thr Asp
145 150 155 160
Gly Gly Ser Thr Val Gly Pro Ser Gly Ala Thr Leu Ile Asp Ile Gln
165 170 175
Gln Ser Gly Lys Val Leu Thr Ser Val Ser Thr Ser Ser Ser Ser Val
180 185 190
Thr Val Lys Tyr Val
195

<210> 29324
<211> 63
<212> PRT
<213> A.fumigatus

<400> 29324
Val Ala Ile Asn Arg Cys Ser Thr His Gln Gly Ser Thr Pro Val Ile
1 5 10 15
Gln Arg Glu Arg Gln Ile Ala His Glu Leu Ile Val Ser Tyr Arg Phe
20 25 30
Ser Phe Ala Glu Ile Tyr Ser Tyr Ile Phe Tyr Leu Leu Cys Lys Gly

```
        35                  40                  45
Met Ile Ile Lys Ser Gly Glu His Lys Glu Thr Arg Pro Tyr Gly
    50                  55                  60

<210> 29325
<211> 222
<212> PRT
<213> A.fumigatus

<400> 29325
Phe Gln Ile Gln Leu Asp Pro Glu Pro Trp Glu Ser Ser Thr Pro His
1               5                  10                  15
Arg Val Ser Val Asn Ser Phe Gly Tyr Gly Gly Ser Asn Ala His Val
            20                  25                  30
Ile Leu Glu Asp Thr Tyr Gly Tyr Leu Gln Ser His Gly Leu Gln Ala
        35                  40                  45
Leu Val Gly Lys Pro Arg Thr Pro Phe Leu Lys Glu Ala Leu Glu Pro
    50                  55                  60
Ser Gln Lys Pro His Ser Arg His Asp Glu Ser Pro Ile Arg Thr Arg
65                  70                  75                  80
Leu Phe Met Leu Ser Gly Phe Asp Asp His Ser Leu Ala Lys Gln Ile
                85                  90                  95
Glu Asn Ile Arg Val Tyr Leu Arg Glu Arg Glu Ser Ile Ala Asp Asp
            100                 105                 110
Gln Phe Met Ser Asn Leu Ala Phe Thr Leu Asn His Arg Arg Thr Thr
        115                 120                 125
Leu Met Cys Arg Thr Ala Val Asn Gly Asn Ser Ala Ser Ser Val Ile
    130                 135                 140
Lys Ala Leu Gly Gly Ser Ile Arg Val Arg Lys Ala Thr Arg Lys Pro
145                 150                 155                 160
Val Val Gly Phe Val Phe Thr Gly Gln Gly Ala Gln Trp Cys Gly Met
                165                 170                 175
Gly Arg Glu Leu Val Lys Ala Tyr Pro Val Phe Arg Gln Ser Met Glu
            180                 185                 190
Arg Ile Asp Ala His Leu Ile Arg Leu Gln Ala Pro Phe Ser Ala Leu
        195                 200                 205
Gly Glu Arg Arg Ile Arg Asp Ile Glu Ser Lys Val Met Ala
    210                 215                 220

<210> 29326
<211> 119
<212> PRT
<213> A.fumigatus

<400> 29326
Glu Ser His Leu Ser Ala Gly Ile Pro Leu Pro Glu Ile Met Gly Ser
1               5                  10                  15
Gln Thr Ser Cys Phe Val Gly Ser Phe Asn Ala Asp Tyr Thr Asp Leu
            20                  25                  30
Leu Leu Arg Asp Pro Asp Ala Ile Pro Met Tyr Gln Cys Thr Asn Ala
        35                  40                  45
Gly Gln Ser Arg Ala Met Met Ala Asn Arg Val Ser Tyr Phe Phe Asp
    50                  55                  60
Leu Lys Gly Pro Ser Val Thr Val Asp Thr Ala Cys Ser Gly Ser Leu
65                  70                  75                  80
Val Ala Leu His Leu Ala Cys Gln Ser Leu Arg Thr Gly Asp Ala Ala
```

```
                85                  90                  95
Met Ala Ile Ala Ala Gly Val Asn Val Ile Leu Ser His Glu Phe Met
            100                 105                 110
Ser Thr Met Thr Met Met Lys
        115
```

<210> 29327
<211> 133
<212> PRT
<213> A.fumigatus

<400> 29327

```
Arg Asn Ser Ala Asn His Gly Ala Thr Gly Glu Ile Leu Glu Asn Gln
1               5                   10                  15
Asp Ala Ser Arg Leu Asn His Pro Leu His Ser Gln Thr Ile Cys Thr
            20                  25                  30
Ala Leu Gln Ile Ala Leu Val Asp Leu Leu Ser Ser Trp Gly Ile Glu
        35                  40                  45
Pro Asp Ser Val Thr Gly His Ser Ser Gly Glu Ile Ala Ala Ala Tyr
    50                  55                  60
Thr Ile Gly Ala Leu Thr Met Glu Asp Ala Ile Ser Val Ala Tyr Tyr
65                  70                  75                  80
Arg Gly Val Ala Ala Ser Lys Leu Leu His Asn Asp Glu Val Lys Gly
                85                  90                  95
Gly Met Leu Ala Val Gly Val Ser Pro Ala Gln Ile Ala Pro Phe Leu
            100                 105                 110
Asp Thr Leu Lys Ser Val Phe Thr Thr Gly Leu Glu Gly Ser Thr Glu
        115                 120                 125
Val Ser Thr Leu Cys
    130
```

<210> 29328
<211> 187
<212> PRT
<213> A.fumigatus

<400> 29328

```
Ile Leu Ser Arg Phe Leu Ser Pro Glu Gly Arg Cys Tyr Thr Phe Asp
1               5                   10                  15
Glu Lys Ser Asn Gly Tyr Ala Arg Gly Glu Gly Ile Gly Cys Leu Ile
            20                  25                  30
Leu Lys Pro Leu Thr Val Ala Ile Arg Asp Lys Asp Pro Ile Arg Ala
        35                  40                  45
Val Ile Arg Gly Ser Gly Ser Asn Gln Asp Gly Arg Thr Pro Gly Ile
    50                  55                  60
Thr Leu Pro Ser Gly Ala Ser Gln Glu Ala Leu Ile Arg His Val Tyr
65                  70                  75                  80
Asn Met Ala Gly Leu His Pro His Asp Thr Glu Phe Val Glu Thr His
                85                  90                  95
Gly Thr Gly Thr Gln Ala Gly Asp Pro Ile Glu Thr Gly Ala Leu Ala
            100                 105                 110
Arg Val Phe Cys Val Gly Arg Asn Ser Asp Lys Pro Leu Arg Ile Gly
        115                 120                 125
Ser Ile Lys Thr Asn Val Gly His Leu Glu Gly Ala Ser Gly Val Ala
    130                 135                 140
Gly Val Ile Lys Ala Val Leu Met Leu Glu Asn Arg Ile Phe Leu Pro
```

```
145                 150                 155                 160
Asn Arg Asn Phe Thr Ser Leu Asn Ser Arg Ile Leu Leu Asp Glu Trp
                165                 170                 175
Lys Leu Lys Ala Cys Ile Pro Tyr Tyr Pro Ser
            180                 185
```

<210> 29329
<211> 138
<212> PRT
<213> A.fumigatus

<400> 29329

```
Tyr Trp Phe Pro Cys Asp Ile Gly Tyr Ala Ile Ala Ser Ile Leu Cys
1               5                   10                  15
Lys Ile Ser Val Ala Ile Phe Leu Leu Arg Val Met Val His Pro Phe
            20                  25                  30
His Arg Arg Ile Met Tyr Ala Val Thr Ala Leu Thr Val Ile Val Gly
        35                  40                  45
Ile Ile Phe Phe Val Tyr Met Met Ile Gln Cys Ser Pro Val Ser Tyr
    50                  55                  60
Phe Trp Thr Arg Met Leu Gly Asn Thr Ser Gly Lys Cys Gly Tyr Val
65                  70                  75                  80
Asp Ala Ile Ile Ile Leu Leu Tyr Leu Phe Ser Ala Ser Ser Ala Leu
                85                  90                  95
Phe Asp Leu Thr Val Gly Leu Leu Pro Ile Leu Leu Val Arg Asn Leu
            100                 105                 110
Gln Met Asn Gln Arg Thr Lys Ile Ala Val Ala Gly Leu Leu Gly Met
        115                 120                 125
Ala Cys Met Tyr Val Asn Cys Thr Phe Thr
    130                 135
```

<210> 29330
<211> 63
<212> PRT
<213> A.fumigatus

<400> 29330

```
Ser Pro Ser Arg Leu Cys Gly Gln Ser Ser Phe Arg Tyr Pro Gly Val
1               5                   10                  15
Val Ile Ile Pro Ser Cys Gln Leu Pro Pro Gly Ser Lys Leu Lys Pro
            20                  25                  30
Thr Ala Gly Val Thr Thr Glu Lys Thr Thr Gly Pro Trp Phe Ala Phe
        35                  40                  45
Ser Lys Leu Leu Ser Gln Asp Thr Ile Gly His Gly Tyr Gly Ser
    50                  55                  60
```

<210> 29331
<211> 73
<212> PRT
<213> A.fumigatus

<400> 29331

```
Ile Ala Ile Trp Ser Asn Ile Glu Thr Gly Leu Gly Ile Thr Ala Gly
1               5                   10                  15
Ser Val Ala Thr Ala Arg Pro Leu Phe Arg Ile Leu His Ser Arg Asn
            20                  25                  30
```

```
Gly Ser Ser Tyr Arg Ile Phe Ala Ser Ser Gly Phe Gln Ser Arg Arg
        35                  40                  45
Arg Gln His Gln Phe Pro Leu Gly Asp Leu Glu Ser Asn Thr Trp Arg
    50                  55                  60
Ser Pro Tyr Asp Pro Thr Lys Ser Asn
65                  70
```

<210> 29332
<211> 156
<212> PRT
<213> A.fumigatus

<400> 29332

```
Arg Thr Lys Asn Thr Ser Ile Leu Arg Asp Glu Ala Gly Lys Glu Val
1               5                   10                  15
Val Cys Asp Ile Asp Tyr Ile Pro Lys Ala Arg Met Gly Leu Lys Cys
            20                  25                  30
Leu Phe Cys Arg Glu Val Arg Gly Ala Cys Phe Gln Cys Asn Phe Gly
        35                  40                  45
Lys Cys Thr Arg Ser Tyr His Ala Thr Cys Ala Leu Leu Ala Gly Val
    50                  55                  60
Gln Val Glu His Gly Ser Ile Ala Val Ile Ala Asp Asp Gly Asn Gln
65                  70                  75                  80
Tyr Ser Val Pro Ser Val Asp Leu Lys Cys Lys Tyr His Arg Gln Lys
                85                  90                  95
Arg Pro Thr Trp Met Thr Asn Asp Ala Ala Asp Tyr Asp Arg Lys Val
            100                 105                 110
Asn Ala Thr Ala Gln Arg Leu Val Val Gly Asp Leu Val Gln Phe Gln
        115                 120                 125
Ala Asp Lys Glu Ile Asn Gly Ala Val Val Leu Gln Asn Arg Pro Glu
    130                 135                 140
Glu Arg Thr Leu Leu Val Lys Ile Leu Pro Arg Gly
145                 150                 155
```

<210> 29333
<211> 479
<212> PRT
<213> A.fumigatus

<400> 29333

```
Pro Asp Ser Pro Leu Thr Pro Thr Ile Ser Leu Ser Met His Leu Arg
1               5                   10                  15
Leu Arg Leu Pro Leu Leu Pro Leu Leu Pro Arg Gln His Asn His His
            20                  25                  30
Leu Ser Pro Ala Val Ala Gly Asn Arg Cys Arg Arg Gln Cys Cys Cys
        35                  40                  45
Cys Cys Cys Pro Ile Ala Leu Pro Phe Met Gln Gly Pro Pro Leu Ala
    50                  55                  60
Pro Pro Pro Thr Ala Ala Ala Pro Arg Ser Ser Ser Ser Ser Thr Val
65                  70                  75                  80
Val Ser Ala Ala Ala Ala Ser Ala Met Pro Ser Ala Tyr Arg Thr Leu
                85                  90                  95
Pro Thr Gln Ser Ala Arg His Ala Pro Tyr Pro Gln Val Ile Lys Ala
            100                 105                 110
His Asn Asn His His His His Gln Gln His Pro Phe Tyr His Ser Pro
        115                 120                 125
```

```
Gln Pro Leu Gln Pro Pro Gln Gln Gln Gln Asn Asn Thr Asn Asn
    130                 135                 140
Asn Thr Thr Thr Thr Asn Thr Ala Ser Thr Asn Gly Leu Pro Ala Asn
145                 150                 155                 160
Thr Phe Ala Asn Val Arg Glu Leu Ile Ala Arg Arg Arg Leu Ala Gln
                165                 170                 175
Ile Thr Asp His Ala Asn Val Phe Ala Gly Tyr Thr Ile Val Ser Pro
            180                 185                 190
Glu Leu Val Val Glu Thr Leu Leu Gly Pro Met Gly Ser Val Pro Pro
        195                 200                 205
Pro Asn Gly Leu Glu Lys Leu Glu Leu Ala Met Ala Gln Gln Arg Val
    210                 215                 220
Gln Pro Arg Ala Pro Asp Gly Thr Leu Leu Pro Leu Gln Pro Leu Asn
225                 230                 235                 240
Met Arg Ser Glu Glu Val Thr Arg Leu Leu Gln Met Leu Arg Phe Ser
                245                 250                 255
Leu Val Ser His Arg Glu Arg Leu Asp Val Leu Gln Lys Arg Glu Ser
            260                 265                 270
Glu Asn Ile Lys Gln Glu Ala Thr Ala Lys Gly Ser Ala Ala Ser Ala
        275                 280                 285
Lys Leu Ala Gly Lys Tyr Ala Tyr Leu Asp Gln Gln Arg Ala Gln Ala
    290                 295                 300
Pro Thr Val Tyr Gln Ser Pro Tyr Asp Met Pro Ser Gly Phe Thr Glu
305                 310                 315                 320
Tyr Ala Lys Lys Thr Tyr Glu Leu Ile Pro Cys Ala Pro Glu Leu Pro
                325                 330                 335
Lys Pro Ser Val Ala Asn Asp Tyr Phe Ala Ser Leu Ser Thr Glu Asp
            340                 345                 350
Gln Glu Lys Ile Leu Lys Thr Cys Gly Ser Phe Val Gln Arg Ala Ile
        355                 360                 365
Glu Arg Ser Ala Pro His Ser Arg Gln Asn Ser Ala Ser Asn Leu Arg
    370                 375                 380
Leu Thr Ser Ala Leu Ala Gln Gln Thr Glu Asn Pro Thr Ile Asp Ile
385                 390                 395                 400
Thr Thr Val Glu Asp Leu Pro Leu Ser Gly Leu Asp Leu Pro Leu His
                405                 410                 415
Ala Asp Ser Pro Cys Ser Ser Phe Ser Arg Ser His Leu Arg Phe Gln
            420                 425                 430
Ser Pro Asn Asp Phe Thr Ser His Gly Pro Glu Ala His His Asp His
        435                 440                 445
His Asp Leu Phe Gly Asp Gln Gln Ala Asn Thr Arg Phe Trp Gln His
    450                 455                 460
Gly Arg Phe His Ser Arg Arg Arg Gln Gly Ser Ala Ile Gly Leu
465                 470                 475
```

<210> 29334
<211> 157
<212> PRT
<213> A.fumigatus

<400> 29334

```
Pro Val Thr Ala Ala Ala Ala Ser Ala Ala Ala Ala Ala Ala Gln Ser
1               5                   10                  15
Pro Phe Pro Ser Cys Arg Asp Leu Leu Leu Pro Leu Leu Leu Leu Leu
            20                  25                  30
Leu Pro Leu Val Pro Pro Leu Pro Arg Leu Leu Phe Leu Leu Leu Leu
```

```
        35                  40                  45
Leu Leu Arg Cys Arg Arg Pro Ile Glu Pro Tyr Pro Leu Ser Pro Leu
    50                  55                  60
Ala Met Leu Arg Thr Arg Lys Ser Ser Lys His Ile Thr Thr Thr Thr
65                  70                  75                  80
Thr Thr Asn Asn Ile Pro Ser Thr Ile Leu Arg Asn Pro Ser Asn Leu
                85                  90                  95
Leu Ser Ser Ser Ser Arg Thr Thr Pro Thr Thr Thr Pro Pro Pro Pro
            100                 105                 110
Ile Pro Pro Ala Pro Met Gly Ser Pro Pro Ile Pro Ser Pro Met Phe
        115                 120                 125
Val Ser Ser Leu Leu Ala Val Ala Trp Arg Lys Leu Pro Thr Met Pro
    130                 135                 140
Met Ser Ser Pro Gly Ile Pro Ser Ser Ala Leu Ser Trp
145                 150                 155

<210> 29335
<211> 121
<212> PRT
<213> A.fumigatus

<400> 29335
Ser Gln Arg Gly Ser Cys Gln Pro Arg Gly Glu Asp Gln Ile Arg Gln
1               5                   10                  15
Gly Asn Met Ser Gly Asn Pro Phe Glu Glu Pro Pro Arg Arg Ile Ser
            20                  25                  30
Glu Tyr Thr Ala Gln Glu Ile Ala Thr Leu Gln Ala Arg Leu Asp Lys
        35                  40                  45
Lys Leu Gly Pro Glu Tyr Ile Ser Ser Arg Pro Gly Ala Ala Gly Gln
    50                  55                  60
Lys Val His Tyr Leu Ser Ala Asp Lys Cys Ile Asn Leu Ala Asn Glu
65                  70                  75                  80
Val Phe Gly Phe Asn Gly Trp Ser Ser Ser Ile Gln Asn Ile Gln Ile
                85                  90                  95
Asp Phe Val Cys Leu Met Lys His Ile Arg Met Arg Pro Gly Gly Gly
            100                 105                 110
Arg Ala Lys Leu Leu Met Asp Ala Pro
        115                 120

<210> 29336
<211> 103
<212> PRT
<213> A.fumigatus

<400> 29336
Arg Met Val Leu Thr Met Lys Tyr Val Phe Asn Gly Cys Phe His Leu
1               5                   10                  15
Val Val Leu Thr Asn Ser Ser Gly Leu Thr Gln Asp Ile Gly Tyr Gly
            20                  25                  30
His Ile Glu Asn Cys Lys Gly Lys Ala Ala Ala Phe Glu Lys Ala Lys
        35                  40                  45
Lys Glu Gly Thr Thr Asp Ala Leu Lys Arg Ala Leu Arg Asn Phe Gly
    50                  55                  60
Asn Val Leu Gly Asn Cys Ile Tyr Asp Lys Asp Tyr Val Ala Lys Val
65                  70                  75                  80
Thr Lys Val Lys Ala Thr Pro Val Cys Cys Lys Pro Gln Leu Asp Thr
```

85 90 95
Gln Thr Leu Ser Cys Ser Asp
100

<210> 29337
<211> 347
<212> PRT
<213> A.fumigatus

<400> 29337
Val Lys Gln Thr Leu Phe Ile Ser Cys Gly His Ser Trp Leu Met Asp
1 5 10 15
Leu Gly Asp Leu Phe Asp Glu Ala Asp Phe Gly Val Thr Ala Ser Gly
20 25 30
Asn Pro Asp Glu Ile Val Leu Gly Pro Glu Thr Gln Ala Lys Pro Gln
35 40 45
Pro Pro Thr Pro Val Lys Thr Gly Pro Gln Gly Asn Phe His Arg Pro
50 55 60
Asn Pro Ala Val Leu Thr Pro Ser Arg Pro Glu Lys Pro Phe Asn Gln
65 70 75 80
Thr Val Asn Asn Arg Gln Pro Ser Val Leu Pro Ser Leu Asn Gln Arg
85 90 95
His Asn Pro Ala Leu Gln Asn Gln Tyr Ala Gly Gln Arg Gln Pro Val
100 105 110
Pro Gln Gly Gln Gln Gln Asn Phe Gln Asn Ser Arg Met Ala Pro Pro
115 120 125
Asp Gln Pro Arg Thr Ser Gln Asp Ser Asn Leu Pro Ser Ala Ala Gly
130 135 140
Gln Met Pro Val Lys Arg Glu Ile Asp Ala Lys Ala Gln Asp Thr Ala
145 150 155 160
Pro Pro Ala Ser Ser Pro Ser Val Leu Pro Ala Ser Phe Phe Ser Ala
165 170 175
Arg Ala Val Asp Leu Leu Arg Glu Asn Pro His Thr Ala Val Asn Ala
180 185 190
Pro Gln Phe Asp Pro His Ala Glu Ser Pro Ser Ile Arg Lys Thr Ala
195 200 205
Gly Val Asp His Ser Lys Ser Val Pro Ile Ser Lys Pro Met Leu Ala
210 215 220
Ala Ala Ser Pro Ala Ser Asn Asn Thr Arg Asp Phe Ile Asn Pro Ser
225 230 235 240
Thr Asp Met His Arg Lys Ile Gly Ala Pro Gly Gly Ile Gly Ser Pro
245 250 255
Met Met Asn Arg Gly Gln Thr Thr Ser Ser Tyr Arg Pro Leu Thr Arg
260 265 270
Gln Asn Leu Asp Pro Lys Gln Ala Ile Ser Asn Ala Ala Ala Asp Arg
275 280 285
Ala Gly Phe Gly Pro Pro Asn Val Asn Gly Lys Arg Pro Pro Leu Ser
290 295 300
Asp Val Thr Asn Ala Ser Val Ser Gly Ser Ser Gly Pro Ala Ser Ala
305 310 315 320
Val Asn Ala Asn Asp Pro Lys Arg Pro Lys Ile Asp Gly Asn Ser Thr
325 330 335
Pro Ser Leu Pro Pro Gln Gln Gln Gln Gln Gln
340 345

<210> 29338

<211> 261
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (9),(103)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29338
Gly Thr Pro Ala Arg Arg Arg Pro Xaa Lys Ala Pro Phe Val Arg Ala
1 5 10 15
Phe Ser Ile Glu Gln Ile Ala Arg Leu Phe Trp Gly Pro Gly Ser Gly
20 25 30
Ala Glu Ser Asp Ser Phe Trp Pro Pro Pro Ala Arg Ser Asn Ala Ala
35 40 45
Gly Leu Ser Pro Gln Gly Arg Ala Phe Leu Gly Ala Val Arg Arg Thr
50 55 60
Val Gln Arg Pro Arg Pro Ser Ala Thr Leu Ser Pro Phe Gly Ser Gln
65 70 75 80
His Asn Gly Phe Ala Glu Phe Gln Glu Cys Ala Trp Ser Asp Trp Ile
85 90 95
Cys Arg Gly Ala Glu Ala Xaa Leu Arg Ala Gly Arg Trp Ser Ser Leu
100 105 110
Ala Gln Ser Arg Phe Val Pro Ala Gln Tyr Phe Arg Asp Pro Glu Glu
115 120 125
Leu Asp Ala Tyr Leu Glu His Ser Asn Phe Leu Ala Asp Ile Asn Asn
130 135 140
Glu Arg Val Leu Lys Asn Lys Arg Tyr Ala Glu Asn Leu Ala Gly Leu
145 150 155 160
Asn Arg Phe Ala Met Tyr Met Phe Glu Asp Asp Thr Met Val Asn Pro
165 170 175
Lys Glu Ser Ala Trp Phe Ala Glu Val Asn Arg Thr Asn Gly Glu Val
180 185 190
Thr Pro Leu Lys Glu Arg Arg Leu Tyr Lys Glu Asp Trp Leu Gly Leu
195 200 205
Lys Ala Leu Asp Glu Gln Gly Lys Leu Asp Phe Arg Thr Val Pro Gly
210 215 220
Gly His Met Gln Leu Ala Glu Glu Thr Leu Glu Lys Val Phe Lys Glu
225 230 235 240
Tyr Phe Gly Pro Val Glu Val Glu Ile Pro Pro Val Asn Thr Leu Leu
245 250 255
Lys Gln Thr Gly Leu
260

<210> 29339
<211> 89
<212> PRT
<213> A.fumigatus

<400> 29339
Leu Asp Thr Asp Thr Ile Val Leu Pro Pro Ile Arg Thr Ile Asn Val
1 5 10 15
Pro Arg Cys Phe Thr Ser Leu Ala Val Ala Thr Ser Lys Ser Pro Ala
20 25 30
Ser Ala Arg Lys Thr Pro Pro Thr Cys Ser Thr Arg Ser Lys Ala Thr

```
        35                  40                  45
Arg Ser Thr Leu Pro Ser Arg Thr Ser Ala Trp Thr Gln Pro Pro Thr
    50                  55                  60
Pro Lys Ile Leu Arg Arg Ile Leu Thr Asp Ser Thr Ser Ala Pro Ala
65                  70                  75                  80
Arg Met Ser Pro Ser Arg Pro Ser Val
                85
```

<210> 29340
<211> 141
<212> PRT
<213> A.fumigatus

<400> 29340

```
Met His Lys Met Leu Tyr Pro Arg Asn Leu Ala Leu Phe Ser Leu Leu
1               5                  10                  15
Ser Leu Ser Ser Ala Ala Pro Ser Gln Val Glu Arg Ser Pro Asp Ala
            20                  25                  30
Val Leu Lys Pro Arg Ala Val Cys Thr Pro Thr Ala Gly Gly Ser Pro
        35                  40                  45
Ser Ile Asp Asp Val Pro Ala Ile Arg Lys Ala Ile Ala Ser Cys Gly
    50                  55                  60
Asn Gly Gly Thr Ile Val Phe Pro Ala Gly Ser Thr Tyr Tyr Leu Asn
65                  70                  75                  80
Ser Val Leu Asp Leu Ala Gly Cys Ser Asn Cys Asp Ile Gln Val Glu
                85                  90                  95
Gly Val Leu Lys Phe Ser Gly Ser Thr Glu Tyr Trp Gly Gly Lys Thr
            100                 105                 110
Ala Met Leu Asn Ile Asp Met Ile Asn Gly Leu Arg Leu Arg Ser Leu
        115                 120                 125
Thr Gly Ser Gly Val Ile Asp Gly Asn Gly Gln Asn Ala
    130                 135                 140
```

<210> 29341
<211> 152
<212> PRT
<213> A.fumigatus

<400> 29341

```
Arg Gly Leu Val Ser Ser Met Ala Met Asp Arg Met Arg Lys Val His
1               5                  10                  15
Leu Ser Val Arg Leu Met Pro Glu Leu Thr Arg Tyr Arg Tyr Asp Arg
            20                  25                  30
Phe Ala Ser Asp Lys Asn Tyr Lys Arg Pro Thr Leu Leu Tyr Ile Thr
        35                  40                  45
Gly Gly Ser Asn Ile Glu Val Ser Gly Leu Arg Gln Lys Asn Pro Pro
    50                  55                  60
Asn Val Phe Asn Ser Val Lys Gly Asp Thr Gln His Val Thr Phe Lys
65                  70                  75                  80
Asn Leu Cys Met Asp Ala Thr Ser Asn Ser Gln Asn Pro Pro Lys Asn
                85                  90                  95
Thr Asp Gly Phe Asp Ile Gly Ala Ser Thr His Val Thr Ile Ser Ser
            100                 105                 110
Val Ser Val Thr Asn Asp Asp Asp Cys Val Ala Phe Lys Pro Gly Ser
        115                 120                 125
Asn Tyr Val Thr Val Glu Asp Val Thr Cys Thr Gly Ser His Gly Ile
```

```
    130                 135                 140
Ser Val Gly Ser Leu Gly Lys Ser
145                 150

<210> 29342
<211> 248
<212> PRT
<213> A.fumigatus

<400> 29342
Val Ala Lys Lys Arg Phe Arg Trp His Tyr Ile Leu Thr Gly Pro Pro
1               5                   10                  15
Gly Thr Pro Tyr Glu Asn Gly Gln Tyr Trp Gly Thr Leu Met Phe Pro
            20                  25                  30
Pro Glu Tyr Pro Phe Ala Pro Pro Ala Ile Arg Met His Thr Pro Ser
        35                  40                  45
Gly Arg Phe Gln Pro Ser Ser Arg Leu Cys Leu Ser Ile Ser Asp Phe
    50                  55                  60
His Pro Lys Ser Phe Asn Pro Ala Trp Glu Val Ser Thr Ile Leu Ile
65                  70                  75                  80
Gly Leu Leu Ser Phe Met Thr Ser Glu Glu Met Thr Thr Gly Ser Val
                85                  90                  95
Ser Ala Ser Glu Ala Glu Arg Arg Val Leu Ala Ala Arg Ser Arg Trp
            100                 105                 110
Trp Asn Ser Thr Gly Gly Gly Ser His Ile Ser Ala Thr Pro Gly Val
        115                 120                 125
Thr Pro Thr Ala Arg Gly Ile Asn Asn Val Lys Ala Gly Asp Gly Gly
    130                 135                 140
Leu Lys Phe Arg Ser Glu Trp Pro Glu Leu Asp Gln Glu Asn Trp Gln
145                 150                 155                 160
Trp Met Arg Glu Asn Arg Ile Asp Thr Asn Thr Gly Gln Leu Ile Pro
                165                 170                 175
Asp Pro Asn Ser Ser Val Thr Lys Cys Ser Pro Glu Thr Ser Ala Leu
            180                 185                 190
Arg Arg Arg Pro Asn Ala Ser Ala Pro Gly Leu Gly Cys Val Met Glu
        195                 200                 205
Gly Gly Gln Val Ala Arg Glu Ala Cys Gln Ser Trp Ala Arg Arg Asn
    210                 215                 220
Lys Ile Trp Ile Gly Leu Ala Leu Ile Phe Gly Tyr Ala Leu Leu Thr
225                 230                 235                 240
Arg Leu Val Asn Asp Val Gln Gly
                245

<210> 29343
<211> 81
<212> PRT
<213> A.fumigatus

<400> 29343
Tyr Glu Ile Leu Tyr Trp Thr Val Ser Asp Met Leu Thr Asp Ile Phe
1               5                   10                  15
Gln Gln Pro Ile Ser Val Tyr Ile Asp Gln Ser Gln Asp Ala Lys Ser
            20                  25                  30
Gln Asn Gly Ile Pro Asn Ile Asp Val Phe Phe Ser Glu Lys Glu Lys
        35                  40                  45
Ser Arg Val Leu Gln Lys Thr Gly Thr Asp Gly Glu Asn Gly Gly Val
```

```
    50                  55                  60
Arg Gln Arg Asn Phe Asp Gly Gly Glu Val Arg Gly Gly Arg Arg Asp
65                  70                  75                  80
Leu
```

<210> 29344
<211> 79
<212> PRT
<213> A.fumigatus

<400> 29344

```
Pro Glu Ser Ala Val Thr Ser Ile Pro Val Val Lys Thr Lys Pro Lys
1               5                   10                  15
Tyr Ser Pro Lys Asp Gln Lys Ala Pro Arg Ala Asp Pro Pro Arg Gly
            20                  25                  30
Ser Asp Lys Leu Glu Asp Leu Tyr Ile Thr Ala Ile Asn Thr Asn Asn
        35                  40                  45
Arg Tyr Ala Gly Asp Ile Thr Leu Gln Ala Tyr Leu Leu Thr Leu Tyr
    50                  55                  60
Ile Ile Ile Ser Val Thr Cys Asp Arg Ala Tyr Asn Asn His Ile
65                  70                  75
```

<210> 29345
<211> 136
<212> PRT
<213> A.fumigatus

<400> 29345

```
Ala Cys Val Ser Ser Arg Pro Cys Arg Ile Ile Cys Asn Cys Leu Arg
1               5                   10                  15
Phe Ala Thr Gly Arg Ser Glu Ser Ser Thr Ser Arg Arg Ala Ser Ser
            20                  25                  30
Thr Gly Asn Thr Met Asn Pro Ser Pro Leu Ser Pro Lys Cys Ser Lys
        35                  40                  45
Pro Ala Gln Pro Ser Thr His Ser Met Arg Trp Asn Ser Ala Ala Ala
    50                  55                  60
Ser Pro Leu Asn Val Asn Ser Arg Ile Pro Ser Pro Ser Pro Lys Ser
65                  70                  75                  80
Thr Ser Ser Ser Thr Ser Gln Ala Thr Ser Cys Ser Thr Ala Pro Ser
                85                  90                  95
Thr Ala Pro Ser Ala Ser Thr Pro Thr Pro Thr Ala Trp Ser Ala Ser
            100                 105                 110
Thr Gln Arg Thr Asn Pro Ser Ala Pro Ser Thr Trp Pro Cys Ile Arg
        115                 120                 125
Ala Asn His Lys Arg Lys Ala Ser
    130                 135
```

<210> 29346
<211> 358
<212> PRT
<213> A.fumigatus

<400> 29346

```
Leu Arg Ile Phe Gln Ala Val Ser Asn Asn Leu Gln Leu Ser Ala Phe
1               5                   10                  15
```

```
Arg Asp Arg Gln Val Arg Val Phe Asp Phe Ala Thr Gly Lys Leu Tyr
            20                  25                  30
Arg Lys Tyr Asp Glu Ser Ile Thr Thr Ile Thr Glu Met Gln Gln Ala
        35                  40                  45
Gly Thr Ala Leu Tyr Pro Leu Asp Glu Val Glu Phe Gly Arg Arg Leu
    50                  55                  60
Ala Ile Glu Arg Glu Leu Glu Asn Pro Ile Thr Gln Pro Lys Ile Asn
65                  70                  75                  80
Val Ile Phe Asp Glu Ser Gly His Phe Val Leu Tyr Gly Ser Leu Tyr
                85                  90                  95
Gly Ala Lys Cys Ile Asn Thr Tyr Thr Asn Arg Val Val Arg Val Tyr
            100                 105                 110
Thr Lys Asp Glu Pro Phe Arg Pro Leu Asn Leu Ala Leu Tyr Gln Gly
        115                 120                 125
Gln Pro Gln Lys Lys Gly Val Met Thr Val Ser Met Ala Ala Ser Ala
    130                 135                 140
Asn Pro Leu Leu Gln Glu Ser Glu Glu Arg Asp Pro Ile Leu Val Ser
145                 150                 155                 160
Thr Gly Phe Ala Lys Ile Arg Phe Tyr Leu Phe Thr Asn Glu Thr Glu
                165                 170                 175
Ile Ser Lys Ser Ser Arg Asp Val Gln Asn Glu Arg Pro Thr His Ala
            180                 185                 190
Asp Ala Arg Glu Thr Thr Ala Lys Lys Ala Ala Glu Thr Gly Thr Ser
        195                 200                 205
Ala Ile Leu His Thr Thr Met Gly Asp Ile His Leu Arg Leu Phe Pro
    210                 215                 220
Gln Ala Ala Pro Lys Ala Val Glu Asn Phe Val Thr His Ala Arg Asn
225                 230                 235                 240
Gly Tyr Tyr Asn Asn Thr Ile Phe His Arg Val Ile Arg Lys Phe Met
                245                 250                 255
Ile Gln Gly Gly Asp Pro Leu Gly Asp Gly Thr Gly Gly Glu Ser Ile
            260                 265                 270
Trp Gly Gly Glu Phe Glu Asp Glu Phe Ser Ser Leu Lys His Asp Lys
        275                 280                 285
Pro Tyr Thr Leu Ser Met Ala Asn Ala Gly Pro Asn Thr Asn Gly Ser
    290                 295                 300
Gln Phe Phe Ile Thr Thr Glu Lys Thr Pro Trp Leu Asp Gly Lys His
305                 310                 315                 320
Thr Ile Phe Gly Arg Ala Val Gln Gly Leu Asp Val Ile His Lys Ile
                325                 330                 335
Glu Asn Thr Lys Thr Tyr Lys Glu Lys Pro Glu Gln Asp Ile Lys Ile
            340                 345                 350
Val Ser Ile Thr Val Thr
        355
```

<210> 29347
<211> 419
<212> PRT
<213> A.fumigatus

<400> 29347

```
Asp His Val Asn Lys Gln Ala Gln Arg Cys Leu Ser Leu Leu Thr Gly
1               5                   10                  15
Pro Ser Val Ala Gln Gln Leu Asp Ser Pro Phe Gln Leu Gln Glu His
            20                  25                  30
Leu Lys Ala Leu Tyr Asn His Phe Thr Arg Pro Glu Gly Ser Glu Thr
```

```
        35                  40                  45
Val Val Pro Ile Ser Arg Asp Val Ala Ile Gln Leu Ala Gly Pro Pro
    50                  55                  60
Glu Gly Val Asp Lys Ser Leu Trp Leu Tyr Glu Leu Cys Arg Phe Leu
65                  70                  75                  80
Thr Met Lys Val Asn Asn Leu Ile Val Ala Phe Phe Ala Glu Asn Pro
                85                  90                  95
Pro Cys Ser Ala Gln Thr Cys Pro Glu Met Arg Ala Ser Glu Trp Gln
            100                 105                 110
Tyr Leu Cys Ala Val His Asp Pro Pro Lys Ser Cys Cys Ala Ile Asp
        115                 120                 125
Tyr Cys Cys His Thr Leu Asp Trp Ala Thr Asn Ile Leu Thr Ser Pro
    130                 135                 140
Lys His Phe Pro Ser Arg Leu Thr Leu Gly Ser Glu Ala Gly Gly Gly
145                 150                 155                 160
Ala Gln Ala Ser Leu Arg Tyr Leu Thr Asn Ile Phe Arg Arg Leu Tyr
                165                 170                 175
Arg Ile Phe Ala His Ala Trp Phe Gln His Arg Asp Val Phe Trp Gln
            180                 185                 190
Val Glu Gly Asn Asp Gly Leu Tyr Ile Phe Phe Lys Thr Val Cys Asp
        195                 200                 205
Met Tyr Lys Leu Ile Pro Glu Asp Asn Tyr Thr Val Pro Ala Glu Ala
    210                 215                 220
Glu Gly Leu Asp Ala Asn Gln Ser Met Gln Glu Gln Ala Gly Asn Arg
225                 230                 235                 240
Arg Met Thr Ile Leu Arg Lys Asp Ser Glu Gly Pro Leu Glu Asn Ile
                245                 250                 255
Glu Pro Ser Ser Ile Ser Thr Gly Ala Thr Thr Arg Arg His Lys Asn
            260                 265                 270
Ser Ala Ser Ile Ser Ser His Val Thr Thr Ile Ser Glu Gly Ala Glu
        275                 280                 285
Glu Ser Glu Glu Gln Pro Lys Ala Glu Pro Val Ile Lys Ser Lys Asp
    290                 295                 300
Glu Lys Ser Thr Glu Ala Val Pro Lys Val Glu Ser Glu Pro Gln Pro
305                 310                 315                 320
Ala Glu Glu Val Val Ser Glu Glu Gln Lys Glu Ala Ala Asp Ala Pro
                325                 330                 335
Val Gln Asp Pro Ala Glu Ser Gln Asp Thr Val Glu Glu Val Gln Glu
            340                 345                 350
Asp Glu Glu Gly Lys Pro Ser Asn Thr Asn Thr Glu Thr Ala Ala Lys
        355                 360                 365
Asp Glu Pro Glu Ala Val Gln Pro Pro Glu Glu Pro Glu Ala Thr Lys
    370                 375                 380
Ala Glu Glu Ser Arg Ala Asp Thr Gln Ala Ser Ala Glu Asp Ser Pro
385                 390                 395                 400
Glu Ala Lys Arg Arg Glu Asp Pro Thr Gly Ala Trp Ser Ser Val Asn
                405                 410                 415
Asn Arg Ala
```

<210> 29348
<211> 65
<212> PRT
<213> A.fumigatus

<400> 29348

```
Arg Ser Leu Pro Ser Leu His Gln Lys Ile Ile Ser Leu Thr Val Arg
1               5                  10                  15
Lys Val Phe His Leu Thr Pro Leu Ser Phe Ala Leu Val Asn Leu Lys
            20                  25                  30
Pro Ile Leu Pro Gly His Val Leu Val Ser Pro Arg Arg Arg Val Pro
        35                  40                  45
Arg Val Ala Asp Leu Thr Ala Ala Glu Thr Ser Asp Leu Phe Leu Thr
    50                  55                  60
Val
65
```

<210> 29349
<211> 71
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (8)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29349
```
Ser Glu Arg Asn His Lys Asn Xaa Val Phe Ser Val Arg Gln Thr Val
1               5                  10                  15
Trp Ala Phe Ser Ala Lys Ser His Tyr Pro Phe Leu Glu Cys Ala Leu
            20                  25                  30
Phe His Tyr Lys Ala Ser Ala Ser Thr Thr Ser Ser Gln Arg Ser Thr
        35                  40                  45
Gly Leu Leu Cys Leu Ser Ala Cys Ser Leu Gln Pro Ala Ala Leu Ala
    50                  55                  60
Cys Pro Leu Val Cys Phe Arg
65                  70
```

<210> 29350
<211> 134
<212> PRT
<213> A.fumigatus

<400> 29350
```
Thr Ser Phe Phe Phe Val Leu Ser Pro Leu Leu Phe Ser Phe Leu Leu
1               5                  10                  15
Phe Pro Pro Pro Leu Phe Leu Phe His Phe Ser Phe Phe Pro Leu Phe
            20                  25                  30
Phe Phe Thr Leu Arg Phe Val Val Asn Leu Phe Phe Leu Phe Phe Ile
        35                  40                  45
Thr Leu Phe Phe Tyr Ser Ile Pro Pro Pro Asn Tyr Gly Gly Ile Ile
    50                  55                  60
Ile Thr Ile Ile Ile Ile Phe Ile Ala Leu Asp Pro Phe Gln Ser Ser
65                  70                  75                  80
Thr Gln Asn Phe Pro Pro Glu Ile Pro Pro Pro Arg Trp Leu Asp Pro
                85                  90                  95
Gly Arg Ser Leu Val Leu Thr Val Glu Trp Ser Gly Tyr Ser Arg Phe
            100                 105                 110
Leu Gly Leu Gly Leu Val Trp Leu Leu Cys Leu Phe Leu Phe Ser Ser
        115                 120                 125
Phe Ile Ile Trp Ser Val
```

130

<210> 29351
<211> 75
<212> PRT
<213> A.fumigatus

<400> 29351
Leu Ser Ser Leu Pro Tyr Ile Ile Leu Leu Ile Ile Ile Thr Gly Ala
1 5 10 15
Gly Ser Ala Ser Ser Phe Leu Pro Leu Leu Ser Ser Thr Leu Thr Val
20 25 30
Leu Pro Ile Ser Ala Ile Ser Val Leu Arg Ile Ile Pro Gln Ser Asp
35 40 45
His Phe His Arg Leu Pro Ser Pro Pro Pro Ser Gln His Asn Ser Leu
50 55 60
His His Gly Ala Gly Arg Ile Arg Arg Trp Phe
65 70 75

<210> 29352
<211> 62
<212> PRT
<213> A.fumigatus

<400> 29352
Met His Cys Asp Ala Phe Phe Ser Trp Ile Phe Tyr Phe Phe Trp Thr
1 5 10 15
Gly Pro Ser His Val Ser Val Thr Ser Pro Lys Glu Gly Thr Ile Gln
20 25 30
Trp Val Glu Gly Glu Lys Ser Val Ile Val Glu Leu Thr Ile Arg Phe
35 40 45
Thr Ile Arg Asp Asn Ser Thr Val Pro Pro Phe Ser Pro Ser
50 55 60

<210> 29353
<211> 131
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (67),(76),(86),(124)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29353
Leu Gln Cys Ser Ser Ile Gly Ser Asn Leu Trp Tyr Ile Arg Ser Ile
1 5 10 15
Val Pro Cys Gln Gly Ile Tyr Pro Thr Ile Cys Asn Asn Thr Lys Asn
20 25 30
Ala Asp Ala Met Val Arg Arg Glu Ile Arg Gly Cys Phe Pro Arg Tyr
35 40 45
Asp Gln Ala Cys Arg Val Asn Ile Ser Arg Gln Ser Ala Met Arg Asn
50 55 60
Glu Ser Xaa Asn Val Asp Arg Leu Ala Asp Ile Xaa Pro Gly Ile Thr
65 70 75 80
Ser Asn Gly Phe Leu Xaa Ala Leu Asp Leu Ser Glu Ser Val Ala Arg

```
                85                  90                  95
Thr Met Val Asp Leu Asp Ser Leu Val Glu Asp Asn Thr Tyr Glu Asp
            100                 105                 110
Thr Phe Leu Asp Ile Gln Thr Met Lys Val Ser Xaa Gln Tyr Thr Ile
        115                 120                 125
Val Ser Ala
    130

<210> 29354
<211> 65
<212> PRT
<213> A.fumigatus

<400> 29354
Thr Val Met Val Leu Lys Tyr Leu Ile Lys Gln Tyr Pro Leu Pro Thr
1               5                   10                  15
Leu Tyr Phe Gly Ile Ala Asn Val Ile Ala Asn Gly Leu Val Met Leu
            20                  25                  30
Arg Phe Val Asp Val Ser Pro Ala Ala Ile His Leu Ser Arg Leu Leu
        35                  40                  45
Thr Gly Leu Leu Gln Tyr Tyr Cys Ser Met Asp Leu Ala Glu His Arg
    50                  55                  60
Gly
65

<210> 29355
<211> 531
<212> PRT
<213> A.fumigatus

<400> 29355
Tyr Arg Arg Pro Thr Leu Gly Arg Gly Gly Gly Thr Lys Asn Cys Lys
1               5                   10                  15
Ile Ser Gly Gly Pro Asp Ser Pro Val Gly Leu Ser His Leu His Val
            20                  25                  30
Pro Ser Ser Leu Arg Asn Glu Asp Leu Arg Thr Thr Ser Lys Ser Pro
        35                  40                  45
Leu Ser Ser Arg Ala Arg Ser Glu Lys Arg Ser Gly Val Ser Met Ala
    50                  55                  60
Ser Glu Pro Ser Pro Lys Arg Pro Ile Pro Arg Ala Gly Leu Ser Gly
65                  70                  75                  80
Val Gln Gly Gln Asp Glu Glu Pro Ser Pro Phe Val Ser His Gly Ala
                85                  90                  95
Pro Trp Leu Arg Lys Asp Arg Val Trp Ile Asn Ser Arg Asn Val Asp
            100                 105                 110
Pro Pro Thr Ser Pro Thr Thr Thr Val Phe Asn Arg Gln Ser Asp Met
        115                 120                 125
Arg Ala Arg Ala Thr Ile Val Arg Ser Ser Lys Arg Arg Phe Pro Gly
    130                 135                 140
Asn Thr Thr Pro Pro Gln Arg Tyr Ser Ser Ile Asp Ser Ser Thr Ser
145                 150                 155                 160
Ala Glu Ser Pro Val His Met Val Thr Arg Gln Gly Phe Ile Ala Ser
                165                 170                 175
Glu Asp Arg Ser Lys Gly Asn Ala Thr Glu Ser Met His Asn Gln Ser
            180                 185                 190
Val Asn Gly Leu Asp Arg Gln Cys Thr Val Ser Asn Glu Arg Met Ser
```

```
        195                 200                 205
Ser Ser Leu Gln Ile Leu Ser Ser Ser Ser Gln Leu Pro Lys Phe Glu
    210                 215                 220
Tyr Arg Arg Arg Lys Val Arg Ala Ala Ser Gly Gln Glu His Thr Ser
225                 230                 235                 240
Ser Pro Met Val Leu Asp Lys Arg Lys Pro Ser Val Val Ala Glu Val
                245                 250                 255
Glu Lys Ala Pro Asn Ile Thr Ala Asp Arg Pro Thr Gln Ala Leu Ala
            260                 265                 270
Leu Arg Asn Val Ser Phe Ala Asp Ala Ala Asp Leu Cys Gln Thr Glu
        275                 280                 285
Ser Ser Gln Ala Ser His Leu Leu Ala Lys Asp Glu Thr Thr Val Ser
    290                 295                 300
Asn Pro Pro Asp Met Glu Thr Val His Asn Ser Lys Ala Ala Arg Ser
305                 310                 315                 320
Met Gln Gly Ser Thr Ser Glu Arg Leu His Ser Ala Gln Arg Val Pro
                325                 330                 335
Gly Asn Ser Ala Met Met Asp Cys Val Thr Ser Leu His Thr Ile Ala
            340                 345                 350
Val Ser Lys Glu His Thr Glu Tyr Asp Gly Asp Thr Ile Pro Glu Ala
        355                 360                 365
Gln Phe Ser Thr Gln Ala Ala Val Leu Leu Ala Gln Arg Ser Phe Gln
    370                 375                 380
Lys Asp Leu Glu Ser Pro Glu Pro Glu Glu Leu Pro Leu Arg Arg Thr
385                 390                 395                 400
Pro Ser Leu Ser Thr Ser Pro Ala His Glu Ile Thr Pro Phe Cys Gln
                405                 410                 415
Val Asn Thr Pro Gly Glu Val Lys Ile Thr Asn Lys Leu Ser Gly Pro
            420                 425                 430
Ala Gly Thr Gly Leu Pro Leu Met Ser Thr Gln Cys Ile Ile Asp Ala
        435                 440                 445
Val Thr Pro Phe Thr Phe Ser Thr Asp Lys Lys Ser Asn Tyr Arg Val
    450                 455                 460
Ile Ser Ser Ala Lys Ser Arg Ser Gly Arg Arg Lys Ser Glu Gly Val
465                 470                 475                 480
Asn Phe Pro Thr Gly Ile Ala Pro Ser Met His Arg Ser Pro Ser Pro
                485                 490                 495
Ser Ile Arg Asp His Ser Glu Leu Arg Asn Pro Asp Ala Asp Arg Asn
            500                 505                 510
Ile Asp Asp Asp Ser Arg Val Phe Thr Thr Gly Val Glu Gly Ser Ser
        515                 520                 525
Gly Gly Ala
    530
```

<210> 29356
<211> 411
<212> PRT
<213> A.fumigatus

<400> 29356

```
Lys Tyr Ala Leu Arg Leu Ile Lys Ala Pro Gln Ser Leu Val Ser Leu
1               5                   10                  15
Val Ser Phe Leu Leu Ile Arg Glu Ile His Thr Phe Asn Ser Cys Ile
            20                  25                  30
Gln Ala Ser Asp Phe Ala Met Phe Leu Ser Lys Leu Pro Asn Glu Val
        35                  40                  45
```

```
Val Leu Leu Ile Ala Ala His Leu Val Cys Tyr Arg Asp Leu Arg Ala
    50                  55                  60
Leu Val Leu Ser Ser Arg Lys Leu His His Leu Leu Lys Ala Arg Leu
65                  70                  75                  80
Ser Lys His Ser Tyr Gln Ala Cys His Gly Asp Ala Leu Cys Cys Ala
                85                  90                  95
Ala Ala Gln Gly Asp Glu Gly Leu Ala Arg Glu Cys Leu Lys Arg Met
            100                 105                 110
Thr Ile Ala Ala Glu Ser Phe Gln Gly Pro Arg Val Ser Asn Pro Tyr
        115                 120                 125
Lys His Pro Leu Cys Thr Thr Asn Trp Arg Val Glu Asp Ser Val Leu
    130                 135                 140
Ile Gln Arg Ala Leu Leu Val Ala Val Gln Ala Gly Ser Lys Arg Val
145                 150                 155                 160
Val Asn Leu Leu Leu Asp His Gly Ala Gln Thr Met Phe Arg Gly Pro
                165                 170                 175
Met Gly Tyr Ile Asn Asn Ile Pro Pro Leu Tyr Leu Ala Val Gln Asn
            180                 185                 190
Ser His Glu Asp Leu Val Asp Phe Leu Cys Glu Arg Gly Asp Pro Cys
        195                 200                 205
Tyr Arg Glu Asn Thr Cys Pro Leu Leu Trp Ala Ile Glu His Asn Gln
    210                 215                 220
Arg Arg Ile Ile Arg Thr Leu Leu Arg His Glu Ser Cys Asp His Cys
225                 230                 235                 240
Trp Tyr Val Leu Pro Met Ala Met Asn Arg Gly Asp Thr Asp Val Leu
                245                 250                 255
His Phe Leu Leu Glu Asn Gly Leu His Gly Thr Asn Tyr Ala Arg Asp
            260                 265                 270
Ala Leu Phe Ala Ala Ile Phe Lys Gly Asp Leu Glu Met Val Arg Phe
        275                 280                 285
Phe Ile Ala His Gly Ala Asp Pro Asn Arg Leu Gly Asp Cys Tyr Asp
    290                 295                 300
Lys Arg Trp Glu Thr Ser His Val Gln Leu Arg Gln Lys Ile Asp Ser
305                 310                 315                 320
Arg Ser Leu Leu Glu Leu Gly Gly Ile Glu Asp Asp Phe Ser Thr Trp
                325                 330                 335
Cys Asn Gly Val Cys Val Asp Glu Glu Pro Met Phe Cys Thr Thr Thr
            340                 345                 350
Tyr Val Ala Ile Tyr Tyr Asp Gln Met Pro Ile Leu Arg Phe Leu Leu
        355                 360                 365
Glu Tyr Gly Val His Pro Glu Pro Glu Asp Ile Gln Leu Ala Arg Lys
    370                 375                 380
Lys Gly Asn Glu Glu Ala Val Gly Leu Leu Ser Arg Ser Ser Asn Glu
385                 390                 395                 400
Asp Val Pro Arg Lys Lys Ser Cys Phe Gln Glu
                405                 410
```

<210> 29357
<211> 182
<212> PRT
<213> A.fumigatus

<400> 29357

```
Ile Ile Leu Asn Asn Ser Asn Leu Phe Leu Leu Pro Lys Gly Asn Gly
1               5                   10                  15
Ile Phe Met Glu Ser Trp Phe Asn Glu Ser Glu Ala Leu Pro Ser Asn
```

```
            20                  25                  30
Thr Thr Ile Ala Thr Gln Ala Asn Gly Trp Ile Ser Asp Glu Leu Ala
        35                  40                  45
Leu Gln Trp Leu Gln Ser Phe Ile Lys Ala Thr Asn Glu Arg Thr Lys
    50                  55                  60
Arg Gly Glu Lys Arg Ile Leu Ile Phe Asp Gly His Gly Ser His Leu
65                  70                  75                  80
Thr Ile Asp Phe Leu Gln Thr Cys Glu Asp Asn Gly Ile Ile Pro Phe
                85                  90                  95
Gly Phe Leu Pro His Thr Thr His Leu Cys Gln Pro Leu Asp Gly Lys
            100                 105                 110
Pro Phe Leu Ser Tyr Lys Gln His Phe Arg Arg Ile Asn Asn Glu His
        115                 120                 125
Ala Phe Trp Ala Gly Glu Pro Val Gly Lys Ser Glu Phe Leu Arg Val
    130                 135                 140
Ile Gly Pro Val Arg Glu Lys Ala Phe Asn Gln Arg Ile Ile Arg Glu
145                 150                 155                 160
Ala Phe Lys Asp Tyr Arg Ile Trp Pro Val Asn Ser Lys Ile Ala Asn
                165                 170                 175
Asp Leu Ala Ile Leu Leu
            180
```

<210> 29358
<211> 124
<212> PRT
<213> A.fumigatus

<400> 29358

```
Gly Tyr Gln Gly Arg Ser Tyr Ala Gln Val Cys Thr Leu Arg Leu Cys
1               5                   10                  15
Gln Arg Leu Arg Arg Ile Phe Asp Arg Leu Pro His Ser Val Gln Ser
            20                  25                  30
Tyr Gly Gly Lys Arg Met Lys Gln Arg Ala Phe Ile Asp Gly Arg Leu
        35                  40                  45
Arg Met Thr Ala Ser Ser Tyr Gly Cys Ala Ala Cys Val Phe Ser Val
    50                  55                  60
Ala Ser Ser Ser Cys Tyr Arg Ala Ala Gly Lys Ile Asp Lys His Val
65                  70                  75                  80
Tyr His Glu Leu Tyr His Leu Ser Lys Gly Asn Thr Phe Lys His Lys
                85                  90                  95
Arg Ala Leu Ile Glu His Val Ser Leu Pro Leu Asp Ser Tyr Pro Phe
            100                 105                 110
Phe Ile Gly Met Gln Arg Trp Arg Leu Arg Gly Glu
        115                 120
```

<210> 29359
<211> 267
<212> PRT
<213> A.fumigatus

<400> 29359

```
Thr His Ile Ser Val Ser Ser Leu Trp Gly Pro Ile Glu His Gly His
1               5                   10                  15
Pro Ser Ser Arg Arg His Cys Phe His Met Ile Pro Ser Leu Arg Leu
            20                  25                  30
Met Leu Arg Ile Ile Ser Gly Val Glu Tyr Leu His Ala Lys Ser Ile
```

```
        35                  40                  45
Ile His Arg Asp Leu Lys Pro Ala Asn Ile Phe Leu Ser Pro Ser Glu
    50                  55                  60
Asn Gly Glu Leu Asp Gly Cys Pro Ser Cys Met Ala Asn Tyr Gly Ser
65                  70                  75                  80
Thr Pro Asp Tyr Cys His Pro Arg Ile Gly Asp Phe Gly Leu Val Ala
                85                  90                  95
Asp Val Ser His Leu Asn Asp Cys Pro Thr Pro Ser Phe Glu Glu Asn
            100                 105                 110
Pro Lys Leu Glu Arg Val Val Gly Thr Glu Phe Tyr Arg Pro Pro Leu
        115                 120                 125
Thr Thr Asn Gly Glu Asn Tyr Ser Asn Gly Met Phe Gln Thr Gly Asn
    130                 135                 140
His Gln Phe Ser Tyr Ile Ile Asp Glu Thr Leu Asp Val Tyr Ala Leu
145                 150                 155                 160
Gly Val Ile Leu Phe Glu Leu Leu Tyr Arg Leu Asn Thr Lys Met Glu
                165                 170                 175
Arg Gln Met Val Leu Thr Asp Leu Thr Lys Gly Thr Asn Arg Gln Ser
            180                 185                 190
Pro Thr Arg Ile Cys Ile Arg Asn Thr Val Phe Pro Ala Asp Phe Ala
        195                 200                 205
Gln Lys Leu Asp Met Gly Ser Ile Ile Leu Glu Asp Ser Val Ser Val
    210                 215                 220
Ala Asp Ser Leu Met Arg Cys Ile Ser Gly Met Leu Glu Pro Asn Pro
225                 230                 235                 240
His Arg Arg Leu Arg Cys Ala Asp Val Lys Arg Ala Leu Glu Asn Ile
                245                 250                 255
Leu Asp Ala Thr Ala Thr Gln Asp Arg Ser Cys
            260                 265
```

<210> 29360
<211> 121
<212> PRT
<213> A.fumigatus

<400> 29360

```
Val Arg Pro Pro Arg Lys Arg Asn Pro Gly Thr Asp Ile Val Lys Asp
1               5                   10                  15
Phe Asn Pro Glu Arg Leu Thr Leu Ala Cys Ala Ala Leu Arg Leu Ala
            20                  25                  30
Arg Val Cys Ala Glu Asp Ala Phe His Tyr Ala Val Gln Arg Glu Thr
        35                  40                  45
Phe Gly Ala Pro Leu Ile Gln Arg Gln Ala Ile Gln Ser Lys Ile Phe
    50                  55                  60
Arg Phe Gly Leu Met Ile Glu Pro Ala Tyr Ala Leu Met Glu Gln Leu
65                  70                  75                  80
Val Asn Ile Ile Glu Leu Thr Lys Asp Arg Pro Ala Asp Asp Val Lys
                85                  90                  95
Ile Gly Gly Met Thr Ala Leu Leu Lys Val Met Ser Thr Arg Ala Leu
            100                 105                 110
Glu Lys Ser Val Arg Glu Ala Gln Gln
        115                 120
```

<210> 29361
<211> 200
<212> PRT

<213> A.fumigatus

<400> 29361
Leu Ser Ile His Phe Glu Gly His His Leu Tyr Leu Phe Leu Ser Ser
1 5 10 15
Pro Gln Lys Leu Leu Ser Gln Leu Ser Glu Lys Met Thr Arg Lys Asp
20 25 30
Pro Pro Pro Thr Ala Pro Tyr Ser Glu Pro Leu Leu Pro Gln Leu Asp
35 40 45
Ile Lys Asn Pro Tyr Tyr Thr Asp Leu His His Glu Leu Arg Ala Tyr
50 55 60
Val Arg Asn Tyr Val Glu Thr Ser Ile Val Pro Tyr Ala Gln Asp Trp
65 70 75 80
Glu Thr Ala Gly Gln Val Pro Glu Glu Val Arg Arg Arg His Cys Asp
85 90 95
Leu Gly Phe Gly Ile Val His Pro Leu Thr Ser Glu Glu Asp Ala Ala
100 105 110
Gly Ile Ser Leu Pro Gly Asn Val Pro Arg Glu Lys Trp Asp Thr Trp
115 120 125
Cys Asn Leu Ile Val Thr Asp Glu Leu Thr Arg Val Gly Tyr Val Gly
130 135 140
Val Ile Trp Gly Leu Gly Gly Gly Asn Ser Ile Gly Cys Pro Pro Ile
145 150 155 160
Ala Arg Phe Gly Thr Pro Glu Gln Arg Arg Arg Trp Leu Pro Lys Val
165 170 175
Ala Arg Gly Asp Ile Arg Phe Cys Leu Gly Ile Thr Glu Pro Asp Gly
180 185 190
Thr Ile Tyr Asp Phe Tyr Ile Ile
195 200

<210> 29362
<211> 192
<212> PRT
<213> A.fumigatus

<400> 29362
Pro Leu Arg Lys Thr Arg Gln Glu Ser His Tyr Pro Val Thr Cys Pro
1 5 10 15
Val Arg Asn Gly Ile Arg Gly Val Thr Ser Leu Leu Arg Thr Ser Leu
20 25 30
Pro Gly Ser Asp Met Trp Val Leu Tyr Gly Ala Trp Gly Val Glu Ile
35 40 45
Val Ser Gly Val Arg Leu Ser Pro Gly Ser Glu Pro Arg Ser Arg Gly
50 55 60
Glu Asp Gly Tyr Leu Arg Leu Arg Gly Gly Ile Ser Gly Phe Ala Trp
65 70 75 80
Gly Leu Gln Ser Leu Met Val Gln Phe Met Ile Phe Thr Ser Phe Lys
85 90 95
Gly Gly Asp Ser Leu Ala Asp Gly Ile Leu Ala Gly Ser Asp Val Ala
100 105 110
Asn Ile Gln Thr Thr Ala Arg Leu Asp Gly Asp His Tyr Val Val Asn
115 120 125
Gly Ala Lys Lys Trp Ile Thr Asn Gly Ile Trp Ala Asp Tyr Cys Thr
130 135 140
Ala Ala Val Arg Thr Gly Gly Pro Gly Arg Asn Gly Ile Ser Leu Leu
145 150 155 160

```
Val Ile Pro Leu Thr Ala Pro Gly Val Thr Arg Arg Arg Met His Asn
                165                 170                 175
Ser Gly Val Asn Ala Ser Gly Met Thr Cys Leu Gln Lys Lys Phe Pro
            180                 185                 190

<210> 29363
<211> 312
<212> PRT
<213> A.fumigatus

<400> 29363
Gln Pro Arg Ser Gln Ser Glu Glu Leu Ile Arg His Pro Leu Ile Gln
1               5                   10                  15
Val Gln Ser Val Arg Leu Leu Gly His Glu Met Ala Ser Cys Lys Ser
            20                  25                  30
Ser Phe Val Ser Ile Leu Asn Asn Asp Asp His Pro Ser Phe Ala Val
        35                  40                  45
Arg Ser Ser His Gly Val Ser Arg Gln Pro Ser Thr Ser Ser Ser Tyr
    50                  55                  60
Ser Leu Gln Ser Glu Gln Gln Pro Arg Thr Leu Leu Pro Asp Tyr Ser
65                  70                  75                  80
Tyr Gly Ala Pro Tyr Thr Glu Ser Thr Ala Arg Ser Pro Gly Arg Val
                85                  90                  95
Lys Arg Gln Pro Phe Asp Pro Val Ser Glu Ala Met Gln Pro Ala Ser
            100                 105                 110
Pro Gly Ser Ser Asp Cys Ser Ser Tyr Asp Tyr Ile Thr Gln Asn Ser
        115                 120                 125
Ala Ile Ser Tyr Tyr Pro Ser Gly Arg Gln Asp Ser Tyr Ala Tyr Pro
    130                 135                 140
Pro Pro Thr Ile Ala Pro Ala Glu Lys Arg Leu Ser Gly His Ser Ala
145                 150                 155                 160
Ser Asp Pro Pro Ser Pro Pro Arg Ser Ile Gly Gly Ser Lys Asp Gly
                165                 170                 175
Ala Gly Ala Lys Gly Thr Lys Lys Asn Lys Tyr Pro Cys Pro Phe Ala
            180                 185                 190
Ala Ser His Gly Cys Ser Ala Thr Phe Thr Thr Ser Gly His Ala Ala
        195                 200                 205
Arg His Gly Lys Lys His Thr Gly Glu Lys Ser Val His Cys Pro Ile
    210                 215                 220
Cys Asn Lys Ala Phe Thr Arg Lys Asp Asn Met Lys Gln His Ile Arg
225                 230                 235                 240
Thr His Arg Thr His Ser Glu Asp Met Pro Ser Gly Thr Gly Asp Arg
                245                 250                 255
Asp Gly Glu Ala Ala Ser Ser Arg Trp Ala Pro Gly Arg Thr Ser Pro
            260                 265                 270
Pro Asp Asn His Ser Arg Ser Thr Ser Gln Ser Gln Thr Asp Gly Asn
        275                 280                 285
Val Tyr His Arg Ser Thr Ser Thr Met Asn Met Thr Thr Ser Ser Gly
    290                 295                 300
Ser Gln Arg Arg His Ser Pro Tyr
305                 310

<210> 29364
<211> 428
<212> PRT
<213> A.fumigatus
```

<220>
<221> UNSURE
<222> (40),(56)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29364

```
Val Val Arg Ser Leu Phe His Ser Phe Ser Ser Tyr Ile Val Ser Ile
1               5                  10                  15
Phe Phe Phe Phe Leu Phe Phe Phe Phe Leu Phe Phe Phe Phe Leu Ala
            20                  25                  30
Phe Cys Phe Phe Ser Ala Gln Xaa Gly Ala Trp Val Asp Arg Cys Pro
        35                  40                  45
Asp Arg Ala Arg Pro Pro Arg Xaa Ile His Ala Ser Met Asn Met Gly
    50                  55                  60
Arg Ile Gly Ser Ala Ser Ala Trp Ala Asn Ala Asn Val Pro Pro Pro
65                  70                  75                  80
Glu Ile Lys Ser Gly Ser Lys Gly Asn Lys Lys Lys Lys Lys Asn Asp
                85                  90                  95
Asp Glu Val Lys Leu Arg Tyr His Ile Ala Asp Ile Ile Val Arg Gln
            100                 105                 110
Arg Tyr Ile Met Gln Leu Cys Arg Ala Phe Met Arg Tyr Gly Ala Pro
        115                 120                 125
Thr His Arg Leu Glu Glu Tyr Met Gln Met Thr Ala Arg Val Leu Asp
    130                 135                 140
Ile Glu Ala Gln Phe Met Tyr Leu Pro Gly Cys Met Ile Met Ser Phe
145                 150                 155                 160
Asp Asp Pro Tyr Thr Arg Thr Ala Glu Val Lys Leu Val Arg Val Pro
                165                 170                 175
Gln Gly Leu Asp Leu Gly Arg Leu Glu Lys Val His Gly Cys Tyr Lys
            180                 185                 190
Arg Val Thr His Asp Met Thr Asp Met Gln Thr Ala Ile Gly Glu Leu
        195                 200                 205
Thr Glu Ile Met Asp Arg Lys Pro Arg Tyr Pro Arg Trp Leu Val Ile
    210                 215                 220
Leu Leu Tyr Gly Val Gly Leu Gly Arg Gly Gly Ser Val Trp Phe Leu
225                 230                 235                 240
Ser Ala Pro Asp Arg Tyr Ala His His Phe Cys Ala Gly Met Leu Cys
                245                 250                 255
Arg Val His Ala Ala Gly Ser Arg Ala Thr Phe Gly Pro Val Leu Glu
            260                 265                 270
Arg Leu Arg Gly His Gly Gly His Pro Gly Leu Leu Pro Gly Pro Arg
        275                 280                 285
Leu Trp Gln His Pro Ile Pro Arg His Leu Gly Pro Gly Leu Leu Leu
    290                 295                 300
Arg His His His Ser Val Leu Asp Arg Pro Asp Pro Ala Arg Phe Leu
305                 310                 315                 320
Arg Ala Asp Glu Gln Pro Gly Ala Pro Val Ala Ser Asp Asp Arg Arg
                325                 330                 335
Ile Asp Pro Ser Arg Val His His Pro Leu Leu Pro Leu Pro Gly Leu
            340                 345                 350
Arg Arg His Ser Arg His His His Leu Arg Arg His Arg Pro Arg Arg
        355                 360                 365
Asn Gln Arg His His Leu Arg Pro Ala Glu Arg Leu Ala Gln Pro Val
    370                 375                 380
Arg Leu Ser Leu Pro Leu Arg Arg Gly Ile Leu Arg His Arg Gly Thr
```

```
385                 390                 395                 400
Asp Gln Pro Gly Gln Ile Pro Thr Asp Pro His Asp Gly Pro Asp Arg
                405                 410                 415
Asp Leu Gly Leu Arg His Gln Leu Phe Gln His Pro
            420                 425
```

<210> 29365
<211> 116
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (107),(113)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29365

```
Lys Glu Met Asp Asn Leu Thr Leu Tyr Ile Leu Thr Phe Asn Cys Ala
1               5                   10                  15
Arg Asn Pro Val Asp Ile Asp Leu Phe Ala Ser His Phe Phe His Ala
            20                  25                  30
Leu Pro His Thr Val Pro Ser Ala Pro His Leu Ile Ala Leu Ser Leu
        35                  40                  45
Gln Glu Leu Ala Pro Ile Ala Tyr Ala Phe Leu Gly Gly Ser Tyr Leu
    50                  55                  60
Thr Pro Tyr Phe Thr Ser Phe Arg Gln Val Val Ala Arg Ala Ala Ala
65                  70                  75                  80
Ser Arg Trp Glu Asp Val Gln Tyr Ala Thr Val Val Glu Asp His Val
                85                  90                  95
Gly Met Thr Gly Leu Met Val Phe Ala Arg Xaa Phe Lys Gln Ala Ala
            100                 105                 110
Xaa Asp Pro Thr
        115
```

<210> 29366
<211> 323
<212> PRT
<213> A.fumigatus

<400> 29366

```
Ser Cys Phe Thr Ala Leu Gly Ser Ala Ala Val Gly Pro Phe Gly Phe
1               5                   10                  15
Ser Ala Arg Pro Ile Asp Met Pro Ile Ile Phe Val Leu Gly Cys Cys
            20                  25                  30
Val Gly Phe Met Gln Leu Val Leu Ala Pro Leu Ser Ala Leu Tyr Ser
        35                  40                  45
Asn Val Phe Glu Val Thr Ala Ala Ile Leu Val Ser Phe Leu Ala Arg
    50                  55                  60
Ala Phe Gly Ser Ile Arg Tyr Pro Gly Thr Ser Asp Pro Val Phe Cys
65                  70                  75                  80
Tyr Ala Thr Ile Thr Gln Ser Ser Ile Ala Leu Ile Leu Pro Gly Phe
                85                  90                  95
Ser Val Leu Thr Ser Ser Leu Glu Leu Gln Ser His Gln Met Ile Ala
            100                 105                 110
Gly Ser Ile Arg Leu Val Tyr Thr Ile Leu Tyr Ser Leu Phe Leu Gly
        115                 120                 125
```

```
Tyr Gly Val Thr Val Gly Thr Thr Ile Tyr Gly Ala Ile Asp Pro Asp
    130                 135                 140
Ala Thr Ser Asp Thr Thr Cys Ala Arg Gln Ser Val Trp Arg Ser Pro
145                 150                 155                 160
Tyr Ala Ser His Phe Pro Phe Val Ala Ala Tyr Cys Val Ile Ala Ala
                165                 170                 175
Leu Ile Asn Gln Ala Lys Phe Arg Gln Ile Pro Met Met Val Leu Ile
            180                 185                 190
Gly Thr Ser Gly Tyr Val Thr Asn Tyr Phe Ser Thr His Lys Leu Gly
        195                 200                 205
Ser Ser Ser Gln Val Ala Asn Thr Val Gly Ala Phe Thr Ile Gly Leu
    210                 215                 220
Leu Ala Asn Leu Tyr Ser Arg Leu Trp His Gly Asn Ala Val Ser Ser
225                 230                 235                 240
Thr Ile Pro Gly Ile Phe Thr Met Val Pro Ser Gly Leu Ala Ser Ser
                245                 250                 255
Gly Ser Ile Leu Ser Ala Ile Glu Tyr Ser Asp Ala Val Arg Asn Gly
            260                 265                 270
Thr Ala Asp Thr Ser Gly Gly Thr Ser Gly Thr Ser Leu Thr Ser Leu
        275                 280                 285
Gly Tyr Gly Met Ile Gln Thr Ala Ile Gly Ile Thr Val Gly Leu Phe
    290                 295                 300
Ile Ala Ala Leu Ile Val Tyr Pro Ser Gly Lys Arg Arg Thr Gly Leu
305                 310                 315                 320
Phe Ser Leu
```

<210> 29367
<211> 153
<212> PRT
<213> A.fumigatus

<400> 29367

```
Arg Pro Val His Ser His Cys Arg Gly Gln Ala Gly Ala Cys Ala Thr
1                   5                   10                  15
Gly Ala Gly Pro Gly Pro Phe Gly Lys Ser Ala Arg Val Leu Gln Ala
            20                  25                  30
Arg Asp Ala Arg His Asp Gly His Ala Asp Gly His Arg Arg Ala Asp
        35                  40                  45
Gly Asp His Gly Pro Gln Ala Ala Val Ser Ala Leu Ala Gly Asp Leu
    50                  55                  60
Ala Leu Arg Arg Trp Ala Arg Pro Arg Trp Val Arg Leu Val Ser Gln
65                  70                  75                  80
Arg Ala Arg Ser Ile Cys Pro Ser Phe Leu Cys Trp Asp Ala Val Ser
                85                  90                  95
Gly Ser Cys Ser Trp Phe Ser Arg His Phe Arg Pro Cys Thr Arg Thr
            100                 105                 110
Ser Ser Arg Ser Arg Arg Pro Ser Trp Ser Pro Ser Trp Pro Ala Pro
        115                 120                 125
Leu Ala Ala Ser Asp Thr Pro Ala Pro Arg Thr Arg Ser Ser Ala Thr
    130                 135                 140
Pro Pro Ser Leu Ser Pro Arg Ser Pro
145                 150
```

<210> 29368
<211> 245

<212> PRT
<213> A.fumigatus

<400> 29368
Leu Pro Tyr Pro Ser Leu Thr Gln Ile Cys Gly Gly Ile Ser Ile Gln
1 5 10 15
Ser Ser Phe Leu Val Ala Phe Lys Gln Leu Val Pro Glu His Thr Val
20 25 30
Thr Ile Phe Lys Gly Leu Val Lys Met Arg Val Lys His Phe Pro Ala
35 40 45
Leu Phe Leu Leu Leu Asn Thr Ile Ser Gly Leu Val Phe Gly Thr Gln
50 55 60
Val Ala Ala Leu Leu Ala Trp Leu Gly Leu Leu Ala Ser Trp Ser Tyr
65 70 75 80
Leu Arg Phe Tyr Lys Arg Gln Pro Asp Leu Thr Gly Thr Ser Thr Asp
85 90 95
Gly Gln Gly Ile Lys Gly Asp Ala Ser Glu Thr Phe Ala Phe Ala Cys
100 105 110
Leu Phe Pro Asp Val Met Gln Pro Pro Ile Ala Phe Val Ser Asp Gln
115 120 125
Ile Tyr Thr Leu Leu Val Ala Leu Lys Ile Cys Thr Pro Phe Ser Glu
130 135 140
Glu Asp Ile Ala Ser Gly Asn Gln Gln Val Leu Ala Arg Gly Glu Ala
145 150 155 160
Gly Leu Pro Ser Leu Leu Ser Asn Gln Arg Gly Gly Gly Ile Arg Gly
165 170 175
Ile Gly Lys Arg Glu Glu Ala Glu Arg Arg Arg Ala Leu Ala Leu Lys
180 185 190
Ala Leu Asp Gln Arg Leu Gln Ala Ala Ala Ala Gly Arg Val Gln Ser
195 200 205
Gln Ser Ser Thr Leu Ser Gln Pro Gly Ser Ser His Ala His His Ala
210 215 220
Thr Pro Thr Val Ser Thr Gly Gln Asn Met Leu Gly Glu Thr Ser Tyr
225 230 235 240
Thr Pro Asp His Ala
245

<210> 29369
<211> 163
<212> PRT
<213> A.fumigatus

<400> 29369
Ala Ala Val Ser Ala Leu Leu Val Lys Met Pro Tyr Arg Ile Asn Ile
1 5 10 15
Pro Pro Ala Thr Arg Thr Cys Leu Val Ser Leu Val Thr Leu Ser Leu
20 25 30
Leu Tyr Asn Ile Ala Arg Trp Arg Gln Ile Asp Thr Arg Gly Lys Thr
35 40 45
Pro Thr Thr Thr Pro Ile Val Pro Tyr Leu Thr Val Val Pro Ser Gln
50 55 60
Phe Phe Phe Tyr Pro Trp Thr Leu Leu Thr Ala Thr Phe Val Glu Gln
65 70 75 80
Asn Ile Phe Thr Val Leu Leu Asn Ala Ala Thr Leu Phe Tyr Gly Gly
85 90 95
Lys Tyr Leu Glu Arg Ala Trp Gly Ser Arg Glu Phe Ala Lys Phe Ile

```
            100                 105                 110
Val Ile Ile Ala Val Ile Pro Asn Leu Val Val Ala Leu Val His Leu
        115                 120                 125
Leu Cys Ala Ala Ile Gly Ala Ser Ser Val Ser Gly Tyr Glu Ile Ser
    130                 135                 140
Pro Gln His Ser Cys Ile Ser Ser Cys Ala Leu Ser Ala Asp Ser His
145                 150                 155                 160
Ile Gln Ala
```

<210> 29370
<211> 79
<212> PRT
<213> A.fumigatus

<400> 29370

```
Asn Ile Asp Thr Ser Tyr Trp Gly Gln Met Thr Ser Phe Leu Ile Ser
1               5                   10                  15
Ser Val Tyr Thr Val Thr Asn Ala Gly Phe Ser Asn Tyr Arg Leu Cys
            20                  25                  30
Ser Gly Ile Ser Arg Glu Gly Gln Lys Arg Phe Leu Arg Lys Leu Pro
        35                  40                  45
Ala Leu Pro Asp Tyr Val Leu Val Met Leu Ala Leu Cys Val Met Lys
    50                  55                  60
Thr Ala Met Met Tyr Lys Gly Val Lys Leu Asn Cys His Pro Lys
65                  70                  75
```

<210> 29371
<211> 203
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (20),(27),(40),(53)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29371

```
Met Cys Val Pro Gly Leu Pro Leu Pro Tyr Tyr Ala Arg Thr Ser Asn
1               5                   10                  15
Gly Ala Asn Xaa Ala Ser Ser Ser Leu Pro Xaa Glu Phe Lys Asp Leu
            20                  25                  30
Gln Leu Ser Phe Phe Lys Pro Xaa Phe Phe Ser Pro Phe Val Cys Ser
        35                  40                  45
Pro Ala Ala Glu Xaa Ile Lys Gln Tyr Arg Arg Thr Gly Glu Gln Gly
    50                  55                  60
Thr Phe Arg Leu Ile Leu Ser Glu Asp Ala Pro Val Gly Ile Ile Asp
65                  70                  75                  80
Pro Asp Glu Ala Gly Val Ile Ala Ala His Leu Leu Ser Gln Asp Asp
                85                  90                  95
Pro Ser Val His Asn Arg Ala Lys Tyr Ile Leu Asn Gly Pro Gln Asp
            100                 105                 110
Ile Thr Gly Lys Gln Ile Val Asp Met Val Lys Gln His Ile Gly Val
        115                 120                 125
Pro Val Lys Asp Val Ser Tyr Arg Asp Val Ser Phe Ile Asp Gln Leu
    130                 135                 140
```

```
Tyr Glu Tyr Gln Tyr Ala Ala Ala Lys Pro Ser Lys Asn Val Ile Tyr
145                 150                 155                 160
Ser Ile Lys Arg Ala Pro Glu Thr Ala Trp Glu Gly Lys Cys Ser Thr
                165                 170                 175
Ser Thr Thr Ser Asn Val Ile Leu Glu Leu Ala Ala Pro Lys Arg Thr
            180                 185                 190
Pro Ala Asp Thr Leu Lys Thr Leu Leu Glu Glu
        195                 200
```

<210> 29372
<211> 213
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (8),(22),(31)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29372

```
Val Ala Met Gly Ile Thr Val Xaa Leu Lys Glu Gly Gly Pro Phe Phe
1               5                   10                  15
Pro Thr Gln Gly Asn Xaa Cys Val Phe Phe Pro Gly Ala Ala Xaa Gly
            20                  25                  30
Ala Ile Phe Ala Leu Leu Ala Met Tyr Leu Met Arg Arg Arg Lys Asn
        35                  40                  45
Asn Leu Pro Pro Ser Val Lys Ile Ala Gln His Thr Gln Arg Thr Ser
    50                  55                  60
Ser Gly Thr Leu Ile Gly Ile Ser Asp Pro Ile Pro Ser Glu Glu Asn
65                  70                  75                  80
Ala Tyr Arg Thr Asp Phe Leu Leu Arg Arg Ser Leu Lys Arg Asn Ser
                85                  90                  95
Glu Gly Ala Arg Ser Met Leu Gln Arg Thr Gly Thr Arg Val Lys Ser
            100                 105                 110
Leu Phe Gly Ser Thr Pro Lys Pro Ser Gln Met Val Ser Lys Gln Pro
        115                 120                 125
Pro Leu Pro Leu Thr Pro Pro Gln Gln Ala Arg Met Pro Ser Thr Glu
    130                 135                 140
Ser Ile Lys Val Tyr Thr Pro Pro Gly Thr Phe Ala Ser Thr Gly Val
145                 150                 155                 160
Leu Arg Pro Glu Pro Tyr Pro Thr Ile Val Val Gly Asn Gly Ser Thr
                165                 170                 175
Phe Thr Glu Met Ile Asp Gln Ala Gly Ser Asn Asn Ser Lys Gly Asp
            180                 185                 190
Pro Ser Tyr Ser Val Asp Glu Ala Pro Arg Ser Arg Ser Lys Ser Pro
        195                 200                 205
Leu Arg Arg Leu Cys
    210
```

<210> 29373
<211> 231
<212> PRT
<213> A.fumigatus

<400> 29373

```
Cys Arg Gln Leu Ile His Thr Lys Met Ser Leu Arg Leu Val Ser Ser
```

```
1               5                   10                  15
Val Arg Asp Asp Leu Phe Ala Ala Val Ala Ser Asp Thr Gln Ala Ala
            20                  25                  30
Gln Asp Asn Cys Phe Ala Phe Ser Pro Asp Gln Leu Asn Gln Leu Phe
        35                  40                  45
Asn Pro Lys Ser Pro Pro Ala Leu Tyr Ala Leu Gly Gly Leu Tyr Gly
    50                  55                  60
Leu Glu Tyr Gly Leu Arg Thr Asp Leu Ser Ala Gly Leu Ser Ala Asn
65                  70                  75                  80
Glu Arg Ile Leu Pro Gly Ala Val Thr Leu Glu Glu Ala Arg Gln Ala
                85                  90                  95
Ala Leu Cys Gln Thr Glu Ser Lys Arg Pro Leu Leu Ala Asn Ala Ala
            100                 105                 110
Arg Pro His Pro Asn Gln Glu Pro Ser Val Pro Phe Ser Asp Arg Thr
        115                 120                 125
Arg Val Phe Gly Arg Asn Val Leu Pro Asp Ala Lys Arg Lys Gly Phe
    130                 135                 140
Gly Arg Leu Leu Trp Asp Ala Tyr Asn Asp Lys Ile Ile Ile Leu Leu
145                 150                 155                 160
Thr Ile Ala Ala Val Val Ser Leu Ala Leu Gly Ile Tyr Glu Ala Val
                165                 170                 175
Ser Gly Gln Ser Gln Val Asp Trp Ile Glu Gly Val Ala Val Cys Val
            180                 185                 190
Ala Ile Val Ile Val Val Ala Ala Thr Ala Gly Asn Asp Trp Gln Lys
        195                 200                 205
Glu Arg Gln Phe Ala Arg Leu Asn Gln Leu Val Gly Phe Glu Leu Leu
    210                 215                 220
Pro Gly Ala Gly Lys Gln Thr
225                 230
```

<210> 29374
<211> 167
<212> PRT
<213> A.fumigatus

<400> 29374

```
His Ser Ile Val Phe Cys Ile Tyr Thr Ile Thr Thr Lys Ala Ser Ile
1               5                   10                  15
Met Pro Leu Ala Pro Gln Glu Thr Thr Leu Val Asp Thr Ala Thr Ser
            20                  25                  30
Ile Ile Thr Arg Ile Pro Val Ser Asp Thr His Ser Val Ala Ser Ala
        35                  40                  45
Ala Arg Ser Thr Asp Gly Arg Ile Phe Thr Gly Val Asn Val Tyr His
    50                  55                  60
Phe Thr Gly Gly Pro Cys Ala Glu Leu Val Val Leu Gly Ser Ala Ala
65                  70                  75                  80
Ala Ala Gly Ala Thr His Leu Thr His Ile Val Ala Val Gly Asn Glu
                85                  90                  95
Lys Arg Gly Val Ile Ser Pro Cys Gly Arg Cys Arg Gln Thr Leu Ile
            100                 105                 110
Asp Leu His Pro Gly Ile His Val Ile Val Pro Glu Gln Gly Glu Pro
        115                 120                 125
Met Pro Val Arg Val Glu Asp Leu Leu Ala Phe Ala Leu Ser Arg Gly
    130                 135                 140
Ile Asn Cys Arg Lys Ser Arg Val Glu Thr Val Gln Ala Ser Lys Val
145                 150                 155                 160
```

```
Val Gly Glu Asn Arg Pro Thr
                165

<210> 29375
<211> 71
<212> PRT
<213> A.fumigatus

<400> 29375
Gly Gln Pro Asp Pro Thr Thr Arg Leu Phe Leu Gly Lys Thr Asn Arg
1               5                  10                  15
Thr Asn Arg Thr Ser Arg Gly Ala Lys Ala Ala Lys Ser Gln Phe Phe
            20                  25                  30
Ile Asn Glu Val Ser Gln Ala Glu Glu Ser Gln Gly Pro Leu Gln Ser
        35                  40                  45
Ile Ile Leu Met Thr Val Phe Pro Pro Val Ser Ile Lys Ile Tyr Leu
    50                  55                  60
Phe Cys Glu Glu Phe Leu Leu
65                  70

<210> 29376
<211> 264
<212> PRT
<213> A.fumigatus

<400> 29376
Tyr Asn Lys Trp Met Phe Ser Glu Asp Arg Val Val Phe Pro Phe Pro
1               5                  10                  15
Leu Phe Thr Thr Ser Leu His Met Leu Val Gln Phe Ser Leu Ala Ser
            20                  25                  30
Val Ile Leu Trp Leu Ile Pro Ala Leu Arg Pro Arg His Arg Ser Ser
        35                  40                  45
Ala Ser Ser Gly Ser Pro Phe Arg Asn Ser His Asp Ala Ser Glu Ser
    50                  55                  60
Thr Pro Ile Leu Thr Lys Arg Phe Tyr Leu Thr Arg Leu Val Pro Cys
65                  70                  75                  80
Gly Ala Ala Thr Ser Leu Asp Ile Gly Leu Gly Asn Met Ser Leu Lys
                85                  90                  95
Phe Ile Ser Leu Thr Phe Leu Thr Met Cys Lys Ser Ser Ala Leu Ala
            100                 105                 110
Phe Val Leu Leu Phe Ala Phe Ile Phe Arg Leu Glu Thr Pro Ser Val
        115                 120                 125
Lys Leu Ile Phe Ile Ile Ala Thr Met Thr Val Gly Val Val Met Met
    130                 135                 140
Val Ala Gly Glu Thr Ala Phe Asn Ala Val Gly Phe Ala Leu Val Ile
145                 150                 155                 160
Ala Ser Ala Phe Phe Ser Gly Phe Arg Trp Gly Leu Thr Gln Ile Leu
                165                 170                 175
Leu Leu Arg His Pro Ala Thr Ser Asn Pro Phe Ser Thr Leu Phe Phe
            180                 185                 190
Leu Thr Pro Val Met Phe Val Ser Leu Ile Ile Ile Ser Leu Thr Val
        195                 200                 205
Glu Gly Pro Val Lys Ile Ala Asp Gly Phe Ala Ala Leu Ser Gly Thr
    210                 215                 220
His Gly Gly Val Phe Ala Val Phe Leu Leu Ile Phe Pro Gly Val Leu
225                 230                 235                 240
```

Ala Phe Cys Met Ile Ser Ala Glu Phe Ala Leu Val Phe Thr Thr Gly
245 250 255
Leu Gln Gly Ala Ala Ala Ser His
260

<210> 29377
<211> 90
<212> PRT
<213> A.fumigatus

<400> 29377
Thr Ala Ala Met Thr Ser Arg Lys Thr Gln Gln Glu Ile Asp Lys Thr
1 5 10 15
Phe Lys Lys Val Ala Glu Gly Ile Gln Thr Phe Glu Gly Ile Tyr Glu
20 25 30
Lys Ile Arg Ser Thr Ser Asn Pro Thr Gln Arg Asp Lys Leu Glu Glu
35 40 45
Asn Leu Lys Arg Glu Ile Lys Lys Leu Gln Arg Phe Arg Asp Gln Ile
50 55 60
Lys Ser Trp Ala Ser Gly Asn Glu Val Lys Asp Lys Gly Pro Leu Leu
65 70 75 80
Glu Gln Arg Arg Ala Ile Glu Thr Val Gly
85 90

<210> 29378
<211> 61
<212> PRT
<213> A.fumigatus

<400> 29378
His Ser Arg Pro Phe Leu Ala Ser Ser Pro Ser Ala Ser Thr Phe Ala
1 5 10 15
Leu Ser Pro Asn Ile Leu Leu Leu Leu Ser Asn Trp Asn Arg Ser Phe
20 25 30
Gln Leu Ala Asp Thr Phe Pro Tyr Leu Pro Lys Ser Thr Gly Ile Pro
35 40 45
Phe Leu Pro Thr Ala Ile Cys Pro Cys Glu Gln Gln Pro
50 55 60

<210> 29379
<211> 160
<212> PRT
<213> A.fumigatus

<400> 29379
Gln Arg Leu Gln Cys Met Glu Gln Phe Lys Ala Val Glu Lys Glu Met
1 5 10 15
Lys Thr Lys Ala Tyr Ser Lys Glu Gly Leu Ser Ala Ala Ser Arg Leu
20 25 30
Asp Pro Lys Glu Lys Glu Lys Leu Glu Ala Cys Asp Phe Leu Ser Thr
35 40 45
Cys Val Asp Glu Leu Gln Leu Lys Ile Glu Ala Met Glu Ala Glu Glu
50 55 60
Glu Thr Leu His Val Gln Met Lys Lys Gly Lys Lys Asp Ile Thr Lys
65 70 75 80
Asn Asn Arg Leu Ser Asp Leu Ser Arg Ile Leu Glu Arg His Lys Trp

```
                85                  90                  95
His Val Asn Lys Leu Glu Leu Leu Leu Arg Ala Leu Gln Asn Gly Ala
            100                 105                 110
Val Glu Thr Ser Gln Val Met Asp Leu Lys Glu Asn Ile Lys Tyr Tyr
        115                 120                 125
Leu Asp Asp Gly Pro His Val Asp Tyr Trp Arg Glu Asp Lys Thr Leu
    130                 135                 140
Phe Asp Asp Leu Asn Leu Gly Glu Ile Ser Gln Ser Pro Ile Trp Lys
145                 150                 155                 160
```

<210> 29380
<211> 65
<212> PRT
<213> A.fumigatus

<400> 29380

```
Val Ala Val Ile Gln Arg Val Lys Ser Ala Ser Val Thr Val Asp Glu
1               5                   10                  15
Lys Leu Val Ser Ser Ile Gly Arg Gly Leu Leu Val Leu Ala Gly Val
            20                  25                  30
Gly Lys Glu Asp Thr Glu Lys Asp Ala Asp Thr Leu Ile Gln Arg Val
        35                  40                  45
Leu Lys Ala Lys Leu Trp Pro Ala Glu Glu Gly Gly Gln Val Ser Ser
    50                  55                  60
Leu
65
```

<210> 29381
<211> 126
<212> PRT
<213> A.fumigatus

<400> 29381

```
Leu Trp Leu Phe Ile Gln Trp Lys Arg Asn Val Gln Asp Ile Glu Gly
1               5                   10                  15
Glu Val Leu Cys Gly Gly Phe Gly Cys Ser Glu Ile Leu Glu Cys Ala
            20                  25                  30
Pro Leu Thr Val Asp Ala Val Ser Gln Phe Thr Leu Tyr Gly Gln Leu
        35                  40                  45
Lys Lys Gly Ser Lys Pro Asp Phe His Asp Ala Ala Asp Ala Glu Thr
    50                  55                  60
Ala Arg Lys Leu Tyr Glu Tyr Phe Phe Arg Arg Leu Gly Glu Ala Tyr
65                  70                  75                  80
Lys Pro Asp Arg Val Lys Asn Gly Val Phe Gln Ala Met Met Asp Val
                85                  90                  95
Glu Leu Lys Asn Asp Gly Pro Val Gly Val Asp Tyr Arg Ser Glu Asp
            100                 105                 110
Ala Ala Val Ser Phe Cys Ser Ser Ser Tyr Leu Val Ser Asp
        115                 120                 125
```

<210> 29382
<211> 109
<212> PRT
<213> A.fumigatus

<220>

<221> UNSURE
<222> (95)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29382
Leu Thr Asn Asn Glu Pro Val Gly Cys Ile Met Leu Val Lys Asp Val
1 5 10 15
Asp Ser Pro Asp Thr Ala Arg Leu Arg Leu Leu Leu Val Asp Pro Ser
20 25 30
Ala Arg Gly Thr Gly Val Gly Arg Ser Leu Ile Lys Gln Cys Ile Glu
35 40 45
Phe Ala Arg Glu Val Gly Tyr Arg Arg Val Val Leu Trp Thr Gln Ser
50 55 60
Ile Leu Gly Ser Ala Arg Arg Leu Tyr Lys Ala Glu Gly Phe Arg Leu
65 70 75 80
Val Lys Glu Glu Glu His Glu Gly Phe Gly Met Ala Leu Val Xaa Glu
85 90 95
Leu Trp Glu Leu Glu Leu Glu Asn Lys Ser Gln Gly Glu
100 105

<210> 29383
<211> 70
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (58)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29383
Ser Gly Leu Tyr Val Thr Thr Leu Leu Asn Tyr Arg His Asp Lys Tyr
1 5 10 15
Asn Asn Cys Ser Cys Asn Gln Val Asn Tyr Ser His Ala Gly Ile Asp
20 25 30
Cys Ser Ser Tyr Thr Ile Ser Gln Cys Ile Ile His Pro Glu Thr Cys
35 40 45
Ser Leu Ala Pro Ala Pro Ile Thr Leu Xaa Pro Thr Pro Ser Gln Thr
50 55 60
Leu His Ala Pro Pro Pro
65 70

<210> 29384
<211> 65
<212> PRT
<213> A.fumigatus

<400> 29384
Thr Gln Tyr Leu Ile Ser Ser Tyr Arg Thr Ala Ser Met Ala Ser Thr
1 5 10 15
Gly Ala Leu Ser Asp Pro Gln Glu Tyr Gln Lys Ile Phe His Trp Ala
20 25 30
Glu Thr Gln Lys Asp Gly Thr Ile Pro Ser Phe Ser Thr Arg Arg Asn
35 40 45
Asp Pro Tyr Gln Val Ser Ser Tyr Ser Ile Cys Ser Phe Leu Arg Asp
50 55 60

Ser
65

<210> 29385
<211> 66
<212> PRT
<213> A.fumigatus

<400> 29385
Cys Arg Asp Ile Tyr Arg Phe Val Ser Glu Ala Val Pro Gly Thr Ile
1 5 10 15
Pro Gln Gly Gln Asn Ser Pro Arg Asn Val Arg Phe Gly Leu Tyr Ala
20 25 30
Glu Gln Ile Thr Ala Thr Ala Phe Val Ala Pro Arg His Cys Asn Lys
35 40 45
Lys Ala Trp Leu Tyr Arg Ala Arg Pro Ala Val Ala His Gln Gly Phe
50 55 60
Val Arg
65

<210> 29386
<211> 81
<212> PRT
<213> A.fumigatus

<400> 29386
Val Pro Tyr Lys Tyr Asp Leu Thr Lys Phe Val Asn Val Gly Ser Ile
1 5 10 15
Ser Val Asp His Ile Glu Pro Ser Ile Phe Cys Val Leu Thr Ala Lys
20 25 30
Ser Arg Asp Leu Thr Ala Pro Leu Ala Asp Phe Ser Ser Ser Leu Pro
35 40 45
Ala Gly Met Glu Arg Leu Arg Ser Cys Phe Val His Lys Gly Tyr Ala
50 55 60
Val Ser Leu Leu Thr Ile Ser Arg His Leu Pro Asp His Phe Thr Ile
65 70 75 80
Thr

<210> 29387
<211> 269
<212> PRT
<213> A.fumigatus

<400> 29387
Asp Ser Ala Cys Met Leu Ser Arg Ser Pro Arg Leu Leu Leu Ser Pro
1 5 10 15
His Gly Ile Ala Thr Arg Arg His Gly Cys Thr Val Leu Val Arg Arg
20 25 30
Leu Pro Thr Lys Asp Leu Tyr Val Asp Ala Ile Arg Ser Ile Gly Arg
35 40 45
Val Leu Met Met Leu Gln Thr Asp Leu Pro Asp Asn Lys Asp Thr Glu
50 55 60
Ser Asn Phe Leu Pro Ile Asn Pro Arg Val Arg Val Ser Pro Thr Gln
65 70 75 80
Leu Ala Trp His Pro Phe Glu Ile Pro Thr Gly Glu Glu Val Asp Phe

```
                85                  90                  95
Ile Ser Gly Leu Lys Thr Val Ala Gly Ser Gly Asp Pro Thr Leu Arg
            100                 105                 110
Glu Gly Leu Ala Thr His Val Tyr Thr Ala Asn Thr Ser Met Lys Lys
        115                 120                 125
Lys Ala Phe Val Asn Ser Asp Gly Glu Phe Leu Ile Ile Pro Gln Gln
    130                 135                 140
Gly Ala Leu Asp Ile Gln Thr Glu Phe Gly Pro Leu Phe Val Gln Pro
145                 150                 155                 160
Gly Glu Ile Val Val Ile Gln Arg Gly Ile Arg Phe Arg Val Glu Leu
                165                 170                 175
Pro Asp Gly Pro Ser Arg Gly Tyr Ile Leu Glu Val Trp Gly Ser Tyr
            180                 185                 190
Phe Glu Leu Pro Glu Leu Gly Pro Leu Gly Ala Asn Gly Leu Ala Asn
        195                 200                 205
Ala Arg Asp Phe Leu Ala Pro His Ala Lys Tyr Glu Ile Ser Gln Glu
    210                 215                 220
Pro Trp Glu Ile Ile Tyr Lys Leu Gly Gly Lys Phe Phe Lys Ser Thr
225                 230                 235                 240
Gln Asn His Ser Pro Phe Asp Val Val Ala Trp His Gly Asn Tyr Val
                245                 250                 255
Cys Leu Ile Pro Tyr Gly Phe His Tyr Thr Arg Arg Ser
            260                 265

<210> 29388
<211> 228
<212> PRT
<213> A.fumigatus

<400> 29388
Ala Glu Lys Ala Cys Cys Cys Arg Cys Cys Arg Leu His Arg Asp Pro
1                   5                   10                  15
Arg Gly Leu Arg Ser Leu Thr Thr Val Trp Ala Glu His Leu Ser Asp
            20                  25                  30
Glu Val Lys Arg Arg Phe Tyr Lys Asn Trp Tyr Lys Ser Lys Lys Lys
        35                  40                  45
Ala Phe Thr Lys Tyr Ala Lys Lys His Ala Glu Glu Asn Gly Ala Ser
    50                  55                  60
Ile Thr Arg Glu Leu Glu Arg Ile Lys Lys Tyr Cys Thr Val Val Arg
65                  70                  75                  80
Val Leu Ala His Thr Gln Ile Arg Lys Thr Pro Leu Lys Gln Lys Ile
                85                  90                  95
Ala His Leu Met Glu Ile Gln Val Asn Gly Gly Ser Val Ala Asp Lys
            100                 105                 110
Val Asp Phe Ala Arg Asn Leu Phe Glu Lys Pro Ile Glu Ile Asp Ser
        115                 120                 125
Ile Phe Glu Lys Asp Glu Met Ile Asp Val Ile Ala Val Thr Lys Gly
    130                 135                 140
His Gly Phe Gln Gly Val Thr Ser Arg Trp Gly Thr Lys Lys Leu Pro
145                 150                 155                 160
Arg Lys Thr His Lys Gly Leu Arg Lys Val Ala Cys Ile Gly Ala Trp
                165                 170                 175
His Pro Ser His Val Gln Trp Thr Val Ala Arg Ala Gly Gln Met Gly
            180                 185                 190
Tyr His His Arg Thr Ser Cys Asn His Lys Val Phe Arg Ile Gly Lys
        195                 200                 205
```

```
Gly Ser Asp Glu Gly Asn Ala Ser Thr Asp Phe Asp Ile Ser Lys Lys
    210                 215                 220
Gln Ile Thr Pro
225
```

<210> 29389
<211> 92
<212> PRT
<213> A.fumigatus

<400> 29389

```
Ser Leu Met Lys Tyr Pro Tyr Ser Met Gly Gly Phe Val Arg Tyr Gly
1               5                   10                  15
Glu Val Lys Asn Asp Tyr Ile Met Val Lys Gly Ser Val Pro Gly Val
            20                  25                  30
Lys Lys Arg Val Met Thr Leu Arg Lys Thr Leu Tyr Pro Gln Thr Ser
        35                  40                  45
Arg Arg Ala Thr Glu Lys Val Glu Leu Lys Trp Ile Asp Thr Ser Ser
    50                  55                  60
Lys Phe Gly His Gly Ala Phe Gln Thr Pro Glu Glu Lys Arg Ala Phe
65                  70                  75                  80
Met Gly Thr Leu Lys Lys Asp Leu Val Thr Ser Ala
                85                  90
```

<210> 29390
<211> 303
<212> PRT
<213> A.fumigatus

<400> 29390

```
Glu Ala Leu Val Val Arg Glu Ala Ser Met Arg Arg Trp Gln Leu Ser
1               5                   10                  15
Arg Arg Val Tyr Cys Val Ile Asn Arg Asn Leu Val Trp Ala Ser Thr
            20                  25                  30
Ser Thr Ala Ser Ser Ser Arg Ala Ala Leu Ser Pro Gln Ser Leu Ile
        35                  40                  45
Leu Lys Ser Gln Ser Phe Ser Ile Ser Phe Gln Arg Arg Leu Tyr Ser
    50                  55                  60
Asn Leu Cys Ile Arg Thr Ser Pro Gln Thr Gln Thr Leu Leu Val Ser
65                  70                  75                  80
Thr His Gln Thr His Tyr Thr Ile Pro Ser Pro Asn Pro Arg Arg Ser
                85                  90                  95
Pro Ile Ile Ser Arg Ala Met Ser Asp Asp Ala Tyr Met Ser Phe Leu
            100                 105                 110
Asp Lys Ala Asn Ala Asp Leu Asn Asn Ala Arg Ala Gln Gln Pro Gln
        115                 120                 125
Gln Ser Ser Gly Val Arg Thr Glu Thr Val Asp Val Gly Val Gln Ile
    130                 135                 140
Pro Ala Pro Leu Arg Ser Val Asp Ala Tyr Tyr Ile Ser Glu Thr Asp
145                 150                 155                 160
Glu Pro Phe Glu Pro Val Ala Leu Lys Trp Glu Gly Ala Asp Asn Gly
                165                 170                 175
Thr Trp Pro Gly Pro Gly Ser Cys Ser Pro Met Gly Ala Ser Cys Cys
            180                 185                 190
Leu Lys Arg Gln Lys Ala Phe Ala Asn Asp Ala Leu Ser Ala Gln Pro
        195                 200                 205
```

```
Asn Ser Arg Asp Ser Ser Pro Pro Asn Ala Asp Ile Ser Ser Ser Ile
    210                 215                 220
Glu Thr Leu Thr Pro Ser Thr Phe Asp Pro Lys Asn Gln Tyr Ser Ala
225                 230                 235                 240
Ala Leu Arg Ala Val Arg Ala Ala Val Ala Gln Thr Phe Gly Gly Gly
                245                 250                 255
Glu Pro Gly Ile Asp Glu Ser Asp Val Glu Thr Lys Val Tyr Arg Val
            260                 265                 270
Glu Val Gly Lys Ser Arg Val Glu Tyr Tyr Ile Leu Gly Leu Asp Ala
        275                 280                 285
Val Gly Gly Thr Ile Val Gly Leu Arg Ala Lys Ala Ile Glu Ser
    290                 295                 300

<210> 29391
<211> 63
<212> PRT
<213> A.fumigatus

<400> 29391
Tyr Thr Glu Lys Glu Arg Leu His Arg Ala Lys Cys Arg Leu Phe Lys
1               5                   10                  15
Val Glu Glu His Gly Lys Ile Tyr Met Leu Gln Tyr Lys His Ala Ser
            20                  25                  30
Asn Met Asn Gly Thr Met Ser Asn Val Ile Thr Ile Asp Asn Leu Val
        35                  40                  45
Ser Asp Ser Leu Pro Glu His Thr Ser Ser Thr Leu Thr Ser Phe
    50                  55                  60

<210> 29392
<211> 71
<212> PRT
<213> A.fumigatus

<400> 29392
Ser Gln Pro Gly Leu Gly Phe Asp Phe His Cys Ile Ile Lys Ser Gly
1               5                   10                  15
Cys Pro Leu Ser Pro Ile Leu Asn Phe Lys Val Ser Glu Phe Phe His
            20                  25                  30
Phe Leu Ser Thr Ser Leu Ile Phe Gln Pro Val His Pro Asn Phe Ser
        35                  40                  45
Ala Asp Thr Asp Ala Ser Ser Phe Asp Pro Pro Asn Pro Leu His His
    50                  55                  60
Pro Ile Thr Glu Pro Ser Pro
65                  70

<210> 29393
<211> 627
<212> PRT
<213> A.fumigatus

<400> 29393
Ile Gln Gly Leu Pro Leu Val Lys Thr Lys Asn His Ser Leu Phe Leu
1               5                   10                  15
Leu Pro Ala Cys Glu Ser Ser Asn Cys Asn Pro Thr Gly Ser Leu Leu
            20                  25                  30
Pro Lys Arg His Phe Asp Ser Lys Asp Asn Ile Asn Met Ser Ala Ile
```

```
        35                  40                  45
Gln Phe Pro Pro Val Pro Ser Pro Val Ser Ala Thr Glu Lys Tyr Phe
    50                  55                  60
Asp Leu Gly Ala His Gly Phe Pro Ile Thr Thr Lys Asn Arg Asp Ala
65                  70                  75                  80
Gln Val Trp Phe Asp Arg Gly Leu Ile Trp Ser Tyr Ala Phe Asn His
                85                  90                  95
Glu Glu Ser Tyr Arg Cys Phe Gln Gln Val Leu Ala His Asp Pro Thr
            100                 105                 110
Cys Ala Met Ala Tyr Trp Gly Leu Ile Tyr Ala Met Gly Pro Asn Tyr
        115                 120                 125
Asn Lys Thr Trp Gln Leu Phe Asp Pro Thr Asp Leu Glu His Thr Phe
    130                 135                 140
Lys Phe Cys His His Ala Ala Gln Ile Ala Glu Lys Leu Ala His Asp
145                 150                 155                 160
Asn Gln Asn Ile Lys Pro Val Glu Arg Ala Leu Ile Lys Ala Ile Gln
                165                 170                 175
His Arg Phe Pro Val Asp His Pro Val Ser Asp Phe Ser Thr Leu Asp
            180                 185                 190
Arg His Tyr Ala Val Ala Met Glu Glu Val Phe Arg Glu Tyr Gly Asn
        195                 200                 205
Lys Asp Met Asp Ile Thr Thr Leu Tyr Ile Asp Ala Ile Met His Thr
    210                 215                 220
Ala Ile Arg Met Met Tyr Glu Val Asn Ser Gly Ala Pro Val Glu Gly
225                 230                 235                 240
Ser Pro Val His Lys Leu Arg Ala Ile Phe Asp Glu Ala Leu Ala Lys
                245                 250                 255
Pro Ala Ser Asp Ser His Pro Gly Leu Leu His Phe Trp Ile His Phe
            260                 265                 270
Met Glu Met Ser Ser Thr Pro Gly Val Ala Leu Pro Gly Ala Asp Lys
        275                 280                 285
Leu Arg Arg Leu Val Pro Asp Ala Gly His Asn His His Met Pro Thr
    290                 295                 300
His Ile Asp Val Leu Val Gly Asp Tyr Arg Arg Ser Ile Asp Ser Asn
305                 310                 315                 320
Thr Ala Ala Val Thr Ala Asp Glu Lys Tyr Leu Ala Lys Glu Gly Gly
                325                 330                 335
Lys Asn Phe Tyr Ser Phe Tyr Arg Leu His Asn Tyr His Ser Leu Ile
            340                 345                 350
Tyr Ala Ala Met Leu Ser Gly Gln Arg Arg Ile Ala Leu Asp Ala Thr
        355                 360                 365
Thr Arg Met Glu Ala Ser Ile Thr Asp Glu Leu Leu Arg Val Glu Ala
    370                 375                 380
Pro Pro Leu Ala Asp Trp Met Glu Phe Phe Lys Ala Val Arg Val His
385                 390                 395                 400
Val Tyr Ile Arg Phe Gly Met Trp Lys Glu Thr Ile Asp Leu Pro Leu
                405                 410                 415
Pro Glu Asn Gln Ala Leu Tyr Cys Val Thr Thr Thr Met Ile His Tyr
            420                 425                 430
Gly Lys Ala Ile Ala Phe Ala Ala Thr Gly Asn Leu Val Gln Ala Glu
        435                 440                 445
Lys Gly Arg Gly Val Tyr His Ala Ala Ala Arg Thr Val Pro Pro Thr
    450                 455                 460
Arg Lys Asp Phe Pro Asn Leu Ile Ser Asp Ile Leu Lys Ile Ser Asp
465                 470                 475                 480
Ala Met Leu Asp Gly Glu Ile Glu Tyr Arg Arg Gly Asn Tyr Leu Val
```

```
                485                 490                 495
Ala Phe Glu Asn Leu Arg Lys Ala Val His Phe Asp Asp Ser Leu Arg
            500                 505                 510
Tyr Thr Glu Pro Trp Gly Trp Met Val Pro Thr Arg His Ala Tyr Ala
        515                 520                 525
Ala Leu Met Leu Glu Gln Gly His Val Glu Glu Ala Ala Gln Ala Tyr
    530                 535                 540
Ala Glu Asp Leu Gly Leu Asp Ser Ser Leu Thr Arg Ala His Gln His
545                 550                 555                 560
Pro Asn Asn Val Trp Ala Leu His Gly Tyr His Glu Cys Leu Val Arg
                565                 570                 575
Leu Gly Arg Glu Ser Glu Ala Arg Ile Ile Lys Gln Asp Leu Asp Leu
            580                 585                 590
Ala Leu Gln Val Ala Asp Val Pro Ile Lys Cys Ser Cys Phe Cys Arg
        595                 600                 605
Leu Gly Ala Leu Glu Ser Asp Glu Asn Gly Gly Ser Cys Cys Gln Gly
    610                 615                 620
Ala Tyr Gln
625
```

<210> 29394
<211> 76
<212> PRT
<213> A.fumigatus

<400> 29394

```
Glu Ser Ile Gly Ser Glu Ile Val Thr Lys Leu Leu Leu Pro Leu Leu
1               5                   10                  15
Pro Arg Val Pro Ser Ile Ile Val Phe Gly Leu Ile Val Cys Val Ile
            20                  25                  30
Tyr Val His Pro Ser Thr Leu Asn Ile Pro Phe Ile Phe Glu Tyr Phe
        35                  40                  45
Val Arg Phe Thr Ile Tyr Ser Thr Leu Leu Leu Leu Pro Phe Ser Lys
    50                  55                  60
His Leu Tyr Phe Pro Lys Thr Thr Ala Ser Ala His
65                  70                  75
```

<210> 29395
<211> 558
<212> PRT
<213> A.fumigatus

<400> 29395

```
Gly Pro Arg Arg Thr Val Cys Pro Leu Pro Glu Arg Asp Thr Ile Asn
1               5                   10                  15
Ser Arg Leu Pro Arg Arg Thr Leu Gly His Arg Ser Cys His Val Cys
            20                  25                  30
Gly Ser Arg Ser Arg Thr Glu Thr Thr Thr Thr Ile His Leu Thr Pro
        35                  40                  45
Leu Thr Ser His Asn Ser Ile His Ser Val Gly Phe Val Gln Ser Phe
    50                  55                  60
Phe Trp Arg Asn Ala Gly Phe Glu Val Ile Arg Lys Ile Pro Gln Leu
65                  70                  75                  80
Arg Asp Tyr Ala Pro Arg Tyr Asn Pro Thr Val Ile Pro Val Ala Asp
                85                  90                  95
Ser Lys Arg Ala Ala Thr Glu Glu Leu Pro Pro Ser Pro Lys Ser Arg
```

```
            100                 105                 110
Lys Gly Ser Ala Asn Tyr His Thr Ser Ala Asp Tyr His Ala Leu Tyr
        115                 120                 125
Lys Ser Gly Lys Leu Thr Pro Thr Ala Val Val Glu Ala Leu Leu Pro
    130                 135                 140
Leu Ile Arg Arg Asp Val Arg Pro Pro Gly Lys His Ser Val Ala Phe
145                 150                 155                 160
Val Glu Ser Gln Val Glu Arg Ile Arg Ala Ala Ala Glu Ala Ser Thr
                165                 170                 175
Gln Arg Tyr Lys Gln Gly Gln Pro Leu Gly Pro Leu Asp Gly Val Pro
            180                 185                 190
Val Ala Val Lys Asp Glu Val His Val Glu Gly Tyr Arg Arg Asn Leu
        195                 200                 205
Gly Ser Asn Leu Asp Phe Lys Gly Gly Phe Glu Gly Thr Ser Trp Cys
    210                 215                 220
Val Gln Lys Trp Glu Glu Ala Gly Ala Ile Ile Ile Gly Lys Thr Thr
225                 230                 235                 240
Met His Glu Leu Gly Leu Gly Lys Asn Arg Thr Ser Pro Leu Leu Leu
                245                 250                 255
Lys Ser Arg Ile Ser Gln Ala His Pro Glu Ala Asp Thr Thr Asn Asn
            260                 265                 270
Asn Pro Asn Tyr Gly Thr Pro Arg Asn Pro His Asn Gln Asp Tyr Tyr
        275                 280                 285
Cys Gly Gly Ser Ser Gly Gly Ser Gly Tyr Ala Val Gly Ala Gly Leu
    290                 295                 300
Val Pro Ile Ala Leu Gly Ala Asp Gly Gly Gly Ser Ile Arg Ile Pro
305                 310                 315                 320
Ser Ser Phe Cys Gly Ile Trp Gly Leu Lys Pro Thr His Asn Arg Val
                325                 330                 335
Ser Gly Phe Pro Thr Ala Ser Leu Ala Pro Thr Val Gly Val Tyr Gly
            340                 345                 350
Pro Met Ala Ala Ser Ile Asp Asp Leu Ala Leu Ala Tyr Arg Leu Met
        355                 360                 365
Ala Ala Pro Ala Pro Ala Thr Glu Asp Pro Val Ser Ala Thr Phe Pro
    370                 375                 380
Asp Pro Met Ser Ser Ile Ser Ser Thr Ala Gln Arg Pro Arg Ser Lys
385                 390                 395                 400
Thr Ile Gly Ile Val Pro Ser Trp Ile Asp Arg Ala Glu Pro Pro Val
                405                 410                 415
Arg Ala Val Phe Asp Ala Ala Leu Asp Phe Tyr Arg Lys Gln Gly Tyr
            420                 425                 430
Thr Val Val Asp Ile Ala Ile Pro Tyr Leu Pro Glu Gly Gln Arg Ala
        435                 440                 445
His Val Leu Thr Ile Met Ser Glu Ile Ser Ser Gly Leu Thr Pro Ala
    450                 455                 460
Gln Ile Gly Ala Leu Thr Ala Pro Asn Lys Val Leu Val Ser Met Gly
465                 470                 475                 480
Met Trp Gln Ile Thr Ala Gln Asp Leu Ile Ala Ala Gln Arg Leu Arg
                485                 490                 495
Asn Leu Leu Met Ser His Leu Ala Tyr Leu Phe Arg Gln His Pro Gly
            500                 505                 510
Leu Leu Ile Leu Thr Pro Thr Ser Pro Ile Pro Gly Trp Arg Ile Glu
        515                 520                 525
Ser Glu Thr Asp Leu Ala Arg Gly Val Ser Asp Gly Lys Ala Ser Val
    530                 535                 540
Gly His Met Ser Ser Arg Arg Gly Trp Lys Glu Pro Arg Thr
```

545 550 555

<210> 29396
<211> 106
<212> PRT
<213> A.fumigatus

<400> 29396
Leu Gln Pro Ser Ala Ser Thr Asp Arg Trp Gln Pro Ala Ser Met Thr
1 5 10 15
Trp Leu Trp Pro Thr Ala Ser Trp Gln Pro Leu Arg Arg Gln Pro Lys
20 25 30
Thr Pro Ser Pro Pro Pro Ser Gln Thr Pro Cys Arg Ala Ser His Leu
35 40 45
Gln Leu Lys Asp Pro Gly Ala Arg Gln Ser Val Ser Ser Pro Pro Gly
50 55 60
Ser Thr Ala Pro Ser His Pro Ser Glu Pro Tyr Ser Thr Pro Pro Ser
65 70 75 80
Thr Ser Thr Ala Ser Lys Ala Thr Pro Ser Ser Thr Ser Pro Ser Pro
85 90 95
Thr Ser Pro Arg Ala Ser Ala His Thr Cys
100 105

<210> 29397
<211> 198
<212> PRT
<213> A.fumigatus

<400> 29397
Pro Gly Ser Gly Leu Pro Pro His Gly Ser Pro Cys Ala Gly Asn Arg
1 5 10 15
Arg Pro Arg Leu Arg His Leu Pro Arg Pro His Val Glu His Leu Ile
20 25 30
Tyr Ser Ser Lys Thr Pro Glu Gln Asp Asn Arg Tyr Arg Pro Leu Leu
35 40 45
Asp Arg Pro Arg Arg Ala Thr Arg Pro Ser Arg Ile Arg Arg Arg Pro
50 55 60
Arg Leu Leu Pro Gln Ala Arg Leu His Arg Arg Arg His Arg His Pro
65 70 75 80
Leu Pro Pro Arg Gly Pro Ala Arg Thr Arg Ala Asn Asp Tyr Val Arg
85 90 95
Asn Leu Val Arg Pro Asp Thr Ser Thr Asp Arg Arg Pro His Gly Pro
100 105 110
Gln Gln Gly Pro Arg Gln His Gly His Val Ala Asp His Arg Thr Gly
115 120 125
Ser His Arg Arg Pro Ala Pro Pro Gln Pro Pro His Val Pro Pro Arg
130 135 140
Leu Pro Leu Pro Pro Thr Pro Arg Ser Thr His Ser Asp Pro Asp Ile
145 150 155 160
Ser His Ser Arg Leu Glu Asp Arg Lys Arg Asp Gly Ser Cys Pro Arg
165 170 175
Arg Val Arg Arg Gln Gly Leu Cys Arg Ala Tyr Val Phe Thr Pro Gly
180 185 190
Leu Glu Gly Thr Ala Asn
195

<210> 29398
<211> 129
<212> PRT
<213> A.fumigatus

<400> 29398
Cys Leu Met Val Tyr Ser Pro Ile Gly Pro Lys Ser Lys Leu Ser Ser
1 5 10 15
Gly Arg Thr Val Met Asn Leu Gly Ser Leu Asn Phe Tyr Asn Phe Asn
20 25 30
Thr Asn Glu Gly Leu Lys Glu Lys Ala Ile Gln Thr Leu Arg Asn Tyr
35 40 45
Gly Val Gly Pro Cys Gly Pro Arg Gly Phe Tyr Gly Thr Gln Asp Val
50 55 60
His Met Lys Thr Glu Ala Asp Val Ala Ala Tyr Leu Gly Thr Ala Ala
65 70 75 80
Cys Ile Ile Tyr Ser Gln Ala Phe Ser Thr Ile Ser Ser Val Ile Pro
85 90 95
Ala Phe Ser Lys Arg Gly Asp Ile Ile Val Ala Asp Lys Gly Cys Gln
100 105 110
Phe Arg His Ser Glu Arg His Gln Asp Phe Ala Gln His Gly Pro Val
115 120 125
Val

<210> 29399
<211> 141
<212> PRT
<213> A.fumigatus

<400> 29399
Pro Arg Ser Ala Cys Pro Ser Ser Pro Val Val Lys Ile Phe Pro Phe
1 5 10 15
Thr Met Asp Ile Gln Glu Thr Gln Arg Leu Leu Ser Glu Tyr Leu His
20 25 30
Glu Leu Ala Asn Leu Phe His Arg Leu Pro Gly Ser Ala Ile Phe Leu
35 40 45
Arg Tyr Val Lys Ser Ser Tyr Gln Asn Asp Pro Ile Arg Ser Ala Val
50 55 60
Glu Leu Phe Leu Phe Leu Phe Ala Val Arg Tyr Leu Leu Ala Pro Lys
65 70 75 80
Tyr Ser Thr Lys Pro Gly Val Val Lys Leu Ser Glu Asp Glu Ile Asp
85 90 95
Asp Leu Val Asp Glu Trp Thr Pro Glu Pro Leu Val Gly Gln Pro Thr
100 105 110
Ala Leu Glu Glu Met Glu Val Glu Lys Arg Thr Val Ile Val Gly Tyr
115 120 125
Phe Tyr Ser His Ser Asn Cys Tyr Cys Asp Ala Asp Val
130 135 140

<210> 29400
<211> 129
<212> PRT
<213> A.fumigatus

<400> 29400

```
Arg Pro Lys Leu Met Leu Leu Pro Ile Ser Ala Gln Arg Leu Ala Ser
1               5                  10                  15
Ser Thr Pro Arg His Ser Leu Pro Tyr Arg Ala Ser Ser Gln His Phe
            20                  25                  30
Gln Asn Val Glu Ile Leu Ser Leu Leu Thr Arg Gly Val Asn Phe Ala
        35                  40                  45
Ile Arg Lys Gly Ile Lys Ile Ser Arg Ser Met Val Arg Trp Tyr Glu
    50                  55                  60
His Asn Asp Leu Glu Asp Leu Lys Arg Val Leu Ala Lys Asp His Gln
65                  70                  75                  80
Arg Ala Ser Glu Lys Ala Pro Ser Arg Glu Gly Phe Ile Ile Thr Arg
                85                  90                  95
Gly Leu Phe Glu Ser Tyr Gly Asp Met Val Asp Leu Pro Lys Ile Val
            100                 105                 110
Cys Asn Ser Ser Ile Pro Ser Gly Ser Glu Asn Ala Tyr His Gly Thr
        115                 120                 125
Val
```

<210> 29401
<211> 184
<212> PRT
<213> A.fumigatus

<400> 29401

```
His Thr Gly Lys Ile Glu Leu Lys Leu Lys Tyr Lys Phe Arg Leu Ile
1               5                  10                  15
Leu Asp Glu Thr Trp Ser Phe Gly Val Leu Gly Arg Thr Gly Arg Gly
            20                  25                  30
Val Thr Glu His Gln Asn Val Asp Ala Ala Glu Val Asp Met Ile Val
        35                  40                  45
Gly Ser Leu Ala Gly Pro Leu Val Ala Gly Gly Gly Phe Cys Ala Gly
    50                  55                  60
Ser Glu Glu Ile Val His His Gln Arg Ile Ser Ala Ala Ala Tyr Thr
65                  70                  75                  80
Phe Ser Ala Ala Leu Pro Ala Leu Leu Ser Thr Thr Ala Ser Ala Thr
                85                  90                  95
Ile Asn Leu Leu Gln Asn Gly Pro Glu Leu Val Ser Gln Leu Arg Glu
            100                 105                 110
His Thr Lys Ala Met Trp Ala Gln Leu Asp Pro Arg Ser Asp Trp Val
        115                 120                 125
Tyr Cys Thr Ser Ala Pro Glu Asn Pro Val Met Ile Leu Val Leu Lys
    130                 135                 140
Pro Glu Val Val Ala Ala Lys Arg Leu Thr Ala Glu Asp Gln Gln Tyr
145                 150                 155                 160
Leu Leu Gln Asp Val Val Asp Glu Val Cys Asn Leu Gly Ser Glu Arg
                165                 170                 175
Phe His Val Val Met Gly Val Gln
            180
```

<210> 29402
<211> 60
<212> PRT
<213> A.fumigatus

<400> 29402

```
Cys Leu Ala Asn Gly Val Leu Ile Ser Arg Leu Lys Ser Leu Asp Asp
1               5                  10                  15
Asn Phe Glu Pro Lys Gln Ile Val Pro Pro Ala Leu Lys Val Cys Ile
            20                  25                  30
Thr Ile Gly Leu Thr Lys Lys Glu Ile Glu Lys Ala Gly Thr Ile Ile
        35                  40                  45
Arg His Ala Ile Thr Lys Val Val Ser Lys Arg Lys
    50                  55                  60
```

<210> 29403
<211> 69
<212> PRT
<213> A.fumigatus

<400> 29403

```
Gln Ser Gly His Ser Ala Phe Cys Asp Thr Ile Phe Lys Phe Leu His
1               5                  10                  15
Pro Ile Arg His Thr Phe Arg Asp Ser Val His Asn Ser Met Pro Val
            20                  25                  30
Glu Arg Pro Gln Ala His Arg Ser Phe Ser Leu Ala Leu Phe His Val
        35                  40                  45
Gln Pro Ser Ser Glu Arg Glu Leu His Thr Glu Trp Lys Ala Thr Ala
    50                  55                  60
Trp Arg Ala Ser Gln
65
```

<210> 29404
<211> 65
<212> PRT
<213> A.fumigatus

<400> 29404

```
Glu Gln Leu Thr Leu Arg Ala Asn Ala Leu Arg Glu Glu Leu His Thr
1               5                  10                  15
Asn Val Glu Ser Met Leu Asn Asp Val Ile Arg Phe Lys Val His Ile
            20                  25                  30
Gln Lys Gly Leu Glu Asp Tyr Glu Ser Phe Val Val Asp Glu Val Glu
        35                  40                  45
Gln Glu Leu Gly Gly Asp Leu Pro Ala Thr Lys Asp Val Thr Ser Gln
    50                  55                  60
Thr
65
```

<210> 29405
<211> 183
<212> PRT
<213> A.fumigatus

<400> 29405

```
Tyr Ser Ser Gly Asp Leu Ser Glu Ala Arg Gly Gly Arg Cys Gln Asn
1               5                  10                  15
Pro Glu Leu Tyr Ala Gly Phe Ser Ser Ile Ser Ala Ser Arg Cys Leu
            20                  25                  30
Leu Arg Ser Arg Arg Ser Ala Ala Leu Ala Ser Ala Arg Ala Ser Ala
        35                  40                  45
Ser Leu Ala Ala Cys Ser Ser Leu Ala Arg Cys Ala Ser Arg Ala Ala
```

```
    50                  55                  60
Arg Arg Ala Leu Leu Ser Ser Arg Arg Leu Ala Ser Arg Ser Ser Ser
65                  70                  75                  80
Ser Arg Ile Trp Leu Ser Tyr Ser Ser Arg Ser Leu Arg Leu Ala Arg
                85                  90                  95
Leu Ser Ser Ala Ala Leu Ala Ser Ser Pro Arg Asn Arg Ser Glu Gly
            100                 105                 110
Ala Trp Arg Asp Val Arg Cys Asp Arg Cys Ala Val Leu Leu Ala Ser
        115                 120                 125
Ala Ser Ser Ala Ser Ala Ser Arg Met Pro Leu Thr Gly Pro Pro Ser
    130                 135                 140
Val Thr Lys Pro Ser Ser Ser Ile Ser Gly Phe Met Glu Arg Arg Leu
145                 150                 155                 160
Leu Ser Cys Leu Asn Arg Arg Ala Ser Ser Arg Ser Gly Ser Val Met
                165                 170                 175
Tyr Leu Thr Ser Ser Ser Arg
            180
```

<210> 29406
<211> 451
<212> PRT
<213> A.fumigatus

<400> 29406

```
Cys Thr Val Gln Asn Ser Lys Ile Leu Ser Ser His Gln Ser Arg Pro
1               5                   10                  15
Arg Ala Tyr Glu Asp Asp Ala Val Ile Val Glu Pro Asp Gln His Tyr
            20                  25                  30
Gln Gly Pro Asp Val Met Ser Gly Pro Asp Asp Leu Ala Phe Val Glu
        35                  40                  45
Ala Pro Arg Glu Arg Arg Val Lys Arg Ser Asn Thr Leu Pro Lys Lys
    50                  55                  60
Gln Asp Thr Gly Gly Leu Met Gly Leu Ile Gly Ser Leu Arg Arg Asn
65                  70                  75                  80
Thr Arg Pro Glu Met Pro Asp Arg Arg Lys Ser Arg Ser Tyr Arg Asp
                85                  90                  95
Glu Asp Val Arg Tyr Met Thr Glu Pro Glu Arg Asp Glu Ala Arg Arg
            100                 105                 110
Leu Arg Gln Glu Arg Arg Arg Arg Ser Met Lys Pro Asp Ile Asp Asp
        115                 120                 125
Glu Gly Phe Val Thr Asp Gly Gly Pro Val Arg Gly Ile Leu Asp Ala
    130                 135                 140
Glu Ala Asp Glu Ala Glu Ala Arg Arg Thr Ala His Arg Ser His Arg
145                 150                 155                 160
Thr Ser Arg His Ala Pro Ser Asp Arg Phe Arg Gly Asp Glu Ala Lys
                165                 170                 175
Ala Ala Glu Glu Arg Arg Ala Arg Arg Arg Glu Arg Glu Leu Tyr Glu
            180                 185                 190
Ser Gln Met Arg Glu Glu Glu Glu Arg Glu Ala Arg Arg Arg Glu Glu
        195                 200                 205
Arg Arg Ala Arg Arg Ala Ala Arg Glu Ala Gln Arg Ala Lys Glu Glu
    210                 215                 220
Gln Ala Ala Arg Glu Ala Glu Ala Arg Ala Glu Ala Lys Ala Ala Glu
225                 230                 235                 240
Arg Arg Glu Arg Arg Arg Gln Arg Glu Ala Glu Met Leu Glu Asn Pro
                245                 250                 255
```

```
Ala Tyr Asn Ser Gly Phe Trp Gln Arg Pro Pro Arg Ala Ser Glu Arg
            260                 265                 270
Ser Pro Glu Glu Tyr Tyr Leu Asp His Arg His Asn Val Glu Gln Arg
        275                 280                 285
His Arg Arg Ser His Arg Ser Ile Asp Glu Arg Glu Lys Ser Arg Arg
    290                 295                 300
Arg Gly Ser Arg Thr Arg Glu Pro Val Arg Pro Pro Pro Met Met Ser
305                 310                 315                 320
Gly Ala Arg Arg Asp Lys Thr Thr Ser Trp Val Asp Ser Gln Ala Ala
                325                 330                 335
Asp Pro Pro Glu Pro Pro Pro Ile Val Pro Thr Val Leu Asp Val Pro
            340                 345                 350
Leu Pro Pro Gly Asp Gln Asn Ala His Ser Ile Ser Ser Asp Glu Glu
        355                 360                 365
Ala Arg Arg Ala Leu Arg Arg Arg Ala Arg Arg Arg Ala Arg Tyr Pro
    370                 375                 380
Gly Leu Asn Asp Glu Glu Ile Glu Glu Leu Arg Ala Arg Arg Arg Glu
385                 390                 395                 400
Ala Arg Arg Ser Asp Arg Ala Lys Ser Ser Ser Gly Ser Gly Asp Tyr
                405                 410                 415
Glu Arg Asp Arg Gly Met Arg Ser Tyr Asp Gly Arg Tyr Pro Ala Val
            420                 425                 430
Pro Pro Pro Thr Ser Gly Ala Lys Met Ser Ser Trp Phe Lys Lys Leu
        435                 440                 445
Thr Asn Leu
    450
```

<210> 29407
<211> 78
<212> PRT
<213> A.fumigatus

```
<400> 29407
Asp Asp Trp Arg Ala Tyr Ser Val Trp Ser Pro Cys Glu His Val Leu
1               5                   10                  15
Gly Thr Leu Ala Ser Ala Arg Tyr Gly Trp Thr Glu Ala Asp Gly Val
            20                  25                  30
Val Phe Gln Val Thr Leu Arg Glu Gln Cys Thr Pro Glu Gln Lys Lys
        35                  40                  45
Leu Phe Leu Glu Pro Ala Glu Lys Tyr Gln Ile Ile Gly Cys Tyr Ala
    50                  55                  60
Ser Ser His Gly Ala Gly Arg Met Arg Gly Gln Arg Ile Ser
65                  70                  75
```

<210> 29408
<211> 171
<212> PRT
<213> A.fumigatus

```
<400> 29408
Phe Thr Pro Pro Ser Ser Thr Phe Pro Val Glu Lys Arg Lys Ala Val
1               5                   10                  15
Ile Arg Val Ile Val His Ser Phe Ile Arg Cys Leu Ile Cys Leu Ile
            20                  25                  30
Ser Tyr Leu Pro Pro Pro Asp Tyr Ser Val Pro Pro Ile Phe Ala Met
        35                  40                  45
```

```
Pro Ser Pro Pro Pro Glu Trp Val Lys Ala Leu Thr Pro Ala Ser Pro
    50                  55                  60
Gln Gly Thr Asp Leu Leu Lys Gln Glu Arg Ala Gln Ser Asn Val Glu
65                  70                  75                  80
Val Asp Lys Leu Ala Glu Phe Leu His Thr Lys Ala Phe Leu Glu Lys
                85                  90                  95
Gln Gln Arg Phe Val Glu Leu Leu Ser Ser Glu Lys Val Phe Asp Lys
            100                 105                 110
Ser Gln Met His Ser Gln Gly Arg Ser Glu Arg Ile Gln Arg Ala Leu
        115                 120                 125
Ala Lys Gly Lys Arg Leu Gln Gln Leu Lys Glu Lys Tyr Asn Trp Ser
    130                 135                 140
Thr Glu Asp Phe His Phe Ala Ser Glu Met Ile Gly Glu Pro Thr Pro
145                 150                 155                 160
Tyr Gly Leu His Ala Ser Met Phe Leu Val Arg
                165                 170
```

<210> 29409
<211> 62
<212> PRT
<213> A.fumigatus

<400> 29409

```
Asp Arg Gly Arg Leu Ser Cys Leu Ala Thr Ile Asp Ser Thr Leu Phe
1               5                   10                  15
Ser Thr Met Tyr Arg Gly Cys Ser Val Val His Leu Gly Pro Val Ser
            20                  25                  30
Thr Ala His Tyr Val Gln Glu Leu Cys Trp Ala Ser His Ile Val Asp
        35                  40                  45
Ser Ser Asn Ser Ser Gly Asn Leu Leu Ser Val Leu Arg Leu
    50                  55                  60
```

<210> 29410
<211> 63
<212> PRT
<213> A.fumigatus

<400> 29410

```
Met His Leu Ala Pro Ile Arg Gln Thr Ile Pro His Gly Leu Ile Leu
1               5                   10                  15
Pro Leu Ile Ser Pro Pro Ile Thr Arg Lys His Gln Val Ile Asn Leu
            20                  25                  30
Arg Tyr Ile Thr Ile Pro Arg Tyr Thr Ile Pro Lys Ile Ser Thr Ile
        35                  40                  45
Thr Gly Ser Ser Met Asn Asp Tyr Ser Glu Gln Pro Leu Val Val
    50                  55                  60
```

<210> 29411
<211> 161
<212> PRT
<213> A.fumigatus

<400> 29411

```
Pro Leu Asn Ile Ala Arg Leu Lys Leu Arg Asp Gln Leu Phe Trp Asp
1               5                   10                  15
Asp Asp Gly Thr Val Tyr Leu Ser Ser Thr Tyr Arg Lys Leu Val Arg
```

```
            20                  25                  30
Thr Pro Gly Ala Thr Leu Lys Asp Phe Ala Ile His Ile Ala Thr Val
        35                  40                  45
Asp Leu Glu Thr Gly Asn Ser Thr Tyr Glu Pro Arg Leu Ile Arg Glu
    50                  55                  60
Ser Ala Ser Gly Val Ala Glu Gly Ser His Ile Phe Lys Arg Gly Lys
65                  70                  75                  80
Tyr Tyr Tyr Leu Phe Thr Ala Glu Gly Gly Thr Glu Ser Gly His Cys
                85                  90                  95
Glu Trp Val Cys Arg Ser Glu Val Ser Pro Phe Gly Pro Trp Glu Val
            100                 105                 110
Gly Pro Cys Asn Pro Leu Trp Arg Asn Gly Val Asp Asp Glu Val Gln
        115                 120                 125
Asn Thr Gly His Ala Asp Leu Val Glu Asp Ala Glu Gly Asn Trp Trp
    130                 135                 140
Ala Val Phe Leu Ile Leu Ala Pro Arg Gly Ala Gly Arg Asp Pro Ala
145                 150                 155                 160
Leu
```

<210> 29412
<211> 144
<212> PRT
<213> A.fumigatus

<400> 29412

```
Cys Arg Met Tyr Asn Asn Pro Ile Ile Pro Gly Phe Asn Pro Asp Pro
1               5                   10                  15
Ser Ile Ile Arg Val Asn His Asp Tyr Phe Leu Val Thr Ser Ser Phe
            20                  25                  30
Glu Tyr Phe Pro Gly Ala Pro Ile Tyr His Ser Thr Asp Leu Ile Arg
        35                  40                  45
Trp Ser Leu Ile Gly His Ala Leu Thr Arg Pro Ser Gln Leu Gln Ile
    50                  55                  60
His Thr Pro Glu Pro Gly Gly Gly Ile Trp Ala Thr Thr Leu Arg Tyr
65                  70                  75                  80
His Lys Gly Thr Phe Tyr Ile Ile Ala Ala Ser Phe Glu Arg Tyr Arg
                85                  90                  95
Pro Gln Glu Asp Asp Arg Val Trp Pro Arg Gly Phe Tyr Val Lys Thr
            100                 105                 110
Glu Asn Ile Trp Asp Ser Asp Pro Trp Ser Asp Pro Val Tyr Phe Asp
        115                 120                 125
Gln Val Gly Phe Asp Gln Asp Val Ser Pro Ala Leu Glu Ser Ser Leu
    130                 135                 140
```

<210> 29413
<211> 85
<212> PRT
<213> A.fumigatus

<400> 29413

```
Ile Gly Ile Ile Phe Trp Leu Phe Ala Gln Leu Ser Tyr Gln Gln Ala
1               5                   10                  15
Ser Gly Val Leu Ser Ile Ile Thr Val Ser Ser Asp Val His Ser His
            20                  25                  30
Tyr Val Ser Glu Ser Tyr Thr Thr Leu His Asn Ile Cys His Ile Cys
```

```
        35                  40                  45
Gly Ser His Lys Thr Ile Met Arg Ser Ala Leu Leu Thr Leu Leu Tyr
    50                  55                  60
Tyr Leu Tyr Pro Arg Cys Arg Asn Gly Thr Asn Ser Asn His Pro Ile
65                  70                  75                  80
Ile Ser Ile Leu Leu
                85
```

<210> 29414
<211> 77
<212> PRT
<213> A.fumigatus

<400> 29414

```
Ala Ile Pro Asn Pro Glu Ala Phe Asp Gln Val Ile Ser Tyr Ser Lys
1               5                   10                  15
Ile Lys Ile Gly Leu Phe Ser Asp Leu Val Phe Cys Ser Gln Val Ser
            20                  25                  30
Gln Arg Ser Val Leu Leu Tyr Gly Leu Glu Leu Phe His Glu Lys Leu
        35                  40                  45
Leu Tyr Leu Thr Cys Phe Lys Gly Val Leu Val Thr Ser Ser Leu Tyr
    50                  55                  60
Leu Gly Leu Arg Ile Ser Phe Thr His Trp Asn Gln Leu
65                  70                  75
```

<210> 29415
<211> 509
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (10)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29415

```
Met Gly Cys Gln Thr Leu Leu Pro Ser Xaa Glu Arg Gln Lys Lys Gly
1               5                   10                  15
Thr Ser Ser Leu Asp Arg Thr Ser Val Trp Leu Ala Ala Gln Gln Thr
            20                  25                  30
Tyr Leu Ala Ala Leu Arg Glu Thr Asn Pro Val Asn Ser Leu Glu Ser
        35                  40                  45
Glu Glu Ser Asp Ala Leu Glu Gly Tyr His Asp Asn Cys Glu Gln Asn
    50                  55                  60
Ala Pro Gly Leu Cys Arg Lys Lys Ser Val Arg Ser Ala Glu Ser Val
65                  70                  75                  80
Ser Glu Ala Ala Arg Pro Pro Ser Ala Leu Ala Ser Lys Asp Ser Ile
                85                  90                  95
Tyr Trp Arg Gly Phe Gln Ser Val Leu Gly Leu Ser Thr Arg Arg Asp
            100                 105                 110
Ser Phe Ile His Arg Asn Thr Arg Phe Asp Ala Val Gln Ser Ile Arg
        115                 120                 125
Ser Gly Leu Leu Ser Met His Ile Asn Cys Val Leu Gly His Tyr Glu
    130                 135                 140
Leu Val Arg Pro Glu Arg Pro Pro Tyr Lys Gly Pro Phe Ser Gln Ala
145                 150                 155                 160
```

```
Pro Arg Asn Ser Val Arg Thr Ser Ala Leu Ala Glu Lys Ala Gln Phe
                165                 170                 175
Ser Ile Leu Glu Lys Glu Gln Leu Val Leu Ser Gln Leu Arg Pro Pro
            180                 185                 190
Met Trp Ala Met Asp Ala Leu Arg Tyr Leu Asn Gly Gly His Leu Val
        195                 200                 205
Thr Ser Pro Ala Arg Ser Arg Leu Ser Met Ala Thr Ala Gln Gln Ala
    210                 215                 220
Pro Pro Gln Lys Pro Lys Gly His Arg Val Arg Val Leu Asp Leu Gly
225                 230                 235                 240
Gly His Ala Ser Cys Glu Trp Ala Trp Gln Leu Ala His Asp Tyr Pro
                245                 250                 255
Asn Val Lys Val Tyr Thr Val Phe Thr Glu His Gln Ala Val Asn His
            260                 265                 270
Gly Ile Lys Gly Pro Pro Asn His Cys Gln Ile Ser Val Ala Gln Leu
        275                 280                 285
Trp Lys Leu Pro Phe Pro Asp Asn Lys Phe Asp Leu Ile Ser Ala Arg
    290                 295                 300
Ser Leu Pro Ala Leu Leu Lys Asn Glu Arg Pro Val Gly Glu Met His
305                 310                 315                 320
Asp Glu Tyr Asp Leu Cys Leu Gln Glu Cys Arg Arg Cys Leu Lys Pro
                325                 330                 335
Gly Gly Tyr Leu Glu Phe Phe Val Met Asp Ala Glu Ile Ser Arg Ala
            340                 345                 350
Gly Pro Tyr Ala Thr Ala Ala Ser Val Glu Phe Ala Phe Asn Leu Lys
        355                 360                 365
Thr Arg Gly Tyr Asp Pro Leu Pro Thr Lys Arg Phe Leu Gly Arg Leu
    370                 375                 380
Arg Ser Ala Gly Phe Val Gly Val Lys Arg Ala Trp Thr Phe Leu Pro
385                 390                 395                 400
Met Gly Asn Glu Pro Val Gln Ala Gln Leu Pro Arg Glu Thr Pro Asp
                405                 410                 415
Pro Arg Val Lys Ser Trp Val Asp Glu Tyr Glu Ala Val His Gly Pro
            420                 425                 430
Val Gly Ser Thr Ala Asp Ile Ala Ser Val Thr Gly Leu Phe Gly Gly
        435                 440                 445
Trp Met Trp Glu Gln Trp Leu Leu Lys Leu Gln Val Glu Met Gly Arg
    450                 455                 460
Glu Arg His Arg Leu Leu Glu Gly Ile Gly Ser Val Phe Asp Glu Gly
465                 470                 475                 480
Arg Lys Asn Gly Ala Gly Trp Thr Cys Leu Ser Gly Trp Ala Met Lys
                485                 490                 495
Pro Lys Arg Lys Met Pro Pro Ser Arg Leu Arg Thr Gly
            500                 505
```

<210> 29416
<211> 565
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (523),(564),(565)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29416

```
Tyr Gln Ser Leu Leu Val Gly Ile Met Thr Asp Ser Ala Ile Ala Ala
1               5                  10                  15
Ser Ala Leu Arg Asp Ser Glu Asn Ile Ser Asn Arg Leu Asp Pro Lys
            20                  25                  30
Gly Pro Asp Leu Leu Thr Val Ala Ser Gly Val Lys Leu Gly Ser Pro
        35                  40                  45
Phe Leu Ser Gln Ser Glu Asn Glu Arg Ser Ala Ser His Phe Arg Asp
    50                  55                  60
Gly Lys Ala Asp Pro Thr Asp Glu Arg Arg Ile Ala Asp Asp Ala Gln
65                  70                  75                  80
Ser Ile Lys Glu Asn Val Asn His Ala Asn Glu Gly Gly Gly Lys Pro
                85                  90                  95
Arg Ser Glu Lys Ala Gly Gly Leu Lys Asp Ala Trp Asn Asp Gly Gln
            100                 105                 110
Gly Glu Gln Pro Val Leu Pro Ser Leu Arg Arg Pro Asn Glu Ser Leu
        115                 120                 125
Asp Ser Pro Gln Gln Ser Pro Asp His Lys Gln His Gln Ser Thr Thr
    130                 135                 140
Pro Gly Ala Ala Val Ser Pro Arg Arg Pro Ser Val Gln Phe Thr His
145                 150                 155                 160
Glu Thr Ser Asp Ile Asp Ala Ala Pro Glu Val Thr Gly Ser Arg Pro
                165                 170                 175
Pro Ser Val Leu Asp Asp Glu Pro Asp Ser Gly Leu Lys Gly Lys Gln
            180                 185                 190
Ser Ile Phe Thr Lys Leu Lys Ser Leu Ala Ser Pro Ser Phe Thr Ser
        195                 200                 205
His Ser Arg Ser Ala Ser Gly Ala Thr Ile Ser Asp Met Arg Gln Thr
    210                 215                 220
Asn Thr Asp Leu Ala Thr Pro Gly Ser Glu Arg Gly Ala Phe Arg Phe
225                 230                 235                 240
Pro Asp Thr Leu Glu Glu Glu Gly Ser Asp Ile Asp Ala Asp Ala Glu
                245                 250                 255
Glu Ser Ala Gly Glu Gln Glu Val Arg Gln Arg Arg Lys Lys Lys Ile
            260                 265                 270
Ser Arg Arg Gln Pro Glu Pro Gln Ser Ala Pro Gln Thr Glu Pro Asn
        275                 280                 285
Thr Pro Lys Thr Thr Arg Arg Pro Ser Phe His Leu Pro Ala Ser Phe
    290                 295                 300
Gly Pro Phe Glu Asn Tyr Arg Ala Asn Leu Phe Ala Arg Arg Val Ser
305                 310                 315                 320
Thr Gly Asp Phe Ala Gln Gln Arg Glu Gly Val Ser Glu Asp Glu Gly
                325                 330                 335
Arg Asp Arg Leu Asn Arg Asp Ala Trp Arg Arg Arg Ile Ala Asn Ala
            340                 345                 350
Arg Ala Leu Thr Tyr Gly Ser Arg Gln Ala Asp Thr Pro Gly Asn Gln
        355                 360                 365
Glu Glu Arg Arg Pro Ser Asn Phe Lys Arg Phe Thr Gly Leu Gly Gly
    370                 375                 380
Pro Ser Glu Asn Ala Glu Gly Asn Ala Pro His Trp Arg Arg His Arg
385                 390                 395                 400
Ala Glu Arg Gly Ser Ser Leu Ser Ala Gln Lys Trp Arg Gln Ile Lys
                405                 410                 415
Ala Gly Phe Lys Phe Met Arg Arg Lys Pro Glu Ser Thr Val Asp His
            420                 425                 430
Ala Lys Ser Ala Glu Leu Leu Ala Glu Leu Thr Ser Gly Val Pro Ala
        435                 440                 445
```

```
Ala Leu Ile Leu Ala Ser Met Phe Gln Arg Asp Glu His Gly Ser Lys
    450                 455                 460
Arg Ile Pro Ile Leu Leu Glu Gln Leu Lys Val Arg Val Thr Asp Ser
465                 470                 475                 480
Lys Phe Glu Pro His Ser Gly Asp Arg His Leu Val Phe Arg Ile Glu
                485                 490                 495
Leu Glu Tyr Gly Ser Gly Met Thr Arg Met Lys Trp Ile Ile His Arg
            500                 505                 510
Thr Leu Arg Asp Phe Ala Asn Leu Pro Leu Xaa Tyr Lys Leu His Phe
        515                 520                 525
Arg Asn Ala Lys Val Leu Ser Ala Gly Lys Tyr Arg Arg Ala Ala Gln
    530                 535                 540
Asn Leu Pro Arg Phe Pro Arg Asn Ala Phe Pro Tyr Leu Pro Arg Ser
545                 550                 555                 560
Pro Arg Ser Xaa Xaa
                565
```

<210> 29417
<211> 81
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (3)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 29417
Leu Ile Xaa Gln Gly Gln Ile Arg Lys Ile Ser Gln Gly Thr Met Asp
1               5                   10                  15
Asp Pro Phe His Pro Arg His Pro Ala Ala Val Phe Gln Leu Asp Pro
            20                  25                  30
Glu Tyr Lys Met Thr Val Thr Gly Met Arg Leu Glu Leu Ala Ile Ser
        35                  40                  45
Asp Pro Asn Phe Gln Leu Leu Gln Lys Asp Trp Asp Pro Phe Ala Ala
    50                  55                  60
Val Phe Ile Pro Leu Lys His Ala Ser Gln Tyr Gln Gly Gly Arg His
65                  70                  75                  80
Pro
```

<210> 29418
<211> 76
<212> PRT
<213> A.fumigatus

```
<400> 29418
Tyr Met Leu Val Tyr Asn Phe Leu Leu Ser Ile Ser Phe Lys Tyr Ile
1               5                   10                  15
Tyr Thr Asn Tyr Ser Val Phe Ile Lys His Ser Ile Thr Ile Leu Leu
            20                  25                  30
Tyr Ile Asp Asn Ile Leu Ile Leu Leu Asn Ser Asn Asn Phe Ile Asn
        35                  40                  45
Asn Phe Leu Lys Gln Leu Gly Lys Leu Phe Lys Tyr Thr Asn Asn Ser
    50                  55                  60
Lys Val Ser Val Tyr Leu Gly Ile Asn Ile Leu Tyr
```

65 70 75

<210> 29419
<211> 62
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (32)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29419
Leu Ile Leu Gly Thr Tyr Leu Asp Ile Thr Phe Thr Ile Ser Lys Leu
1 5 10 15
Ala Tyr Phe Thr Arg Asn Pro Ser Leu Asn Tyr Phe Ile Ile Val Xaa
20 25 30
Tyr Ile Phe Tyr Tyr Leu Ala Glu Met Leu Leu Leu Leu Leu Phe Tyr
35 40 45
Pro Phe Ile Phe Ser Asn Leu Asn Ser Phe Ile Asn Thr Asn
50 55 60

<210> 29420
<211> 426
<212> PRT
<213> A.fumigatus

<400> 29420
Arg Pro Leu Ala Leu Pro Ala Asn Phe Ala Ser Ala Thr Ala Tyr Phe
1 5 10 15
Ile Glu Arg Pro Pro Ala Asn Phe Gly Glu Glu Arg Pro Thr Leu Ser
20 25 30
His Leu Leu Thr Ile Tyr Pro Arg Thr Gln Ser Lys Asp Phe Pro Arg
35 40 45
Arg Pro Arg Cys Trp Ser Pro Arg Thr Ala Glu Ile Thr Gln Gln Asp
50 55 60
Trp Asp Met Phe Leu Lys Tyr Leu Phe Pro Pro Asp Leu Gly Leu Ala
65 70 75 80
Ala Ser Ser Ala His Leu Pro Arg Gln Leu Arg Ala Glu Ile Gln Arg
85 90 95
Asp Arg Lys Asp Arg Pro Gln Glu Thr Asp Glu Gln Arg Arg Leu Arg
100 105 110
Ile Ala Ala Val Ile Glu Glu Trp Asn Glu Cys Phe Phe Glu Pro Arg
115 120 125
Ala Thr Arg Ile Glu Phe Ile Tyr Val Thr Glu Ser Glu Asn Ala Pro
130 135 140
Val Ser Pro Leu Cys Pro Arg Cys Tyr Pro Ala Ala Thr Arg Ala Thr
145 150 155 160
Arg Ala Asn Arg Ser Thr His Ala Gln Glu Ala Gly Glu Ser Pro Ser
165 170 175
Ser Val Pro Ala Ser Met Leu Pro Thr Val Ala Gly Gln Pro Thr Ala
180 185 190
Pro Pro Ala Ser Gly Thr Tyr Ala Pro Gly Met Phe Pro Tyr Pro Pro
195 200 205
Pro Gln Met Pro Pro Ala Pro Tyr Pro Pro Tyr Val Pro Pro Ala Phe
210 215 220

```
Phe Pro Pro Gly Met Val Pro Asn Thr Pro Pro Pro Pro Pro Ala Pro
225                 230                 235                 240
His Ala Tyr Thr Tyr Pro Pro Gln Pro Pro Ser Gln Tyr Gln Gln Pro
                245                 250                 255
Pro Ser Trp Gly Trp Asn Asn Thr Pro Tyr Gly Pro Gln Tyr Gln Tyr
            260                 265                 270
Ser Ser Thr Ser Lys Gly Gly Pro Leu Ser Trp Leu Ser Ser Leu Ala
        275                 280                 285
Ser His Ala Gln Lys Tyr Ser Glu Arg Ile Thr Glu Gln Ala Gln His
    290                 295                 300
Tyr Gly Arg Gln Val Glu Glu Gln Ala Met Ala His Gly Arg Trp Ile
305                 310                 315                 320
Glu Glu Lys Ala Gly Leu His Ser Arg Lys Leu Glu Asp Val Phe Gly
                325                 330                 335
Gly Phe Ser Ser Pro Pro Arg Val Glu Tyr Pro Thr Asn Asn Pro Gln
            340                 345                 350
Ala Gln Gly Phe Tyr Ala His Gly Tyr Gly Tyr Pro Pro Val Asn Val
        355                 360                 365
Val Ser Thr Gln Pro Val Ala Pro Pro Ile Thr Gln Pro Thr Gln Pro
    370                 375                 380
Ala Arg Arg Thr Ser Val Ser Ser Val Ser Ser Glu Ser Ser Phe Ser
385                 390                 395                 400
Ser Ile Asp Ser Ile Ser Thr Thr Ser Asp Leu Ser Ser Thr Asp Leu
                405                 410                 415
Ala Thr Val Arg Asn Ala Ala Ser Ile Ala
            420                 425
```

<210> 29421
<211> 91
<212> PRT
<213> A.fumigatus

<400> 29421

```
Gln His Gln Arg Leu His Leu Arg Trp Ser Ser Leu Tyr Val Leu Phe
1               5                   10                  15
Pro Val Val Thr Leu Arg Thr Arg Thr Asp Arg Pro Pro Val Asn Pro
            20                  25                  30
Tyr Gly Lys Thr His Gly Ala Pro Glu Asp Ser Glu Arg His Val Gly
        35                  40                  45
Asp Leu Gly Asn Phe Glu Thr Asp Ala Glu Gly Asn Ala Val Gly Ser
    50                  55                  60
Lys Gln Asp Lys Leu Ile Lys Leu Ile Gly Ala Glu Ser Val Leu Gly
65                  70                  75                  80
Val Ser Phe Phe Phe Ser Ala Asp Gly Asn Ala
                85                  90
```

<210> 29422
<211> 74
<212> PRT
<213> A.fumigatus

<400> 29422

```
Leu Thr Leu Pro Ser Val Ala Val Leu Arg Gly Asp Ser Lys Ile Thr
1               5                   10                  15
Gly Thr Val Thr Phe Glu Gln Ala Asp Glu Asn Ser Pro Thr Thr Val
            20                  25                  30
```

```
Ser Trp Asn Ile Lys Gly Asn Asp Pro Asn Ala Lys Arg Gly Phe His
        35                  40                  45
Val His Gln Phe Gly Asp Asn Thr Asn Gly Cys Thr Ser Ala Gly Pro
    50                  55                  60
His Cys Met Ser Ser Ser Gln Trp Ser Leu
65                  70
```

<210> 29423
<211> 61
<212> PRT
<213> A.fumigatus

<400> 29423

```
Arg Thr Leu Val Val His Ala Gly Thr Asp Asp Leu Gly Arg Gly Gly
1               5                   10                  15
Asn Glu Glu Ser Lys Lys Thr Gly Asn Ala Gly Ala Arg Pro Ala Cys
            20                  25                  30
Gly Lys Cys Ile Ser Val Tyr Gly His Lys Arg Arg Met Tyr Val Asn
        35                  40                  45
Leu Leu Ser Leu Ser Thr Gly Val Ile Gly Ile Ala Ala
    50                  55                  60
```

<210> 29424
<211> 371
<212> PRT
<213> A.fumigatus

<400> 29424

```
Asn Arg Ile Leu Ala Trp Gln Met Val Arg Gln Ile Ala Glu His Ser
1               5                   10                  15
His Tyr Val Gln Gly Met Ala Trp Asp Pro Leu Asn Glu Phe Val Ala
            20                  25                  30
Thr Gln Ser Ser Asp Arg Ser Val His Ile Tyr Ser Leu Lys Thr Lys
        35                  40                  45
Asp Gly Gln Phe Thr Leu Thr Ser His Gly Lys Phe Leu Lys Met Asp
    50                  55                  60
Leu Pro Ala Lys Arg Ile Ser Ser Ser Ser Pro Ala Pro Pro Glu Leu
65                  70                  75                  80
Ser Ile Arg Ser Gln Pro Ala Ser Gly Asn Ser Ile Ala Ile Ala Ser
                85                  90                  95
Pro Ala Thr Ser Thr Pro Gly Thr Pro Leu Thr Ser His Leu Pro Met
            100                 105                 110
Asp Pro Pro Pro Val Ser His Ser Arg Arg Ser Ser Phe Gly Ser Ser
        115                 120                 125
Pro Ser Ile Arg Arg Ser Ala Ser Pro Ala Pro Ser Leu Pro Leu Pro
    130                 135                 140
Ala Val Lys Pro Leu Glu Val Ala Ser Pro Asn Val Leu Gly Gly Leu
145                 150                 155                 160
Thr Ile Lys Asn Ala Asn Ile Tyr Ala Asn Glu Thr Phe Thr Ser Phe
                165                 170                 175
Phe Arg Arg Leu Thr Phe Thr Pro Asp Gly Ser Leu Leu Phe Thr Pro
            180                 185                 190
Ala Gly Gln Tyr Lys Thr Thr His Val Pro Ala Thr Asp Pro Thr Lys
        195                 200                 205
Thr Thr Asp Glu Ile Ile Asn Thr Val Tyr Ile Tyr Thr Arg Ala Gly
    210                 215                 220
```

```
Phe Asn Lys Pro Pro Ile Ser His Leu Pro Gly His Lys Lys Pro Ser
225                 230                 235                 240
Val Ala Val Lys Cys Ser Pro Ile Leu Tyr Thr Leu Arg Lys Ala Pro
                245                 250                 255
Gln Pro Ala Arg His Ile Thr Leu Asp Thr Ser Ser Gly Glu Glu Ser
            260                 265                 270
Phe Ala Ser Leu Pro Glu Pro Val Val Ser Thr Lys Pro Thr Pro Asp
        275                 280                 285
Lys Pro Ser Met Glu Pro Pro Ser Thr Pro Ser Ala Ser Glu Ser Ser
    290                 295                 300
Lys Thr Asn Thr Val Ser Lys Asn Ala Glu Asn Glu Gly Ala Ser Ala
305                 310                 315                 320
Gly Gln Asn Pro Ser Pro Val Phe Ser Leu Pro Tyr Arg Ile Val Tyr
                325                 330                 335
Ala Val Ala Thr Gln Asp Ala Val Leu Val Tyr Asp Thr Gln Gln Gln
            340                 345                 350
Thr Pro Leu Cys Val Val Ser Asn Leu His Phe Ala Thr Phe Thr Asp
        355                 360                 365
Leu Thr Trp
    370
```

<210> 29425
<211> 226
<212> PRT
<213> A.fumigatus

<400> 29425

```
Cys Val Arg Tyr Ala Asp Lys Asn Arg Ser Asp Asp Gly Leu Thr Leu
1               5                   10                  15
Ile Met Ser Ser Ser Asp Gly Phe Cys Ser Thr Leu Ser Phe Ala Pro
            20                  25                  30
Gly Glu Leu Gly Gln Pro Tyr Thr Pro Pro Ala Gly Thr Ala Gln His
        35                  40                  45
Pro Ala Ser Ala Ser Thr Thr Ser Ala Asn Gln Ala Pro Gln Pro Ser
    50                  55                  60
Pro Ala Asn Asn Pro Ser Pro Leu Lys Leu Ser Gln Pro Ser Leu Ser
65                  70                  75                  80
Ser Ser Pro Ala Gln Pro Ala Glu Val Pro Pro Ala Ser Pro Ala Arg
                85                  90                  95
Ser Asn Ser Val Cys Ser Met Thr Thr Gln Ser Pro Ile Gln Gln Val
            100                 105                 110
Thr Ala Gln Gln Ser Gly Asp Phe Val Val Asn Asn Pro Thr Pro Thr
        115                 120                 125
Leu Gly Ser Val Pro Leu Val Thr Ala Ala Asn Ser Ala Gln Pro Pro
    130                 135                 140
Ile Leu Pro Phe Thr Thr Pro Pro Gln Thr Pro Met Ser Ala Val Ala
145                 150                 155                 160
Gln Ser Gly Ala Asn Ser Val Ser Asn Ser Val Leu Gly Lys Arg Asp
                165                 170                 175
Ile Ser Glu Ser Glu Lys Glu Asp Ser Lys Asp Gln Ser Ser Val Pro
            180                 185                 190
Gln Val Gln Gln Pro Lys Lys Arg Arg Val Ala Pro Thr Leu Ile Ser
        195                 200                 205
Ala Gly Thr Asn Ser Asn Pro Pro Ser Ser Ser Ser Pro Asn His Glu
    210                 215                 220
Val Ser
```

225

<210> 29426
<211> 664
<212> PRT
<213> A.fumigatus

<400> 29426
Ser Ser His Phe Pro Arg Leu Ala Pro Val Cys Cys Asn Leu Tyr Arg
1 5 10 15
Phe Ile Pro Val Pro Cys His Thr Thr Ala Tyr Phe Ala Gln Phe Val
20 25 30
Ser Thr Phe Ser Ser Ser Thr His Pro Gln Gln Phe Thr Leu Leu Thr
35 40 45
Thr Thr Met Ser Ser Pro Ala Glu His Ser Ser Ser Glu Ser Ser His
50 55 60
Gly His Asn Trp Pro Asn Pro Ala Leu Arg His Pro Arg Phe Asn Leu
65 70 75 80
Ala Glu Met Pro Asp Pro Pro Pro Ser Trp Lys Phe Leu Gly Glu Ser
85 90 95
Ala Asp Val Val Leu Arg Thr Arg Lys Tyr Val Arg Glu Gln Met Val
100 105 110
Ala Met Leu Asp Phe Tyr Ser Trp Gly Ile Asp Thr Gly Met Pro Ser
115 120 125
Arg Leu Thr Asn Leu Arg Ile Leu Gln Ala Leu Trp Lys Ile Phe Tyr
130 135 140
Tyr Thr Ala Asp Tyr His Arg Pro Arg Ser Phe Arg Asp Leu Leu Asp
145 150 155 160
Phe Glu Gly Lys Asp Gly Gly Pro Arg Leu Leu Ser Cys Glu Ile Asp
165 170 175
His Pro Ser Leu Leu Pro Ile Ser Arg Tyr Tyr Pro Asp Pro Pro Ala
180 185 190
Leu Asp Gly Thr Thr Gln Pro Asp Phe Val Arg Pro Glu Asn Ala Ala
195 200 205
Ala Asn Ile Pro Asp Ile Tyr Leu Glu Arg Met Ser Lys Ser Ser Arg
210 215 220
Asp Leu Asn Met Ser Glu Ala Glu Thr Leu Gly Ser Ser Pro Pro Ala
225 230 235 240
Val Gly Thr Leu Asn Ile Gly Gly Asn Gly Asn Thr Ala Ala Phe Gln
245 250 255
Ser Asn Asn Gln Thr Thr Ala Val Val Thr Ala Ala Ala Gly Ser Leu
260 265 270
Ala Asn Pro Ser Leu Thr Ala Pro Ala Asn Pro Thr Gly Val Phe Ile
275 280 285
Pro Ala Pro Ala Pro Ser Ala Val Val Arg Val Pro Ala His Met Ala
290 295 300
Arg Ala Ile Ile Glu Asp Val Glu Arg Val Val Met Lys Tyr Ala Tyr
305 310 315 320
Met Glu Leu Glu Arg Asp Ala Ser Ala Ala Pro Gln Thr Val Ala Arg
325 330 335
Pro Asn Leu Thr Ala Phe His Glu Gly Asp Ile Ser Lys Ser Ile Val
340 345 350
Gly Leu Tyr His Ala Asn Ala Gln Val Arg Leu Ser Leu Asp Pro His
355 360 365
Asp Pro Thr Arg Thr Ile Ile Asp Pro Thr Gly Asn Asp Tyr Pro Cys
370 375 380

```
Arg Gly Arg Gly Pro Ile Trp Lys Asn Asn Ser Ser Thr Ile Asp Ser
385                 390                 395                 400
Leu Ile Val Val Gly Lys Leu Leu Asn Ala Gly Ser Thr Val Ile Asp
                405                 410                 415
Arg Lys Lys Thr Gly Trp Glu Thr Arg Phe Ser Ser Leu Glu Arg Ala
            420                 425                 430
Phe Ile Glu Ala Thr Asp Val Asn Trp Asp Val Leu Ser Leu Asp Glu
        435                 440                 445
Ser Thr Glu Met Arg Asp His Phe Trp Asp Val Val Gln Glu His Val
    450                 455                 460
Ala Gly Ile Gln Pro Gly Val Leu Ser Pro Leu Trp Thr Val Trp Ser
465                 470                 475                 480
Asp Cys Ala Gly His Phe Asp Gln Phe His Phe Thr Tyr Arg Glu Ala
                485                 490                 495
Val Ala Pro Cys Gln Cys Thr Gly Gln Gly Ala Thr Ile Gln Ala His
            500                 505                 510
Thr Lys Thr Phe Val Ala Pro Asp Arg His Ala Arg Asp Met His Gly
        515                 520                 525
Val Cys Met Ser Glu Val Met Ala Arg Pro Phe Ala Pro Leu Leu Tyr
    530                 535                 540
Ala Asp Cys Thr Ala Cys Asn Ala Pro Gln Cys Val Thr Ile Glu Arg
545                 550                 555                 560
Arg Phe Asp Thr Leu Pro Leu Arg Met Val Val Gly Leu Asp Glu Gln
                565                 570                 575
Val Ser Ile Lys Asn His Thr Lys Asp Ile Thr Phe Asp Phe Cys Asp
            580                 585                 590
Gly Asp Gly Gln Leu Gln Lys Ala Thr Tyr Arg Trp Leu Gly Arg Ile
        595                 600                 605
Tyr Tyr Lys Asp Tyr Arg Tyr Arg Val Phe Trp Thr Asp Thr Lys Arg
    610                 615                 620
Gly Glu Thr Asp His Gly Phe Leu Lys Met Tyr Asp Ser Thr Met Asn
625                 630                 635                 640
Ser Gly Leu Ile Ile Gly Asp Ile Pro Pro Ala His Lys Asp Glu Arg
                645                 650                 655
Val Pro Pro Glu Trp Trp Arg Asn
            660
```

<210> 29427
<211> 113
<212> PRT
<213> A.fumigatus

<400> 29427

```
Thr Ile Ile Met Ala Ser Lys Thr Trp Asn Val Gly Ile Val Gly Tyr
1               5                   10                  15
Gly Phe Ser Ala Lys Ile Phe His Ile Pro Phe Val Thr Glu Val Pro
            20                  25                  30
Gln Phe Lys Leu Tyr Ala Ile Val Gln Arg Thr Pro Lys Pro Glu Asp
        35                  40                  45
Asp Ala Glu Lys Asp His Pro Gly Ile Lys Ser Tyr Arg Thr Ala Glu
    50                  55                  60
Asp Met Ile Lys Asp Ala Ala Val Asp Val Val Ile Ile Thr Thr Ala
65                  70                  75                  80
Pro Asp Ser His Tyr Ala Leu Ala Arg Leu Ala Leu Glu Asn Gly Lys
                85                  90                  95
His Gly Glu Tyr Pro Phe Ile Asp Tyr Leu Asp Gly Thr Cys Ala Asp
```

100 105 110
Leu

<210> 29428
<211> 238
<212> PRT
<213> A.fumigatus

<400> 29428
Ser Met Thr Asn Phe Asn Leu Val Val Cys Glu Lys Pro Phe Thr Pro
1 5 10 15
Thr Ser Glu Glu Ala Asn Asp Leu Val Thr Leu Ala Gln Gln Arg Asn
20 25 30
Arg Leu Leu Ala Val Tyr Gln Ser Thr Leu Asp Gln Thr Lys Phe Ser
35 40 45
Arg Arg Ile His Phe Gln Glu Leu Thr Ser Arg Leu Thr Asp Arg Arg
50 55 60
Phe Asp Ala Asp Phe Val Thr Leu Thr Lys Leu Val Lys Asn Gly Ser
65 70 75 80
Leu Gly Arg Val Val Glu Phe Glu Thr His Phe Asp Arg His Arg Pro
85 90 95
Glu Glu Pro Pro Ala Asp Val Ser Lys Trp Lys Asn Lys Val Ile Pro
100 105 110
Gly Gly Ser Ala Ile Tyr Asp Leu Gly Ser His Leu Leu Asp Gln Ala
115 120 125
Val Gln Leu Met Gly Met Pro Asp Arg Ile Thr Gly Phe Val Gly Ser
130 135 140
Gln Arg Ala Val Asn Thr Thr Gly Phe Glu Asp Ser Phe Thr Val Leu
145 150 155 160
Leu His Tyr Asn Asn Gly Leu Leu Val Thr Ala Lys Ala Gly Val Val
165 170 175
Ser Pro Glu Glu Lys Gln Leu Arg Tyr Trp Val Arg Gly Glu Lys Gly
180 185 190
Ser Phe Lys Lys Val Arg Asn Leu Ile Thr Phe Pro Arg Pro Asn Ala
195 200 205
Asp Thr Val Ser Ile Val Pro Pro Arg His Ser Gly Gly Ser Ala Gln
210 215 220
Gly Trp Asn Glu Thr Gly Arg Gln Arg Ile Arg Ser Gly Ala
225 230 235

<210> 29429
<211> 88
<212> PRT
<213> A.fumigatus

<400> 29429
Ala Ala Ser Ala Leu Glu Gly Leu Gly Val Ile Trp Leu Thr Met Leu
1 5 10 15
Cys Thr Gly Thr Leu Thr Thr Ile Gln Asp Gly Lys Pro Val Ala Glu
20 25 30
Ile Phe Pro Thr Val Glu Pro Pro Thr Tyr Thr Glu Tyr Tyr Arg Lys
35 40 45
Phe Ala Arg Ala Leu Ala Gly Glu Gly Asp Leu Pro Ala Ser Gly Ala
50 55 60
Glu Ala Ala Lys Val Ile Arg Leu Ile Glu Leu Ala Lys Glu Ser Ser

65 70 75 80
Lys Leu Gly Lys Thr Ile Asp Val
85

<210> 29430
<211> 440
<212> PRT
<213> A.fumigatus

<400> 29430
Lys Val Lys Val Trp Asp Val Lys Ser Gly Phe Cys Ile Val Thr Phe
1 5 10 15
Thr Glu His Ser Ser Gly Val Thr Ala Cys Lys Phe Ala Lys Lys Gly
20 25 30
Ser Val Leu Phe Thr Ala Ser Leu Asp Gly Ser Val Arg Ala Trp Asp
35 40 45
Leu Ile Arg Tyr Arg Asn Phe Arg Thr Phe Thr Ala Pro Ser Arg Thr
50 55 60
Ser Phe Thr Ser Leu Ala Val Asp Pro Ser Gly Glu Val Ile Cys Ala
65 70 75 80
Gly Ser Pro Asp Ser Phe Asp Ile His Val Trp Ser Val Gln Thr Gly
85 90 95
Gln Leu Leu Asp Gln Leu Ser Gly His Glu Gly Pro Val Ser Ser Leu
100 105 110
Ala Phe Ala Ala Asp Gly Asn His Leu Ala Ser Gly Ser Trp Asp Arg
115 120 125
Thr Val Arg Val Trp Ser Ile Phe Gly Arg Thr Gln Thr Ser Glu Pro
130 135 140
Leu Gln Leu Met Ser Asp Ile Leu Asp Val Ala Phe Arg Pro Asp Gly
145 150 155 160
Lys Gln Val Ala Ala Ser Thr Leu Asp Gly Gln Leu Thr Phe Trp Ser
165 170 175
Val Asp Asn Ala Val Gln Glu Gly Gly Ile Asp Gly Arg Arg Asp Val
180 185 190
Ser Gly Gly Arg Lys Met Gly Asp Arg Val Thr Ala Ala Asn Ser Ala
195 200 205
Ala Thr Lys His Phe Asn Cys Ile Thr Tyr Ser Ala Asp Gly Ser Cys
210 215 220
Ile Leu Ala Gly Gly Asn Ser Lys His Ile Cys Leu Tyr Asp Val Arg
225 230 235 240
Ser Gly Ala Leu Leu Lys Lys Tyr Thr Val Ser Val Asn Thr Ser Leu
245 250 255
Asp Gly Thr Gln Glu Phe Leu Asn Ser Arg Asp Leu Thr Glu Ala Gly
260 265 270
Pro Arg Gly Leu Ile Asp Glu Thr Gly Glu Ala Ser Asp Leu Glu Asp
275 280 285
Arg Ile Asp Arg Ser Leu Pro Gly Ala Lys Arg Gly Asp Ala Gly Thr
290 295 300
Arg Lys Thr Arg Pro Glu Val Arg Val Thr Ala Val Asp Phe Ser Pro
305 310 315 320
Thr Gly Arg Ala Phe Cys Ala Ala Ser Thr Glu Gly Leu Leu Val Tyr
325 330 335
Ser Leu Asp Thr Glu Phe Val Phe Asp Pro Phe Asp Leu Asp Leu Asp
340 345 350
Ile Thr Pro Thr Thr Ile Leu Ala Thr Leu Asp Ala Ala Lys Lys Ala
355 360 365

```
His Ser Met Asn Thr Ala Asp Asp Asp Asn Thr Phe Leu Lys Ala Leu
    370                 375                 380
Val Met Ala Phe Arg Leu Asn Glu Ser Lys Leu Ile Arg Ala Val Tyr
385                 390                 395                 400
Glu Ala Ile Pro Pro Ser Glu Ile Pro Leu Val Val Arg Ala Leu Pro
                405                 410                 415
Thr Val Tyr Leu Ser Arg Phe Leu Arg Phe Val Ala Gln Ser Ser Pro
            420                 425                 430
Thr Gly Leu Asp Ser Ile Arg Ala
        435                 440
```

<210> 29431
<211> 254
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (8)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29431

```
Gly Gly Arg Gly Ala Gly Leu Xaa Gly Arg Ala Arg Gly Thr Arg Arg
1               5                   10                  15
Arg Ala Gly Arg Val Val Arg Asn Arg Tyr Asn His Ser Arg Gly Gly
            20                  25                  30
His Val Gly Gly Ala Ala Leu Gly Asp Glu Gly Ser Gly Gly Gly Leu
        35                  40                  45
Arg Gly Gly Ser Gly Gly Val Gly Thr Gly Arg Ala Arg Ser Arg Gly
    50                  55                  60
Ser Arg Arg Arg Ser Ser Ser Arg Arg Arg Leu Gly Leu Ala Ser Gly
65                  70                  75                  80
Arg Gly Leu Arg Arg Arg Gly Leu Arg Arg Gly Arg Arg Leu Gly Leu
                85                  90                  95
Gly Gly Gly Arg Ala Gly Arg Arg Arg Leu Gly Ser Arg Ala Ser Val
            100                 105                 110
Ala Arg Val Gly Asp Thr Lys Leu Gly Arg Val Leu Val Leu Ala Gly
        115                 120                 125
Ala Phe Asp His Glu Gln Gln Thr Val Val Gly Gly Val Gly Leu Glu
    130                 135                 140
Arg Gly Ala Gly Ser Pro Gly Lys Ala Ala Gly Val Gly Asp Ala Val
145                 150                 155                 160
Gly Gln Arg Leu Asn Gly His His Ile Gly Ala Gly Thr Ala Gln Glu
                165                 170                 175
His Gln Arg Asp Arg Pro Gly Gly Ser Gly Ile Pro Cys Asp Cys Val
            180                 185                 190
Arg Leu Ala Ser Arg Asp Gln Phe Val Gln Ala Gly Leu Glu Asp Gly
        195                 200                 205
Ile Ser Arg Gly Val Leu Gly Val Val Gly Leu Gly Arg Gly His Gly
    210                 215                 220
Glu Ser Arg Gln Ala Gly Asp Asp Arg Arg Asn Gly Glu Thr His Phe
225                 230                 235                 240
Ile Arg Asn Arg Arg Lys Asp Cys Lys Met Val Leu Leu Glu
                245                 250
```

<210> 29432

<211> 83
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (56)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29432
Thr Ser Ser Thr Gly Arg Ile Gln Glu His Asp Asn Val Gln Ser Met
1 5 10 15
Ser His Pro Thr Trp Gln Thr Asp Ser Pro Leu Val Ile Tyr Arg Pro
20 25 30
Ile Arg Arg Gln Ser Ala Ser Leu Pro Gly Asn Glu Val Thr Ser Gln
35 40 45
Ala Pro Gln Thr Asn Gln Leu Xaa Val Asn Ala Val Lys Asn Val Gly
50 55 60
Pro Val Ser Ala Leu Lys Pro Gly Gly Asn Thr Ala Lys Asn Ser Asp
65 70 75 80
Leu Val Gln

<210> 29433
<211> 252
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (245)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29433
Gln His His Leu Thr Val Leu Pro Ser Val Thr Asn Lys Met Arg Leu
1 5 10 15
Ser Ile Ala Ser Val Val Ser Cys Leu Ala Ala Leu Ala Met Ala Ala
20 25 30
Thr Lys Pro Asp Tyr Thr Gln Asp Pro Thr Gly Asn Ala Ile Leu Lys
35 40 45
Pro Gly Leu Asn Glu Leu Val Pro Ala Gly Lys Pro Tyr Thr Ile Thr
50 55 60
Trp Asp Pro Thr Thr Thr Gly Pro Val Ser Leu Val Leu Leu Arg Gly
65 70 75 80
Pro Ser Thr Asn Val Val Pro Ile Glu Thr Leu Ala Asp Ser Ile Pro
85 90 95
Asn Ser Gly Ser Phe Ser Trp Thr Pro Ser Thr Ser Leu Glu Pro Asp
100 105 110
Thr Thr His Tyr Gly Leu Leu Leu Val Val Glu Gly Thr Gly Gln Tyr
115 120 125
Gln Tyr Ser Thr Gln Phe Gly Ile Ser Asn Pro Gly Tyr Thr Gly Ser
130 135 140
Thr Ser Gln Ser Ser Ser Thr Ser Pro Thr Ala Thr Glu Thr Lys Ser
145 150 155 160
Ser Ser Ala Thr Glu Ser Ser Ser Ser Lys Ser Ser Thr Thr Gly Lys
165 170 175

```
Pro Glu Thr Thr Thr Thr Thr Thr Pro Pro Thr Thr Thr Ala Thr Ser
            180                 185                 190
Gly Ser Ala Ser Ala Asp Ser Thr Thr Thr Ala Ser Glu Thr Pro Ala
        195                 200                 205
Thr Thr Leu Val Thr Gln Ser Ser Thr Ala Asn Val Pro Thr Ser Thr
    210                 215                 220
Val Val Val Ser Val Pro Asn Asn Ser Ala Gly Ser Ser Ser Gly Ala
225                 230                 235                 240
Ser Gly Ser Pro Xaa Gln Ser Ser Thr Pro Ser Pro
                245                 250
```

<210> 29434
<211> 200
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (194)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29434

```
Thr Asn Trp Ser Arg Leu Ala Ser Arg Thr Gln Ser His Gly Ile Pro
1               5                   10                  15
Leu Pro Pro Gly Arg Ser Arg Trp Cys Ser Cys Ala Val Pro Ala Pro
            20                  25                  30
Met Trp Cys Pro Leu Arg Arg Trp Pro Thr Ala Ser Pro Thr Pro Ala
        35                  40                  45
Ala Phe Pro Gly Leu Pro Ala Pro Arg Ser Ser Pro Thr Pro Pro Thr
    50                  55                  60
Thr Val Cys Cys Ser Trp Ser Lys Ala Pro Ala Ser Thr Ser Thr Arg
65                  70                  75                  80
Pro Ser Leu Val Ser Pro Thr Leu Ala Thr Leu Ala Arg Leu Pro Ser
                85                  90                  95
Arg Leu Arg Pro Ala Arg Pro Pro Pro Arg Pro Ser Leu Leu Pro Arg
            100                 105                 110
Arg Ser Pro Leu Leu Arg Ser Pro Arg Pro Leu Ala Ser Pro Arg Arg
        115                 120                 125
Arg Arg Leu Leu Leu Leu Leu Arg Leu Pro Arg Leu Leu Ala Arg Pro
    130                 135                 140
Val Pro Thr Pro Pro Leu Pro Pro Arg Arg Pro Pro Pro Leu Pro Ser
145                 150                 155                 160
Ser Pro Arg Ala Ala Pro Pro Thr Cys Pro Pro Arg Leu Trp Leu Tyr
                165                 170                 175
Leu Phe Leu Thr Thr Leu Pro Ala Leu Arg Arg Val Pro Leu Ala Leu
            180                 185                 190
Pro Xaa Asn Pro Ala Pro Arg Pro
        195                 200
```

<210> 29435
<211> 448
<212> PRT
<213> A.fumigatus

<400> 29435

```
Pro Asn Val Thr Asp Gly Thr Tyr Met Ile Asn Tyr Gln Arg Lys Gln
```

```
1               5                  10                  15
Leu Pro Asn Tyr Val Ala Pro Pro Pro Asp Ile Tyr Met Leu His Pro
            20                  25                  30
Asp Tyr Gly Thr Tyr Phe Ser His Asp Gln Val Ser Thr Ile Leu Asp
        35                  40                  45
Asn Leu Asp Thr Pro Asp Gln Ser Tyr Gln Gln Tyr Leu Asp Arg Val
    50                  55                  60
Leu Val Glu Asn Ala Asp Asp Val Ile His Val Leu Ser Phe Glu Gly
65                  70                  75                  80
Glu Leu Leu Tyr Ile Ser Pro Ser Cys Arg Lys Val Leu Glu Tyr Asp
                85                  90                  95
Pro Asn Glu Leu Ile Gly Lys Thr Leu Ser Thr Ile Cys His Pro Ser
            100                 105                 110
Asp Ile Gly Pro Val Ile Arg Asp Leu Arg Ser Cys Thr Asn Ser Asp
        115                 120                 125
Pro Val Ser Val Met Tyr Arg Val Arg Thr Lys Tyr Ser Gly Tyr Met
    130                 135                 140
Trp Phe Glu Ser His Gly Ser Trp His Ile Gly Asp Arg Gly Arg Gln
145                 150                 155                 160
Tyr Leu Val Met Thr Gly Arg Val Cys Pro Val Tyr His Leu Asp Gln
                165                 170                 175
Leu Ala Asn Ile Gly Asn Gly Gly Leu Ala Glu Asn Asp Leu Trp Ala
            180                 185                 190
Lys Leu Ser Ile Ser Gly Ile Ile Leu Phe Met Ser Ser Lys Ala Arg
        195                 200                 205
Pro Val Leu Gly Arg Val Ser Asp Asp Leu Val Gly Lys Gly Ile Gln
    210                 215                 220
Asp Leu Ile Pro Ala Asp Ala Arg Glu Asp Ala Lys Gln Ala Leu Glu
225                 230                 235                 240
Val Ala Arg Thr Gly Gln Gln Thr Ser Phe Ser His Lys Ile Arg His
                245                 250                 255
Lys Lys Gly His Met Leu Gln Ala Gln Thr Thr Leu Tyr Pro Gly Asp
            260                 265                 270
Thr Lys Glu Gly Glu Lys Pro Ser Phe Leu Val Ala Gln Leu Arg Phe
        275                 280                 285
Pro Lys Ser Pro Gln Thr Thr Pro Gly Thr Glu Glu Val Val Pro Phe
    290                 295                 300
Asn Ile Thr Ala Thr Phe Ser Arg Asp Ala Ser Val Thr Gly Arg Arg
305                 310                 315                 320
Asn Val Thr Ala Ala Gly Gln Pro Thr Ser Asp Lys Ser Ala Arg Gly
                325                 330                 335
Ser Ser Gly Asp Gln Tyr Val Pro Ala Pro Asp Glu Pro Thr Leu Phe
            340                 345                 350
Ala Glu Leu Asn Thr Ala Arg Gly Ser Ser Trp Gln Phe Glu Leu Arg
        355                 360                 365
Glu Leu Glu Lys Gln Asn Arg Ala Leu Ser Asp Glu Val Gln Arg Leu
    370                 375                 380
Leu Ala Arg Arg Lys Lys Arg Lys Arg Lys Gln Ser Ile Val Pro Val
385                 390                 395                 400
Glu Lys Ala Cys Ala Met Cys Gln Thr Arg Thr Thr Pro Glu Trp Arg
                405                 410                 415
Arg Gly Pro Ser Gly Asn Arg Asp Leu Cys Asn Ser Cys Gly Leu Arg
            420                 425                 430
Trp Ala Lys Gln Val Arg Asn Ala Ile Gln Lys Lys Ala Pro Thr Thr
        435                 440                 445
```

<210> 29436
<211> 195
<212> PRT
<213> A.fumigatus

<400> 29436
Asp Arg Leu Ser Thr Trp Pro Glu Ile Trp Thr Val Val Tyr His Glu
1 5 10 15
Ser Pro Ser Ile Gly Gly Leu Asn Tyr Leu Ser Ile Ala Ile Gly Ser
20 25 30
Phe Ala Gly Leu Phe Phe Asn Leu Lys Phe Val Asp Arg Ile Tyr Lys
35 40 45
Thr Leu Lys Ala Arg Asn Asn Asn Asn Asn Asn Asn Gly Gln Pro Glu
50 55 60
Phe Arg Met Pro Ser Leu Ala Val Gly Ser Val Leu Ser Thr Ile Gly
65 70 75 80
Leu Phe Trp Tyr Gly Trp Ser Ile Gly Asn Thr His Trp Ile Met Pro
85 90 95
Asn Ile Gly Ala Leu Met Tyr Thr Ala Gly Thr Ile Ser Cys Leu Gln
100 105 110
Gly Met Gln Thr Tyr Ile Val Asp Ser Tyr Gln Thr Tyr Ala Ala Ser
115 120 125
Ala Met Ala Ala Cys Ala Val Leu Arg Ser Leu Ala Gly Phe Gly Phe
130 135 140
Pro Leu Phe Ala Pro Tyr Ile Tyr Gln Ser Leu Gly Tyr Gly Trp Gly
145 150 155 160
Thr Ser Val Leu Ala Phe Val Thr Val Gly Ile Gly Cys Val Ala Pro
165 170 175
Phe Ala Phe Trp Arg Phe Gly Pro Arg Leu Arg Ala Ile Ser Arg Tyr
180 185 190
Ala Ala Gly
195

<210> 29437
<211> 62
<212> PRT
<213> A.fumigatus

<400> 29437
Glu Trp Gly Arg Ala Thr Ser Ile Ile Met Lys Ala Asn Thr Phe Gly
1 5 10 15
Ala Phe Ala Arg Ser Phe Ser Asn Ala Cys Ala Ala Ala Val Ala Ser
20 25 30
Phe Ser Asn Thr Leu Phe Gly Ser Ala Leu Ala Ser Arg Asn Pro Trp
35 40 45
Pro Thr Trp Arg Ile Arg Trp Arg Met Val Gly Asp Ser Ser
50 55 60

<210> 29438
<211> 195
<212> PRT
<213> A.fumigatus

<400> 29438
Ile Ile Arg Pro Phe Cys Gly Val Asn Val Ile Ala Tyr Tyr Ser Thr
1 5 10 15

```
Thr Ile Phe Val Glu Ser Gly Tyr Gly Ile Gln Glu Ala Leu Leu Ala
            20                  25                  30
Ser Met Gly Thr Gly Ile Leu Asn Trp Val Phe Ala Leu Pro Ala Phe
        35                  40                  45
Phe Thr Ile Asp Thr Trp Gly Arg Arg Asn Leu Leu Leu Phe Thr Phe
    50                  55                  60
Pro Leu Leu Ala Ile Cys Leu Phe Trp Ser Gly Phe Ser Phe Trp Ile
65                  70                  75                  80
Glu Pro Asp Asp Pro Leu Ser Lys Lys Arg Val Ala Met Val Thr Thr
                85                  90                  95
Gly Met Tyr Leu Phe Glu Val Phe Tyr Ser Pro Gly Glu Gly Pro Val
            100                 105                 110
Pro Phe Thr Tyr Ser Ala Glu Ala Phe Pro Leu His Val Arg Glu Val
        115                 120                 125
Gly Met Ser Trp Ala Thr Ala Thr Thr Trp Cys Phe Asn Phe Ile Leu
    130                 135                 140
Ser Phe Thr Trp Pro Met Leu Leu Asp Thr Phe Lys Pro Gln Gly Ala
145                 150                 155                 160
Phe Gly Trp Tyr Ala Ala Trp Cys Leu Val Gly Trp Val Leu Ile Leu
                165                 170                 175
Leu Phe Val Pro Glu Thr Lys Gly Glu Ser Val Ser Pro Cys His Ser
            180                 185                 190
Ser Gly Arg
        195
```

<210> 29439
<211> 240
<212> PRT
<213> A.fumigatus

```
<400> 29439
Tyr Ala Ala Cys Leu Leu Val Asp Thr Glu Asn Thr Trp Ser Ser Ser
1               5                   10                  15
Ser Asn Val Arg Ala Ala Ile Ile Ser Thr Ser Ala Ser Arg Arg Val
            20                  25                  30
Thr Gly Gly Asn Arg Leu Thr Leu Gly Leu Arg Asp Lys Lys Gln Asp
        35                  40                  45
Gln His Pro Thr Asp Gln Thr Pro Arg Arg Ile Pro Pro Lys Arg Thr
    50                  55                  60
Leu Arg Leu Glu Arg Val Gln Gln His Arg Pro Arg Lys Arg Glu Asn
65                  70                  75                  80
Glu Val Glu Thr Pro Gly Gly Arg Arg Gly Pro Arg His Pro His Phe
                85                  90                  95
Pro His Val Gln Arg Glu Cys Leu Arg Arg Val Arg Glu Arg His Gly
            100                 105                 110
Thr Leu Ala Gly Arg Val Glu Asp Leu Glu Gln Ile His Ala Cys Arg
        115                 120                 125
Asp His Gly Asp Thr Leu Leu Ala Gln Gly Val Val Gly Phe Asp Pro
    130                 135                 140
Glu Gly Glu Ala Gly Pro Glu Glu Ala Asp Gly Gln Glu Gly Glu Gly
145                 150                 155                 160
Glu Glu Gln Glu Val Ala Ala Ala Pro Gly Val Asp Gly Glu Lys Gly
                165                 170                 175
Gly Glu Ser Glu Asp Pro Val Glu Asp Ala Gly Ala His Gly Cys Glu
            180                 185                 190
Glu Gly Phe Leu Asp Ala Val Pro Gly Phe Asp Glu Asp Gly Gly Gly
```

```
        195                 200                 205
Ile Ile Gly Asp Tyr Val Asp Pro Ala Glu Arg Ser Asn Tyr Leu Ala
    210                 215                 220
Gln Cys Arg Phe Gln Val Gln Trp Asn Gln Thr Leu Val Pro Val Ala
225                 230                 235                 240
```

<210> 29440
<211> 305
<212> PRT
<213> A.fumigatus

<400> 29440

```
Ile Ser Tyr Thr Met Asn Leu Ala Gln Ala Thr Gln Ala Val Leu Glu
1               5                   10                  15
Glu Leu Lys Leu Ile Pro Ser Glu Glu Thr Pro Leu Gln Arg Pro Leu
            20                  25                  30
Pro Trp Arg Pro Ser Leu Ala Leu Asn Arg Arg Gly Glu Asp Val Arg
        35                  40                  45
Pro Ile Phe Trp Arg Asn Arg Asn Ser Ser Tyr Ile Ala Arg Thr Gln
    50                  55                  60
Thr Trp Asp Glu Phe Pro Asn Gly Arg Trp Thr Asp Ser Arg Ser Pro
65                  70                  75                  80
Ala Phe Gly Glu Leu Asp Ala Tyr Gly Ile Gly Leu Lys Gly Thr Asn
                85                  90                  95
Glu Gln Asn Ile Lys Leu Trp Gly Glu Pro Lys Ser Ile Arg Asp Ile
            100                 105                 110
Thr Gln Ile Phe Val Arg Tyr Leu Glu Gly Lys Leu Asp Arg Leu Pro
        115                 120                 125
Trp Ser Asp Ser Pro Ile Ser Gly Glu Ala Asn Ala Ile Lys Asp Asn
    130                 135                 140
Leu Val Gln Leu Asn Ser Arg Gly Leu Leu Thr Val Asn Ser Gln Pro
145                 150                 155                 160
Ala Val Asn Gly Val Arg Ser Ser His Pro Val Phe Gly Trp Gly Pro
                165                 170                 175
Lys Asn Gly Phe Val Tyr Gln Lys Ala Tyr Leu Glu Leu Phe Val Pro
            180                 185                 190
Pro Tyr Leu Leu Asp Glu Leu Ile Ala Arg Ile Glu Lys Asn Pro Asp
        195                 200                 205
Leu Thr Tyr His Ala Val Ala Lys Asn Arg Glu Leu Arg Thr Asn Thr
    210                 215                 220
Arg Asp Ser Pro Asn Ala Leu Thr Trp Gly Ile Phe Ala Gly Arg Glu
225                 230                 235                 240
Ile Val Gln Pro Thr Ile Val Asp Thr Ile Ser Phe Leu Ala Trp Lys
                245                 250                 255
Asp Glu Ala Tyr Arg Leu Gly Glu Asp Trp Ala Lys Cys His Asp Ala
            260                 265                 270
Ser Ser Pro Ser Arg Lys Leu Ile Gln Asp Ile Met Asp Asn Trp Tyr
        275                 280                 285
Leu Val Asn Ile Gly Lys Phe Ala Phe Ala Pro Cys Met Cys Ser Asn
    290                 295                 300
Cys
305
```

<210> 29441
<211> 67
<212> PRT

<213> A.fumigatus

<400> 29441
Val Cys Val Cys Ser Leu His Val Phe Glu Leu Leu Thr Leu Asp Asn
1 5 10 15
Leu Val Asn Asn Asp Phe His Asn Thr Tyr Asp Leu Phe Asp Leu Phe
20 25 30
Asn Gly Leu Glu Val Lys Asp Leu Asp Leu Glu Val Gly Pro Asp Thr
35 40 45
Ala Glu Thr Lys Ser Gln Pro Asn Gly Ala Ala Pro Glu Glu Val Ala
50 55 60
Ile Lys Asn
65

<210> 29442
<211> 62
<212> PRT
<213> A.fumigatus

<400> 29442
Ser His Asn Thr Val Ala Trp Met Ala Arg Gly Val Leu Asp Trp Phe
1 5 10 15
Leu Gln Leu Ser Ile Ile Thr Thr Arg Lys Cys Gly Pro Pro His Phe
20 25 30
Lys Thr Gly Thr Ile Leu Thr Arg Ala Glu Lys Tyr Asp Ser Tyr Phe
35 40 45
Gly Asn Phe Val Met Glu Gln Thr Arg Gly Asp Val Leu Leu
50 55 60

<210> 29443
<211> 67
<212> PRT
<213> A.fumigatus

<400> 29443
Arg Thr Arg Pro Arg Ile Leu Arg Ala Phe Leu His Gly Glu Pro Lys
1 5 10 15
Ser Ser Pro Leu Ser Pro Val Pro Ser Arg Arg Leu Pro Asn Arg Phe
20 25 30
Leu Ser Ser Gln Lys Arg Gly Tyr Ser Asp Tyr His Ser Leu Gln Met
35 40 45
Ile Ile Tyr Tyr Phe Gln Tyr Ile Thr Leu Pro Ser Ser Asn Ser Thr
50 55 60
Val Ser Ile
65

<210> 29444
<211> 128
<212> PRT
<213> A.fumigatus

<400> 29444
Met Val Ala Ala Ala Lys Leu Glu Arg Glu Ala Val Glu Lys Lys Asn
1 5 10 15
Glu Gln Leu Arg Ala Gln Val Lys Asp Thr Glu Leu Leu Leu Ala Ser
20 25 30

```
His Gln Glu Gln Leu Ala Glu Leu Lys Ser Val Met Gln Gly Met Asn
        35                  40                  45
Ile Ala Lys Asp Asp Val Glu Val Arg Thr Thr Ile Ser Thr Val Pro
    50                  55                  60
Ser Ser Pro Asp Gly His Gln Gln Leu Pro Gly Ile Phe Pro Arg Ser
65                  70                  75                  80
Leu Glu Thr Ala Asp Pro Pro Glu Gln Ser Pro His Val Glu Glu Ile
                85                  90                  95
Val Pro Gly Pro Ser Thr Ser Phe Pro His Leu Phe Lys Ser Val Cys
            100                 105                 110
Arg Thr Asp Ile Gln Ala Phe Glu Asp Phe Arg Glu Leu Phe Ser Leu
        115                 120                 125
```

<210> 29445
<211> 271
<212> PRT
<213> A.fumigatus

<400> 29445

```
His Leu Asn Trp Val Thr Ala Pro Leu Gln Phe Ser Glu Phe Val Ala
1               5                   10                  15
Ala Leu Ser Ser Pro Pro Trp Gln Ser Met Cys Pro Leu Pro His Ala
            20                  25                  30
Asn Leu Ser Met Val Thr Ile Glu Val Thr Asn Phe Met Ser Ser Leu
        35                  40                  45
Ile Ala Phe Gln Thr Tyr His Leu Arg His Ser Phe Leu Ser Pro Ser
    50                  55                  60
Asn Met Ile Pro Arg Ser Ser Asn His Lys Arg Ser Leu Ser Ser Gly
65                  70                  75                  80
Pro Arg Ser Leu Ser Pro Asp Arg Thr Val Thr Lys Thr Lys Ser Thr
                85                  90                  95
Asn Asp Leu Ala Ala Thr Ala Thr Glu Lys Pro Ser Leu Ala Thr Arg
            100                 105                 110
Ser Asn Ser Ala Gly Asp Ile Pro Asp Ser Gly Phe Ser Thr Leu Arg
        115                 120                 125
Asp Pro Arg Leu Val Asn Asn Ser Glu Ala Ser Asp Thr Ser Ser Thr
    130                 135                 140
Pro Ser His His Pro Asp Leu Ser Ser Glu Val Ala Ala Leu Ser Val
145                 150                 155                 160
Lys Leu Ile Gln Ala Ile Asn Asn Gln Thr Thr Leu Asp Asp Asn Leu
                165                 170                 175
Val Ala Thr Arg Gln Glu Leu Glu Gln Ala Gln Asn Arg Ile Lys Ser
            180                 185                 190
Leu Glu Ser Glu Asn Glu Lys Tyr Arg His Asp Ile Glu Gln Ala Val
        195                 200                 205
Leu Ile Lys Lys Ala Asp Ala Asp Arg Glu Ile Ser Gln Leu Lys Ala
    210                 215                 220
Ala Leu Ala Glu Glu Lys Ala Gln Arg Ala Ile Val Glu Lys Ser Lys
225                 230                 235                 240
Lys Thr Ile Glu Gln Glu Leu Glu Thr Leu Thr Ala Ala Leu Phe Glu
                245                 250                 255
Glu Ala Asn Lys Val Cys Arg Tyr Gln Phe Leu Thr Arg His Tyr
            260                 265                 270
```

<210> 29446
<211> 65

<212> PRT
<213> A.fumigatus

<400> 29446
Ala Val Pro Thr Leu Ser Phe Arg Met Lys Leu His Ala Leu Ile Pro
1 5 10 15
Leu Leu Phe Ala Pro Leu Ala Ala Ser Ala Ala Leu Ser Gly Val Leu
20 25 30
Asn Gly Val Val Asp Thr Asn Ser Glu Leu Ser Cys Tyr Asn Thr Glu
35 40 45
Ile Arg Thr Ser Asn Lys Ala Arg Arg Cys Tyr Ser Arg Gln Arg Ser
50 55 60
Ser
65

<210> 29447
<211> 405
<212> PRT
<213> A.fumigatus

<400> 29447
His Val Asn Leu Gln Val Arg Ala Thr Lys Ile Val Leu Glu Ser Phe
1 5 10 15
Glu Lys Glu Glu Leu Pro Pro Asp Pro Phe Pro Leu Ser Thr Leu Ser
20 25 30
Gly Ala Val Arg Lys Pro Ser Ile Ser Glu Phe Gln Gln Val Arg Asp
35 40 45
Phe Glu His Leu Ala Lys Cys Ala Glu Gln Ile Phe Val Glu Glu Gly
50 55 60
Arg Gly Leu Lys Asp Glu Ile Arg Asn Asp Gln Pro Asp Gly Ala Thr
65 70 75 80
Leu Trp Val Arg Trp Arg Glu Arg Phe His Ser Ser Ile Tyr Arg Val
85 90 95
Leu Leu Ala Gly Ala Ile Leu Ser Arg Ala Tyr Gln Glu Pro Met Tyr
100 105 110
Phe Ala Ala Glu Trp Gly Leu Pro Asn Phe Leu Glu Lys Tyr Val Glu
115 120 125
Ala Leu Ala Ser Gly Gly Met Ser Gly Glu Pro Val Gly Gly Asp Glu
130 135 140
Leu Asp Tyr Leu Val Thr Phe Ala Pro Tyr Asn Leu Gly Glu Ser Gly
145 150 155 160
Arg Ile His Gly Ser Phe Arg Ala Leu Gly Glu Phe Phe Val Gln Gln
165 170 175
Gly Lys Thr Arg Ala His Gln Ser Asn Leu His Glu Gln Thr Thr Ala
180 185 190
Ile Leu Pro Pro Phe Ala Ala Pro Gln Ala Leu Ser Arg Ser Glu Ala
195 200 205
Ala Val Val Phe Val Glu Leu Gly Gln Leu Phe Phe Ala Leu Glu Val
210 215 220
Leu Thr Gly Ile Gln Asp Arg Gln Pro Ile Ile Val Asn Gly Asp Gly
225 230 235 240
Ser Asp Glu His Gly Arg Thr Arg Ile Ala Pro Asp Leu Leu Tyr Lys
245 250 255
Pro Ala Arg Thr Thr Pro Val Val Leu Phe Gly Thr Phe Phe Pro Glu
260 265 270
Tyr Ile Ser Met Pro Ala Lys Ala Ala Asp Ala Val Asp Ser His Leu

```
        275                 280                 285
Val Ala Thr Pro Leu Ser Arg Thr Ser Leu Thr Arg Ser Gly Val Gly
    290                 295                 300
Phe Gln His Ile Tyr Gln Phe Leu Tyr Asp Leu Tyr Arg Met Ala Gly
305                 310                 315                 320
Arg Asp Asn Glu Phe Ser Ser Gln Asn Pro Ala Arg Tyr Pro His His
                325                 330                 335
Gln Phe Phe Glu Tyr Met Phe Arg Glu Tyr Leu Gly Leu Gln Phe Val
            340                 345                 350
Asp Arg Glu Phe Asp Cys His Tyr Asp Glu Phe Met Gly Asp Gly Phe
        355                 360                 365
Ile Phe Ala Glu Arg Asp Asp Leu Leu Ala Ala Ser Asp Phe Ile Glu
    370                 375                 380
Thr Ser Asp Met Thr Ala Leu Ala Ala Leu Phe Glu Pro Ala Ala Ser
385                 390                 395                 400
Val Thr Arg Lys Ala
                405
```

<210> 29448
<211> 528
<212> PRT
<213> A.fumigatus

<400> 29448

```
Ile Gln Gln Trp Met Lys Cys Ser Gly Lys Asp Ile Gln Ser Ser Thr
1               5                   10                  15
Val Ile Cys Glu Pro Pro Leu Leu Leu Ala Val Glu Arg Leu Ser Ser
            20                  25                  30
Leu Thr Leu Gln His Pro Asn Pro Gly Leu Val Lys Arg Leu Val Tyr
        35                  40                  45
Pro Ile Leu Leu Pro Leu Trp Gly Leu Ala Cys Phe Ser Leu Glu Gln
    50                  55                  60
Gln Arg Pro Lys Leu His Glu Lys Val Met Ala Ile Leu Gln Thr Tyr
65                  70                  75                  80
Phe Gly Ile Ser Val Gly Ile Gln Pro Leu Lys Lys Leu Val Asp Asn
                85                  90                  95
Leu Leu Trp Asp Gly Gly Ala Thr Trp Thr Tyr Gly Leu Asp Ser Asn
            100                 105                 110
Asn Leu Leu Val Leu Glu Lys Arg Lys Ser Thr Gly Ser Glu Arg Ser
        115                 120                 125
Asn Ile Val Arg Leu Val Asp Thr Leu Gln Ser Arg Ala Lys Leu Phe
    130                 135                 140
Val Thr Leu Leu Gly Ala Asp Pro Ser Ser Glu Glu Arg Thr Gly Asp
145                 150                 155                 160
Ile Phe Leu Tyr Val Ser Gln Ser Trp Leu Val Gln Pro Ala Gln Glu
                165                 170                 175
Arg Ser Leu Gly Arg Leu Gln Leu Pro Leu Asp Asn Asp Asp Ser Thr
            180                 185                 190
Asn Ile Ile Gln Lys Leu Val Ser Ala Lys Leu Ala Glu Val Leu Leu
        195                 200                 205
Glu Asn Phe Lys Asp Thr Leu Ser Arg Arg Pro Leu Arg Val Leu Glu
    210                 215                 220
Leu Ile Lys Gln Val Ile Glu Gly Glu Leu Asn Arg Val Arg Val Ser
225                 230                 235                 240
Gln Lys Ile Lys Pro Gln Asp Ser Lys Gly Val Ser Leu Ser Leu Leu
                245                 250                 255
```

```
Ala Asn Ile Val Ala Asn Glu Asn His Gly Gln Glu Glu Ala Val Thr
            260                 265                 270
Glu Thr Asp Ala Ala Glu Ser Leu Pro Ala Val Phe Ser Leu Leu Ser
        275                 280                 285
Thr Val Leu Ala Ser Pro Asp Phe Ser Val Thr Gln Glu Thr Leu Pro
    290                 295                 300
Val Leu Gln Glu Leu Lys Leu Val Leu Asp Asp Leu Ile Pro His Leu
305                 310                 315                 320
Pro Ser Ser Leu Ala Lys Pro Gly Thr Thr Ser Ser Met Leu Leu Glu
                325                 330                 335
Ile His Ile Thr Ser Pro Asp Glu Gly Gly Gln Ala Lys Ser Pro Val
            340                 345                 350
Gln Ile Ser Asp Phe Glu Thr His Arg Arg Ala Leu Thr Asn Leu Asn
        355                 360                 365
Ser Asp Leu Pro Pro Val Gln Ala Glu Gly Phe Ser Leu Leu Ser Asp
    370                 375                 380
Leu Ile Lys Arg Ser Ser Pro Val Leu Asp Ile Pro Ser Thr Leu Thr
385                 390                 395                 400
Leu Leu Leu Ser Val Ile Thr Asp Gln Ser Gly Ser Ala Ala Asp Asp
                405                 410                 415
Glu Phe Ile Tyr Leu Asn Ala Ile Lys Leu Ile Gly Thr Leu Ala Ser
            420                 425                 430
Arg His Pro Arg Thr Val Val Lys Thr Leu Val Asp Arg Tyr Ile Asp
        435                 440                 445
Arg Ala Glu Thr Val Gly Leu Asp Gln Arg Leu Arg Ile Gly Glu Ser
    450                 455                 460
Leu Leu Arg Thr Val Gln Asp Leu Gly Glu Ala Leu Thr Gly Glu Thr
465                 470                 475                 480
Ala Lys Ile Leu Gly Glu Gly Met Ile Thr Val Ala Gly Arg Arg Ala
                485                 490                 495
Arg Lys Ala Lys Thr His Lys Arg Arg Lys Glu Glu Leu Glu Lys Glu
            500                 505                 510
Lys Arg Ala Arg Glu Arg Glu Glu Arg Arg Asn Lys Glu Pro Ala Met
        515                 520                 525

<210> 29449
<211> 94
<212> PRT
<213> A.fumigatus

<400> 29449
His Ala Asp Gly Ser Tyr Thr Thr Ala Pro Thr Ser Ser Ser Ser Leu
1               5                   10                  15
Arg Pro Leu Leu Thr Ile Arg Pro Arg Ser Ala Phe Pro Leu His Arg
            20                  25                  30
Ser Pro Cys Thr Thr Thr Gly Val Ile Pro Ser Pro Phe Pro Ser Arg
        35                  40                  45
Ser Tyr Pro Arg Cys Pro Ser Leu Ser Ser Ala Gly Thr Thr Leu Arg
    50                  55                  60
Thr Val Arg Ser Thr Ile Ser Arg Asn Pro Thr Ser Phe Pro Phe Arg
65                  70                  75                  80
Phe Ser Asp Val Ser Ser Thr Val Asn Ser Arg Ser Cys Ala
                85                  90

<210> 29450
<211> 142
```

<212> PRT
<213> A.fumigatus

<400> 29450
Ser Phe Met Arg Gly Gly Phe Val Arg Glu Leu Phe Asp Arg Ser Ile
1 5 10 15
Phe Thr Val Gln Thr Leu Asn Pro Arg Ser Leu Val Pro Thr Leu Ala
20 25 30
Cys Pro Thr Gly Gln Ser Asp Gly Asn Asp Leu Lys Leu Lys Ser Phe
35 40 45
Ile Leu Glu Tyr Tyr Glu Glu Ala Tyr Pro Asp His Gln Pro Arg Leu
50 55 60
Leu Pro Gly Asp Pro Tyr Glu Lys Ala Arg Ala Lys Val Trp Met Asp
65 70 75 80
Phe Val Thr Thr Trp Val Ile Pro Ala Leu His Cys Phe Leu Gln Tyr
85 90 95
Gln Pro Gln Ser Lys Asp Glu Asp Val Ala Thr Glu Thr Asp Lys Val
100 105 110
Arg Gln Glu Phe Leu Ala Arg Leu Lys Glu Ser Thr Lys Glu Met His
115 120 125
Pro Gly Gly Pro Thr Phe Leu Gly Glu Ser Asp Phe Asn Ala
130 135 140

<210> 29451
<211> 260
<212> PRT
<213> A.fumigatus

<400> 29451
Met Pro Phe Cys Arg Lys Phe Gly Ser Pro Gly Val Tyr Ala Leu Leu
1 5 10 15
Gly Gln Phe Ser Pro Gly Arg Pro Arg Trp Glu Arg Ala Gln Asp Gln
20 25 30
Pro Arg Thr Lys Asp Pro Arg Ala Phe Phe Ser Leu Gly Pro Asp Phe
35 40 45
Leu Trp Lys Leu Gly Ala Gly Ala Gly Gly Pro Gly Ala Gly Arg Thr
50 55 60
Gly Ala Ser Ser Leu Gly Ala Ala Ala Gly Pro Ser Leu His Ser Thr
65 70 75 80
Pro Cys Ala Gly Gly Pro Arg Arg Arg Ala Ser Gly Arg Phe Gly Phe
85 90 95
Pro Val Pro Thr Phe Cys Gly Asp Thr Lys Gln Pro Asn Arg Trp Arg
100 105 110
Asp Ser Trp Ala Glu Phe Tyr Ala Gln Glu Arg Leu Leu Thr Val Leu
115 120 125
Glu Thr Ser Glu Lys Arg Asn Gly Lys Asp Val Gly Leu Arg Glu Met
130 135 140
Val Glu Arg Thr Val Arg Ser Val Val Pro Ala Leu Leu Arg Asp Gly
145 150 155 160
His Leu Gly Tyr Asp Arg Glu Gly Lys Gly Glu Gly Ile Thr Pro Val
165 170 175
Val Val His Gly Asp Leu Trp Ser Gly Asn Ala Asp Leu Gly Arg Ile
180 185 190
Val Ser Ser Gly Arg Lys Glu Asp Glu Glu Val Gly Ala Val Val Tyr
195 200 205
Asp Pro Ser Ala Cys Tyr Ala His Ser Glu Tyr Glu Leu Gly Ile Met

```
    210                 215                 220
Lys Met Phe Gly Gly Phe Gly Pro Ala Phe Phe Glu Ala Tyr His Arg
225                 230                 235                 240
Ile Val Pro Lys Thr Glu Pro Val Glu Glu Tyr Glu Asp Arg Val Arg
                245                 250                 255
Leu Tyr Glu Leu
            260
```

<210> 29452
<211> 83
<212> PRT
<213> A.fumigatus

<400> 29452

```
Val Ser Arg Ser Pro Ser Gln Asn Gln Arg Met Gln Arg Pro Asn Ala
1               5                   10                  15
Val Phe Leu Ser Gln Thr Leu Pro Gln Ser Leu Trp Leu Ile Cys Lys
            20                  25                  30
Tyr Gln Glu Pro Ala Arg Asn Asn Gln Val Thr Thr Met Pro Ser Val
        35                  40                  45
Pro Asp Ala Glu Ile Tyr Pro Glu Ala Ser Gly Pro Ala Lys Ala Leu
    50                  55                  60
Val Asp Arg His Gln Ala Glu Gln Pro Leu Lys Leu His Ala Gly Trp
65                  70                  75                  80
Phe Cys Ser
```

<210> 29453
<211> 61
<212> PRT
<213> A.fumigatus

<400> 29453

```
Gly Lys Gly Tyr Cys Glu Ala Leu Pro Val Met Ala Ala Arg Leu Leu
1               5                   10                  15
Lys Pro Ala Ala Asp Thr Lys Ile Phe Leu Cys Gly Pro Pro Gly Met
            20                  25                  30
Ile Asn Ala Ala Lys Lys Gly Leu Val Ser Leu Gly Phe Glu Ala Pro
        35                  40                  45
Gly Ala Val Gly Lys Met Thr Asp Gln Ile Phe Cys Phe
    50                  55                  60
```

<210> 29454
<211> 156
<212> PRT
<213> A.fumigatus

<400> 29454

```
Leu Val Pro Ala Cys Val Trp Ala Ser Ala Gly Tyr Asn Val His Val
1               5                   10                  15
Arg Asp Pro Ser Pro Gln Gln Arg Glu Asp Cys Leu Ala Tyr Val Arg
            20                  25                  30
Asp Asn Val Ala Ala Tyr Ala Glu Ser Thr Gly Gln Lys Pro Gly Thr
        35                  40                  45
Val Gly Thr Thr Glu Ser Leu Glu Glu Ala Val Asp Asn Ala Trp Leu
    50                  55                  60
```

```
Val Ile Glu Ala Val Pro Glu Lys Ile Leu Leu Lys Ile Asp Ala Phe
65                  70                  75                  80
Ala Glu Leu Asp Ala Arg Ala Pro Ser Asp Cys Ile Leu Ala Ser Asn
                85                  90                  95
Ser Ser Ser Tyr Lys Ser Ser Glu Met Leu Glu Lys Val Ser Glu Ala
            100                 105                 110
Thr Lys Ser Arg Ile Leu Asn Met His Tyr Tyr Met Pro Pro Gln Cys
        115                 120                 125
Met Ile Val Glu Leu Met Thr Asp Gly His Thr Ser Ala Asp Ile Phe
    130                 135                 140
Pro Phe Met Val Asp Arg Ser Lys Glu Ala Ala Thr
145                 150                 155
```

<210> 29455
<211> 176
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (51)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29455

```
Phe Leu Asn Phe Ser Gly Trp Gly Gly His Trp Arg Gly Ala Asn Ala
1               5                   10                  15
Thr Ser Glu Thr Val Ile Cys Asp Arg Ser Tyr Thr Thr Arg Arg Trp
            20                  25                  30
Leu Val Ser Met Cys Ser Gln Gly Tyr Thr Val Ala Gly Ser Glu Thr
        35                  40                  45
Asn Thr Xaa Trp Ala Ser Asp Leu Met His Arg Leu Tyr His Val Pro
    50                  55                  60
Ala Val Gly Gln Gly Trp Val Asp His Phe Ala Asp Gly Tyr Asp Glu
65                  70                  75                  80
Val Ile Ala Leu Ala Lys Ser Asn Gly Thr Glu Ser Thr His Asp Ser
                85                  90                  95
Glu Ala Leu Gln Tyr Phe Ala Pro Glu Ala Tyr Ala Phe Asp Ile Ala
            100                 105                 110
Ala Pro Gly Val Gly Cys Ala Gly Glu Ser His Gly Pro Asp Gln Gly
        115                 120                 125
His Asp Thr Gly Ser Ala Ser Ala Pro Ala Ser Thr Ser Thr Ser Ser
    130                 135                 140
Ser Ser Ser Gly Ser Gly Ser Gly Ala Thr Thr Thr Pro Thr Asp Ser
145                 150                 155                 160
Pro Ser Ala Thr Ile Asp Val Pro Ser Val Arg Thr Val Arg Ile Ser
                165                 170                 175
```

<210> 29456
<211> 168
<212> PRT
<213> A.fumigatus

<400> 29456

```
Gly Cys Ser Thr Ser Gly Tyr Asn Ala Arg Val Thr His His Pro Thr
1               5                   10                  15
Leu Lys Lys Glu Asn Val Leu Thr Asn Gly Cys Ser Leu His Ala Leu
```

```
            20                  25                  30
Gln Leu Ser Ser Pro Trp Pro Arg Arg Leu Val Ala Thr Leu Pro Thr
        35                  40                  45
Ser Pro Val Pro Ile Ala Ala Arg Ala Thr Pro His Glu Pro Val Phe
    50                  55                  60
Phe Ser Trp Asp Ala Gly Ala Val Thr Ser Phe Pro Ile His Ser Ser
65                  70                  75                  80
Cys Asn Ala Thr Gln Arg Arg Gln Ile Glu Ala Gly Leu Asn Glu Ala
                85                  90                  95
Val Glu Leu Ala Arg His Ala Lys Ala His Ile Leu Arg Trp Gly Asn
            100                 105                 110
Glu Ser Glu Ile Tyr Arg Lys Tyr Phe Gly Asn Arg Pro Thr Met Glu
        115                 120                 125
Ala Val Gly Ala Tyr Asp Val Ile Val Asn Gly Asp Lys Ala Asn Val
    130                 135                 140
Leu Phe Arg Cys Asp Asn Pro Asp Gly Asn Cys Ala Leu Glu Gly Lys
145                 150                 155                 160
Asp Pro Pro Ser Ile Leu Pro Lys
                165
```

<210> 29457
<211> 115
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (36),(73),(100)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29457

```
Phe Trp Ile Arg Cys Asn Arg Ser Asn Asp Asp Ile Val Ser Gln Ala
1               5                   10                  15
Val Val Glu Val Ser Asp Arg Lys Phe Phe Asp Leu Glu His Asp Arg
            20                  25                  30
Ala Val Val Xaa His Gly Pro Leu Asp Gly Arg Met Gly Ile Ser Ser
        35                  40                  45
Lys Thr Ala Thr Cys Gln Thr Cys Gly Gly Ser Leu Gln Val Cys Asn
    50                  55                  60
Gly His Phe Gly His Val Arg Leu Xaa Phe Thr Cys Leu Pro Cys Arg
65                  70                  75                  80
Ile Leu Gln Thr Cys Tyr Gln His Ser Ala Gly Asn Leu Gln Gly Val
                85                  90                  95
Phe Ala His Xaa Ala Ala Arg Ser Arg Ala Thr Cys Phe Ser Ser Pro
            100                 105                 110
Arg Cys Val
        115
```

<210> 29458
<211> 224
<212> PRT
<213> A.fumigatus

<400> 29458

```
Arg Glu Phe His Ser Gly Pro Arg Pro Asn Phe Leu Glu Arg Arg Arg
1               5                   10                  15
```

```
Asn Cys Arg Ser Arg Gly Gly Gly Gly Phe Lys Glu Pro Ile Arg Ser
            20                  25                  30
Trp Val Thr Met Thr Phe Pro Arg Arg Ser Thr Leu Ala Lys Ser Ile
        35                  40                  45
Glu Leu Cys Gly Ala Asn Arg Gly Glu Gln Lys Ser Leu Glu Tyr Phe
    50                  55                  60
Thr Pro Arg Gln Val Ile Leu Lys Tyr Glu Leu His Val Ala Gln Leu
65                  70                  75                  80
Val Asp Asp Phe Phe Gly Lys Leu Lys Gly Ser Thr Lys Gly Tyr Ala
                85                  90                  95
Ser Leu Asp Tyr Glu Glu Ser Ala Trp Gln Thr Gly Asn Ile Val Lys
            100                 105                 110
Leu Gln Leu Leu Val Asn Lys Ala Pro Val Asp Ala Val Ala Arg Ile
        115                 120                 125
Val His Ser Ser Gln Val Glu Arg Leu Gly Arg Gln Trp Val Thr Lys
    130                 135                 140
Phe Lys Glu His Val Asp Arg Gln Leu Phe Glu Val Val Ile Gln Ala
145                 150                 155                 160
Ala Val Gly Lys Lys Ile Ile Ala Arg Glu Thr Val Lys Pro Tyr Arg
                165                 170                 175
Lys Asp Val Leu Ala Lys Leu His Ala Ser Asp Val Ser Arg Arg Arg
            180                 185                 190
Lys Leu Leu Glu Lys Gln Lys Glu Gly Arg Lys Arg Leu Arg Ala Val
        195                 200                 205
Gly Asn Val Val Ile Glu His Lys Ala Phe Gln Ala Phe Leu Ala Lys
    210                 215                 220

<210> 29459
<211> 149
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (19)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29459
Arg Ala Ile Ile Ser Ser Trp Ala Ala Glu Thr Asp Ile Cys Ile Ser
1               5                   10                  15
Leu Phe Xaa Gln Leu Ile Ser Leu Ala Gly Leu His Ser Asn Ala Thr
            20                  25                  30
Ile Thr Thr Glu Leu Ser Arg Ala Phe Lys Asp Glu Gly Met Leu Ala
        35                  40                  45
Tyr Val Arg Leu Ile Gln Ser Arg Glu Lys Glu Leu Gly Val Glu Val
    50                  55                  60
Leu Thr His Gln Lys Trp Ser Gly Ala Pro Tyr Met Asp Gly Ile Leu
65                  70                  75                  80
Gly Ala Ile Gln Ser Gly Ser Ser Ser Ser Lys Ser Met Gly Glu Gly
                85                  90                  95
Asn Thr Glu Lys Gly Lys Leu Ser Ile His Phe Asp Leu Leu Ala Ile
            100                 105                 110
Asn Ala Asn Asn Pro Lys Leu Gln Ala Ser Lys Gln Ile Pro Arg His
        115                 120                 125
Gly Arg Ile Ile Ile Met Pro Ser Val Leu Leu Asp Arg Cys Arg Asp
    130                 135                 140
```

Lys Lys Lys Ser Pro
145

<210> 29460
<211> 114
<212> PRT
<213> A.fumigatus

<400> 29460
Pro Gly Gly Gln Asp Ser Gln Ile Val Thr Lys Glu Ser Val Thr His
1 5 10 15
Met Arg Ser Asn Tyr Val Leu Gln Thr Ala Asp Asp Pro Pro Ala Phe
20 25 30
Ile Ile Val Lys Thr Glu Gly Trp Leu Thr Gly Ala Lys Asp Val Leu
35 40 45
Asp Lys Val Asn Asp Pro Asn Ile Ala Asp Thr Ile Asn Pro Asn Thr
50 55 60
Tyr Lys Tyr Arg Leu Asn Leu Ser Met Glu Thr Gly Asp Glu Arg Tyr
65 70 75 80
Ala Phe Leu Asn Thr Leu Met Trp Val Ala Ser Gly Cys Arg Arg Gly
85 90 95
His Glu Gly Arg Ser Arg Tyr Ser Cys Ser Leu Arg Ser His Ala Asn
100 105 110
Asn Leu

<210> 29461
<211> 342
<212> PRT
<213> A.fumigatus

<400> 29461
Phe Leu Phe Ser Cys Arg Arg Thr Ile Ser Asp Arg Pro Arg Gly Cys
1 5 10 15
Leu Ile Leu Ile Lys Ile Leu Leu Cys Lys Leu Arg Val Val Tyr Leu
20 25 30
Val Thr Gln Pro Ile Phe Arg Phe Ser Tyr His Ile Phe Ile His Ser
35 40 45
Val His Pro Ser Pro Ile Cys Pro Arg Arg Gly Gly Arg Asp Glu Ser
50 55 60
Leu Asp Arg Pro His Ser Gly Thr His Thr Met Pro Thr Tyr Pro Ile
65 70 75 80
Arg Arg Arg Pro Arg Glu Cys Lys Thr Cys Leu Pro Cys Arg Ala Ser
85 90 95
Lys Val Arg Cys Asp Arg Asn Val Pro Cys Gly Asn Cys Val Lys Arg
100 105 110
Asn Phe Asn Cys Ser Tyr Gly Arg Pro Pro Pro Lys Asp Pro Tyr Pro
115 120 125
Leu Pro Thr Pro Thr Ala Thr Thr Ala Thr Thr Ser Leu Pro Lys Thr
130 135 140
Pro His Ser Ser Ser Leu Pro Ala Tyr Thr Pro Thr Tyr His Gln Thr
145 150 155 160
Thr Asn Ile Ser Gly His Asp Ala Ser Phe Gly Thr Gly Thr Gly Thr
165 170 175
Asp Ser Thr Pro Asp Gln Glu Pro Leu Ser Asp Thr Val Val Ile Thr
180 185 190

```
Gln Gly Glu Trp Asp Glu Ile Asn Ala Lys Met Arg Ala Met Glu Gln
        195                 200                 205
Ile Leu Gly Ser Leu His Thr Leu Phe Asp Thr Arg Ala Arg Arg Lys
    210                 215                 220
Pro Asp Asn Gln Val Thr Asp Ile Ser Pro Glu Ala Glu Gly Ser Pro
225                 230                 235                 240
Pro Ser Glu Gly Ile Tyr Glu Pro Asp Ala Leu Arg Thr Gly Ser Val
                245                 250                 255
His Ile Gly Ser Arg Ser Ala Leu Val Asp Ile Leu Asn Arg Ser Lys
            260                 265                 270
Val Ala Glu Gly Thr Ala Gln Ala Leu Pro Lys Asp Asp Leu Leu Ala
        275                 280                 285
Glu Leu Ala Met Gly Asn Glu Ser Ala Ala Tyr Pro Phe Val Asp Leu
    290                 295                 300
Trp Ser Ser Asp Pro Tyr Thr Phe Asn Ile Ala Gly Val Cys Gly Val
305                 310                 315                 320
Leu Pro His Asp Asp Gln Cys Arg Arg Tyr Gly Asn Trp Phe Arg Trp
                325                 330                 335
Ser Ile Val Leu Pro Tyr
            340
```

<210> 29462
<211> 285
<212> PRT
<213> A.fumigatus

```
<400> 29462
Pro Arg Phe Val Ala Ala Val Gly His Ile Asp Gln Ala Leu Phe Leu
1                   5                   10                  15
Trp Ile His Phe Leu Pro Ala Cys Pro Ser His Leu Arg Leu Ser Leu
            20                  25                  30
Ser Ser Tyr Thr Thr Pro Leu Lys Met Ala Glu Lys Asp Gln Asp His
        35                  40                  45
Pro Pro Ser Ala Pro Pro Pro Thr Ser Tyr Met Ser Asp Thr Thr Ser
    50                  55                  60
Asp Pro Ala Leu Leu Asp Pro Phe Arg Ala Ile Ala Trp Ser Asn Ser
65                  70                  75                  80
Leu Leu Asn Ser Pro Asp Tyr Tyr Pro Ile Arg Thr Trp Ser Arg Leu
                85                  90                  95
Phe Lys Pro His Thr Gly Glu Asp Gly Tyr Phe Ala Ile Thr Leu Val
            100                 105                 110
Thr Ser Ser Thr Ile Pro His Cys Leu Thr Leu Arg Arg Arg Asn Leu
        115                 120                 125
Leu Pro Pro Pro Gln Glu Pro Pro Val Trp Pro Ser Pro Thr Ala Thr
    130                 135                 140
Pro Ser Ser Ala Pro Ser Pro Ile Pro Pro Asp Ile Ile Met Met Val
145                 150                 155                 160
Asp Leu Ala Thr Pro Gly Val Ser Gly His Pro Ser Thr Ala His Gly
                165                 170                 175
Gly Val Val Ala Thr Leu Ile Asp Glu Ala Met Ser Leu Ala Val Ala
            180                 185                 190
Ile His Ala Pro Ser Ser Gly Asp His Pro Arg Gly Ala Ile Tyr Thr
        195                 200                 205
Ala Gln Leu Asp Val Arg Tyr Lys Lys Pro Leu Arg Val Pro Gly Leu
    210                 215                 220
Val Val Ile Arg Ala Lys Val Val Ala Arg Val Gly Arg Lys Tyr Trp
```

```
225                 230                 235                 240
Val Arg Ala Gln Ala Val Gln Glu Glu Ser Asp Glu Asn Asn Gly Arg
                245                 250                 255
Gly Leu Gly Gly Pro Leu Glu Trp Ala Lys Lys Lys Thr Val Val Thr
            260                 265                 270
Asp Ala Met Ala Phe Trp Ile Gln Thr Ala Pro Ser Leu
        275                 280                 285

<210> 29463
<211> 153
<212> PRT
<213> A.fumigatus

<400> 29463
Ser Arg Cys Ser Ala Ser Arg Ser Gly Thr Ser Thr Trp Pro Val Ser
1               5                   10                  15
Pro Leu Pro Ile Pro Phe Leu Gln Arg Arg Leu Trp Cys Leu Pro Pro
            20                  25                  30
Ser Ser Pro Cys Pro Cys Cys Gln Thr His Pro Ala Pro Ser Gly Thr
        35                  40                  45
Cys Pro Pro Glu Thr Pro Arg Pro His Ser Ser Thr Ala Pro Pro Cys
    50                  55                  60
Ser His Gln Ala Gly Thr Val Pro Thr Gly Arg Gln Pro Ala Ala Cys
65                  70                  75                  80
Pro Ala Gln Asp Pro Val Arg Thr Val Gln Pro Ala Ala Thr Pro Gly
                85                  90                  95
Gly Thr Trp Glu Thr Ala Gln Pro Ala Gly Pro Ile Ala His His Asp
            100                 105                 110
Arg Ser Pro Ala Met Leu Gln Gly Ser His Asp Pro Glu Ala Pro Thr
        115                 120                 125
Arg Glu Leu Pro Arg Val Ala Arg Ser Ser Ser Arg Ala Pro Ile Arg
    130                 135                 140
Pro Leu Gln Leu Ser Arg Gly Ser Pro
145                 150

<210> 29464
<211> 77
<212> PRT
<213> A.fumigatus

<400> 29464
Ala His Glu Gln Gln Arg Ala Phe Leu Cys Phe Trp Met Val Trp Tyr
1               5                   10                  15
Asp Ser Asp Pro Leu Val Leu Phe Leu Val Pro Pro Val Leu Asn Asn
            20                  25                  30
Asn Tyr Asn Asn Asn Asn Asn Asn Asn Asn Asn Lys Asp Asn Lys Asn
        35                  40                  45
Ser Tyr Thr Tyr Cys Val Lys Cys Arg Ser Phe Leu Asp Phe Asp Asp
    50                  55                  60
Thr Glu Ser Thr Thr Gly Val Leu Leu Cys Ser Thr Leu
65                  70                  75

<210> 29465
<211> 136
<212> PRT
<213> A.fumigatus
```

<400> 29465
Gly Gln Pro Asn Ile Val Gln Tyr Ile Asp His His Glu His Asp Arg
1 5 10 15
Trp Ile Tyr Ile Ile Met Glu Tyr Val Pro Gly Gly Glu Leu Ser Thr
20 25 30
Tyr Leu Ser Ile His Gly Lys Ile Pro Glu Asp Met Val Lys Thr Leu
35 40 45
Ala Arg Gln Leu Leu His Ala Leu Gln Tyr Leu His Lys Arg Arg Ile
50 55 60
Thr His Arg Asp Ile Lys Pro Asp Asn Ile Leu Ile Ala Ser Leu Glu
65 70 75 80
Pro Leu Arg Val Lys Leu Ser Asp Phe Gly Leu Ser Lys Val Ala Gln
85 90 95
Glu Glu Thr Phe Leu Lys Thr Phe Cys Gly Thr Leu Leu Tyr Cys Ala
100 105 110
Pro Glu Val Tyr Pro Glu Tyr Glu Asn Tyr Arg Arg Gly Glu Ile Arg
115 120 125
Lys Arg Arg Arg Leu Gly Asp Pro
130 135

<210> 29466
<211> 300
<212> PRT
<213> A.fumigatus

<400> 29466
Leu Ile Leu Ile Cys Ser Pro Pro Lys Thr Ser Pro Tyr Asp Gln Ser
1 5 10 15
Val Asp Met Trp Ser Phe Gly Ala Val Leu Phe His Ile Leu Ser Gly
20 25 30
Thr Pro Pro Tyr Thr Gly Arg Gly Asp Asp Arg Gly Ser Gln Met Leu
35 40 45
Arg Asn Ile Met Thr Thr Glu Pro Asp Tyr Asp Val Leu Arg Arg Glu
50 55 60
Gly Val Ser Glu Ala Gly Val Asp Phe Val Arg Arg Leu Leu Asn Arg
65 70 75 80
Asp Pro His Ser Arg Pro Lys Glu Ser Glu Cys Phe Gln His Pro Trp
85 90 95
Ile Arg Asp Val Pro Asp Val Asp Glu Tyr Asp Asp Asn Asp Ile Gln
100 105 110
Pro Ala Asp Phe Gly Ala Leu Ser Asp Ile Gly Glu Asp Leu Glu Asn
115 120 125
Glu Leu Asp Ala Ser Gln Ile Ser Leu Asn Asp Asn Gln Glu Pro Val
130 135 140
Ile Thr Gly Asp Glu Ser His Asp Ser Asn Asn Leu Ala Gln Ser Lys
145 150 155 160
Arg Pro Arg Ile Asp His Leu Pro Ala Asp Ile Arg Tyr Pro Ser Leu
165 170 175
Pro Asn Ile Glu Ser Leu Pro Ala Ala Arg Pro Ile Pro Glu Ser Thr
180 185 190
Pro Arg Arg Leu Phe Gly Glu Ile Thr Ser Ser Ala Leu His Ser Ser
195 200 205
Asn Val Phe Gly Ala Ser Met Asn Ala Phe Gly Gly Asp Asp Leu Ser
210 215 220
Val His Asp Phe Val Ser Ser Thr Gly Glu Ser Ile Ile Ser Asp Gly

```
225                 230                 235                 240
Asn Ser Leu Asn Ser Val Leu Ser Leu Pro Asp Asn Pro Phe Ala Gly
                245                 250                 255
Ser Ala Pro Ser Leu Met Gly Ala Glu Asn Leu Val Gly Gln Leu Asn
            260                 265                 270
Met Asn Ser Trp His Pro Gly Thr Ser Ala His Ser Pro Pro Ala Ala
        275                 280                 285
Ala Glu Leu Pro Ala Leu Lys Thr Ser Leu Asp Glu
    290                 295                 300
```

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Sequence Listing

<210> 29467
<211> 151
<212> PRT
<213> A.fumigatus

<400> 29467

```
Arg Arg Gly Asn Met Tyr Asn Val Thr Gly Gln Ile Gly Lys Gly Ala
1               5                   10                  15
Phe Ala Thr Val Tyr Lys Leu Ala Thr Lys Gln His Gly Ala Val Tyr
            20                  25                  30
Ala Ala Lys Glu Leu Asp Lys Arg Arg Phe Met Lys Asn Gly Ile Leu
        35                  40                  45
Asp Gln Lys Val Asp Asn Glu Met Lys Ile Met Lys Asp Leu Lys His
    50                  55                  60
Val Ser Phe Gly Thr Pro Ser Ser Asn Thr Gly Leu Leu Glu Leu Ile
65                  70                  75                  80
Thr Thr Glu Asp Ser Pro Thr Ser Cys Asn Thr Leu Ile Thr Met Asn
                85                  90                  95
Met Thr Asp Gly Phe Ile Leu Ser Trp Asn Met Cys Leu Ala Ala Ser
            100                 105                 110
Phe Leu Leu Ile Phe Gln Phe Met Ala Lys Phe Leu Lys Thr Trp Ser
        115                 120                 125
Lys His Trp Pro Gly Ser Ser Cys Met His Cys Asn Ile Phe Thr Asn
    130                 135                 140
Ala Gly Leu Arg Ile Val Thr
145                 150
```

<210> 29468
<211> 118
<212> PRT
<213> A.fumigatus

<400> 29468

```
Thr Ile Pro Pro Ala Ala Cys Thr Ala Asn Val Asp Ser Pro Leu Leu
1               5                   10                  15
Leu Leu Leu Leu Leu Leu Pro Leu Pro Leu Leu Leu Pro Leu Pro Leu
            20                  25                  30
Pro Leu Pro Leu Pro Leu Pro Leu Pro Leu Pro Leu Val His Lys Ser Phe Leu
        35                  40                  45
Ile His Thr Pro Leu Ala Gln Ile Gln Ile Ser Leu Ile Thr Leu Pro
    50                  55                  60
Phe Gly Pro Cys Ala Cys Leu Glu Tyr Ser Cys Arg Leu Leu Asn His
65                  70                  75                  80
Phe Ala Leu Ala Val Thr Phe Cys Ser Ala Phe Leu Lys Met Arg Gln
                85                  90                  95
Leu Leu Ser Gly Leu Leu Glu Pro Pro Arg Tyr Val Pro Val Phe Phe
```

100 105 110
Arg Gly Leu Gly Ser Ser
115

<210> 29469
<211> 209
<212> PRT
<213> A.fumigatus

<400> 29469
Pro Gln Gly Asp Ala Leu Trp Asp Ile Pro Ser Asp Trp Ser Gly Glu
1 5 10 15
Glu Thr Arg Pro Arg Arg Asn Ala Arg Thr Glu Pro Arg Phe Leu Arg
20 25 30
Arg Ser Gln Arg Ala Arg Lys Ser Val Gln Val Glu Asp Thr Pro Thr
35 40 45
Arg Thr Ser Arg Arg Leu Ala Arg Val Ile Glu Asp Arg His Glu Arg
50 55 60
Ser Ser Glu Glu Asp Asp Ser Glu Met Glu Glu Leu Asp Lys Ile Ile
65 70 75 80
Asp Lys Gln Leu Gly Gly Ala Arg Leu Ile Gln Ser Ile Asn Glu Asn
85 90 95
Arg Ser Thr Asp Val Ser His Gly Ser Ile Gly Glu Glu Arg Gly Pro
100 105 110
Gln Glu Gly Glu Asp Asp Arg Ala Ser Glu Val Pro Val Glu Ser Thr
115 120 125
Ser Pro Ser Lys Lys Leu Gly Phe Gln Asn Phe Lys Thr Thr Asp Ala
130 135 140
His Glu Asp Gln Glu Asp Asp Pro Glu Trp Ala Pro Asp Thr Ala Ala
145 150 155 160
Ser Glu Glu Leu Gly Glu Glu Asp Asp Glu Arg Gly Trp Asp Ile Thr
165 170 175
Arg Pro Asp Gly Val Asn Thr Asn His Pro Asp Trp Lys Ile Asp Ser
180 185 190
Gly Ala Ala Gln Pro Ala Glu Glu His Gly Asp Ile Pro Trp Trp Phe
195 200 205
Gln

<210> 29470
<211> 141
<212> PRT
<213> A.fumigatus

<400> 29470
Glu Thr Thr Arg Val Leu Glu Thr Gly Thr Gly Thr Glu Arg Gln Ser
1 5 10 15
Tyr Gln Arg Tyr Leu Asn Leu Ser Lys Arg Ser Val Asn Gln Lys Ala
20 25 30
Leu Met Asn Gln Arg Gln Arg Gln Arg Gln Arg Gln Arg Gln Arg Gln
35 40 45
Arg Gln Lys Gln Arg Lys Arg Lys Lys Lys Lys Lys Lys Lys Gln Gly
50 55 60
Arg Val Asp Ile Arg Arg Thr Arg Ser Arg Arg Asn Gly Leu Ser Pro
65 70 75 80
Arg Asp Gln Ala Arg Asp Ala Glu Leu Met Gly Ile Ser Ala Thr Leu

```
                85                  90                  95
Lys Ser Arg Phe Tyr Ala His Gly Gln His Arg Arg Gln Cys Ile His
            100                 105                 110
Ile Asp Arg Leu Leu Met Thr Met Lys Ala Thr Glu Ala Arg Val Asn
        115                 120                 125
Leu Arg Lys Val Leu Leu Leu Pro Gln Ala Ser Ser Leu
    130                 135                 140
```

<210> 29471
<211> 420
<212> PRT
<213> A.fumigatus

<400> 29471

```
Leu Arg Ser Cys Pro Thr Arg Gly Arg Thr Arg Gly His Thr Leu Val
1               5                   10                  15
Val Pro Val Ala Gln Thr Glu Val Asp Ala Phe Ser Lys Lys Pro Asn
            20                  25                  30
Arg Arg Ser Leu Pro Val Arg Asn Gly Leu Arg Asp Asp Thr Ser Thr
        35                  40                  45
Arg Asp Arg His Arg Asp Arg Thr Ala Glu Leu Ser Glu Ile Ser Glu
    50                  55                  60
Ser Glu Gln Glu Glu Cys Glu Ser Glu Ser Ser Tyr Glu Pro Glu Ala
65                  70                  75                  80
Glu Ala Glu Ala Glu Ala Glu Ala Glu Ala Glu Ala Glu Ala Glu Glu
                85                  90                  95
Glu Glu Glu Glu Glu Glu Glu Glu Ala Gly Ala Ser Arg His Ser Pro
            100                 105                 110
Tyr Thr Gln Pro Glu Glu Trp Ser Ile Thr Ala Arg Pro Ser Lys Arg
        115                 120                 125
Arg Arg Thr Asp Gly Tyr Gln Arg Asn Pro Gln Val Glu Ile Leu Arg
    130                 135                 140
Thr Arg Ser Thr Pro Pro Pro Val His Ser Tyr Arg Ser Thr Pro Asp
145                 150                 155                 160
Asp Asn Glu Ser His Arg Ser Ser Arg Gln Pro Ser Gln Ser Ser Ala
                165                 170                 175
Val Ala Ala Ser Leu Ile Thr Val Ile Ser Asp Asp Ala Gln Asn Glu
            180                 185                 190
Ala Leu Val Arg Ser Asp Arg Asp Tyr Ala Gly Asp Lys Ala Trp Phe
        195                 200                 205
Ala Glu Ala Cys Asn Leu Gly Gln Gln Arg Glu Asn Trp Asp Ile Ile
    210                 215                 220
Val Thr Ala Ala Ser Glu Leu Lys Glu Asn Ile Asp Pro Ser Arg Ala
225                 230                 235                 240
Glu Ser Phe Gly Thr Ile Asp Lys Gln Val Ser Gln Leu Arg Thr Arg
                245                 250                 255
Tyr Ala Lys Ile Asn Lys Lys Leu Lys Ser Gln Gln Gly Pro Leu Arg
            260                 265                 270
Glu Asn Leu Arg Glu Cys Asp Asp Leu Arg Glu Ala Ile Ser Asp Glu
        275                 280                 285
Gly Thr Arg Ile Leu Asp Ser Val Tyr Trp Leu Ser Leu Arg Gln Ala
    290                 295                 300
Glu Ser His Glu Met Leu Lys Gln Ala His Arg Leu Val Lys Gln Phe
305                 310                 315                 320
Glu Ala Arg Val Phe Pro Thr Met Ile Lys Val Ile Leu Leu Cys Phe
                325                 330                 335
```

```
Glu Gly Tyr Tyr Thr Asn Arg Lys Leu Phe Pro Ser Ala Tyr Arg His
            340                 345                 350
Phe Ala Gly Ala Met Lys Leu Leu Leu Arg Phe Cys Asp Arg Ile Ala
        355                 360                 365
Ser Leu Arg Thr Glu Arg Tyr Ile Arg Cys Lys Ile His Ser Arg Thr
    370                 375                 380
Ile Arg Lys Pro Leu Arg Glu Leu Ile Lys Ala Val Glu Asp Asn Leu
385                 390                 395                 400
Leu Gln Arg His Leu Asn Glu Thr His Gly Ala Thr Arg Gly Glu Lys
                405                 410                 415
Glu Gly Met Asp
            420
```

<210> 29472
<211> 482
<212> PRT
<213> A.fumigatus

<400> 29472

```
Leu Ser Phe His Gly Cys Gly Glu Asp Ala Trp Glu Gly Pro Gln Trp
1               5                   10                  15
Leu Leu Arg Glu Ser Asn Arg Asp Thr Arg His Ala Tyr Ile Asp Ala
            20                  25                  30
Phe Leu Thr Trp Leu Ser Phe Glu Thr Thr Gln Asp Glu Ile Lys Ala
        35                  40                  45
Thr Ser Arg Pro Val Lys Gly Thr Gly Thr Leu Pro Arg Arg Glu Ser
    50                  55                  60
Pro Glu Val Thr Lys Lys Asp Asp Lys Arg Pro Leu Asn Val Ser Gln
65                  70                  75                  80
Arg Glu Lys Val Ile Ile Ala Ala Gln Leu Asn Phe Leu Arg Leu Phe
                85                  90                  95
His Leu Thr Ile Tyr Asp Ile Ala Leu Asp Cys Pro Thr Asp Glu Ser
            100                 105                 110
Glu Ile Leu Leu Leu His Leu Leu Leu Thr Asn Leu Val Glu Arg Leu
        115                 120                 125
Gly Val Asn Ala Val Arg Phe Gly Leu Pro Met Val Leu Lys Leu Gln
    130                 135                 140
Glu Asp Leu Ala Ser Val Gln Ser Leu Arg Ser Pro Thr Ala Lys Val
145                 150                 155                 160
Asn Ile Gly Ser Leu Val His Gly Tyr Leu Trp Ala Val Cys Glu Lys
                165                 170                 175
Phe Glu Leu Glu Gly Tyr Lys Val Gly Asn Glu Ile Arg Ile Glu Ile
            180                 185                 190
Asp Arg Arg Lys Gln Asn Gly Leu Trp Leu Asp Arg Val Arg Met Pro
        195                 200                 205
Ala Ile Gly Ile Asp Asp Ile Ile Glu Ser Arg Glu Lys Ser Pro Arg
    210                 215                 220
Lys Asp Asp Ser Met Ala Gln Ser Glu Leu Ile Thr Phe Lys Asp Gly
225                 230                 235                 240
Ile Glu Glu Leu Val Asn Arg Ile Glu Glu Val Tyr Asn Ser Ser Ile
                245                 250                 255
Thr Ser Ala Ala Ser Ser Pro Pro Ala Ser Pro Glu His Ser Tyr Ala
            260                 265                 270
Leu Pro Val Leu Gly His Gly Ala Ala Thr Ala Ser Ser Leu Lys Cys
        275                 280                 285
Asn Leu Pro Ser Ser Ile Lys Glu Gln Met Leu Ser Pro Trp Ser Arg
```

```
    290                 295                 300
Glu Ala Cys Leu Ala Ala Ser Glu Lys Glu Lys Ala Glu Ala Met Ser
305                 310                 315                 320
Ile Ser Gly Ser Arg His Gly Thr Leu Gly Leu Arg Asn Tyr Ala Thr
                325                 330                 335
Leu Asn Gly Ala Gly Asn Ser Ser His Ser Ile Ala Thr Ser Ala His
            340                 345                 350
Gln Ser Ala Phe Gly Ala Ala Ala Gly Leu Gln His Leu Arg Arg Thr
        355                 360                 365
Ser Ile Pro Asp Ser Gln Gly Thr Pro Val Asn Gly Ser Gly Arg Glu
    370                 375                 380
Ser Pro Val Arg Val Asn Glu Leu Arg Gln Val Leu Ser Val Asn Val
385                 390                 395                 400
Glu Gly Asn Ala Arg Arg Leu Ser Pro Leu Arg Gly Arg Leu Asp Ala
                405                 410                 415
Ser Asn Gly Ser Ile Val Ser Ser Ser Ser Glu Ser Met Val Ser Gly
            420                 425                 430
Phe Ser Leu Ser Glu Tyr Asp Ala Asp Gly Asn Ser Ile Arg Pro Gln
        435                 440                 445
Ser Ile Arg Asp Gly Arg Leu Ser Ala Asn Gly Asp Gly Met Glu Thr
    450                 455                 460
Pro Lys Ala Ser Ser Ile Gly Val Asn Gly Ala Gln Ser Arg Gln Ser
465                 470                 475                 480
Ser Ser
```

Application Number: 2003200466
Lodged: 29 Jan 2003

<210> 29473
<211> 599
<212> PRT
<213> A.fumigatus

<400> 29473

```
Ala Asn Ile Leu Gln Leu His Gly Arg Asp Lys Val Ser Thr Leu Tyr
1               5                   10                  15
Lys Asn Met Lys Gly His Lys Thr Val Leu Glu Lys Asn Arg Ile Val
            20                  25                  30
Leu Glu Ser Leu Asn Gly Leu Thr Thr Cys Phe Met His Val Glu Pro
        35                  40                  45
Asp Gly Cys Ser Arg Leu Tyr Gln Tyr Ser Gly Arg His Glu Gln Glu
    50                  55                  60
Pro Ser Gln Arg Gln Asn Leu Val Ala Ile Asn Thr Tyr Thr Asp Lys
65                  70                  75                  80
Leu Thr Leu Arg Ser Arg Glu Glu Tyr Asp Gly Lys Gly Ala Leu Arg
                85                  90                  95
Asn Glu Phe Val Tyr Asp Tyr Pro Glu Ala Ser Lys Thr Lys Leu Pro
            100                 105                 110
Met Gln Arg Gln Cys Leu Ala Gly Glu Leu Glu Gly Gln Val Val Gln
        115                 120                 125
Tyr Asp Gln Arg Gly Tyr Ile Thr Thr Gly Ser Ala Met Arg Gly Val
    130                 135                 140
Asn Pro Val Gln Phe Gln Tyr Trp Tyr Arg Lys Asn Ala Lys Phe Asp
145                 150                 155                 160
Asp Glu Leu Leu Arg Ala Glu Tyr Val Phe Pro His Ile Lys Ile Lys
                165                 170                 175
Val Ala Trp Ser Met Pro Pro Arg Thr Arg Pro Glu Arg Leu Asp Lys
            180                 185                 190
```

```
Trp Ile Pro Tyr Pro Arg Val Thr Glu Ala Val Phe Ile Gln Asp Gly
        195                 200                 205
Asp Val Tyr Asn Ala Gln Trp Thr Tyr Asp His Lys Phe His Pro Ile
    210                 215                 220
Ile Ala Thr Thr Leu Asn Gly Glu His Ile Pro Thr Pro Pro Met Ile
225                 230                 235                 240
Cys Asp Asp Trp Phe His Val Leu Asp Lys Pro Thr Gly Cys Thr Leu
                245                 250                 255
Leu His Asp Asn Pro Leu Val Ser Phe Ser Ser Thr Lys Thr Asn Ile
            260                 265                 270
Ile Ala Arg Leu Met Arg Leu Asn Val Lys Gln Tyr Pro Ile Pro Thr
        275                 280                 285
Ser Arg Ala Arg Thr His Leu Trp Lys Ser Trp Lys Ala Ser Lys Glu
    290                 295                 300
Phe Asp Ala Val Thr Thr Arg Trp Leu Asp Glu Ile Leu Leu Arg Ser
305                 310                 315                 320
Asp Arg Ile Leu Arg Pro Tyr Trp Arg Arg Arg Asp Trp Gly Arg Leu
                325                 330                 335
Glu Ser Ala Ala Asp Tyr Leu Asp Ala Gln Val Asp Thr Ile Leu Ala
            340                 345                 350
Arg Val Asp Ile Asp Pro Glu Ile Ser Ser Trp Thr Gln Leu Ala Phe
        355                 360                 365
Lys Ile Ser Asp Leu Tyr Ser Phe Gly Gln Gly Gly Asp Ala Arg Ile
    370                 375                 380
Asn Thr Arg Thr Leu Ser Thr Gln Leu Gln Asp Thr Asp Ser Glu Leu
385                 390                 395                 400
His Val Leu Ala Met Asp Thr Gly Thr Trp Pro Asn Glu Pro Gly Gly
                405                 410                 415
Val Ser Ala Cys Arg Arg Asp Met Val Asn Asp Leu Lys His Ile Arg
            420                 425                 430
Trp His Ile Leu Ala Glu Ala Ala Asn Asp Phe Gly Val Pro Arg Phe
        435                 440                 445
Gln Ile Glu Arg Asn Val Gln Ser Leu Thr Val Leu Pro Gln Trp Gly
    450                 455                 460
Leu Asp Phe Leu Asn Pro Thr His Gly Val Phe Gln Asn Cys Leu Asp
465                 470                 475                 480
Ser Ala Val Val Glu Lys Ser Tyr Asp Thr Thr Val Ala Asp Ile Arg
                485                 490                 495
Arg Asn Phe Leu Pro Ile Leu Ser Ser Ile Val Arg Cys Ser Arg Thr
            500                 505                 510
Asp Gln Leu Thr Arg Ser His Ile Glu Glu Ala Thr Arg Ala Leu Val
        515                 520                 525
Asp Leu Asn Thr Tyr Phe Glu Ser Ser Arg Ser Trp Asn Asp Val Trp
    530                 535                 540
Met Ser Asp Thr Val Lys Gln Ala Trp Arg Glu Met Trp Leu Ser Glu
545                 550                 555                 560
Asp Thr Pro Gly Ala Val Pro Val Ser Gln Trp Leu Glu Ser Glu Lys
                565                 570                 575
Pro Thr Leu Leu Gln Leu Asp Ala Ala Leu Asp Gly Phe Gln Arg Gly
            580                 585                 590
Ala Arg Ser Arg Ser Ile Gly
        595
```

<210> 29474
<211> 912
<212> PRT

<213> A.fumigatus

<400> 29474

```
Arg Arg Lys Thr Asp Gln Gly Ser Ile His Thr Asn Asp Glu Gly Thr
1               5                  10                  15
Glu Thr Asn Pro Glu Val Pro Pro Gly Asp Glu Lys Gln Ser Ser Gln
            20                  25                  30
Pro Glu Val Gly Glu Glu Arg Ser Pro Ser Pro Ser Arg Ala Ser Ser
        35                  40                  45
Thr Phe Gly Asp Ser Ser Leu Gly His Arg Tyr Ser Ser Ile Ser Ser
    50                  55                  60
Val Ser Thr Ala Thr Gly Leu Gly Ser Pro Val Pro Leu Ser Ser Ile
65                  70                  75                  80
Gln Lys Leu Glu Pro Glu Gln Val Ala Thr Pro Pro Ser Pro Arg Arg
                85                  90                  95
Ile Ser Pro Glu Arg Ser Arg Ser Thr Ser Pro Thr Lys Gly Leu Gly
            100                 105                 110
Gly Phe Val Gln Ser Ala Met Met Lys Arg Ser Asp Ser Val Ser Lys
        115                 120                 125
Arg Trp Ser Ala Gln Leu Pro Ser Gly Val Ser Arg Gly Val Asn Ser
    130                 135                 140
Phe Ala Ser Asn Arg Asn Ser Ile Ala Gly Leu Ala Ser Gly Asp Ala
145                 150                 155                 160
His Ala Pro Ala Ser Pro Ser Arg Leu Gly Arg Glu Asp Pro Phe Ile
                165                 170                 175
Ala Ser Lys Arg Pro Ser Ser Ser His Ser Glu Ala Thr Ile Val His
            180                 185                 190
Asn Ala Lys Glu Ser Glu Arg Pro Ala Thr Pro Pro Val Val Asn Lys
        195                 200                 205
Val Glu Thr Asp Glu Ala Thr Ala Arg Pro Thr Leu His Ile Arg Ala
    210                 215                 220
Leu Ser Thr Leu Ser Gly Asn Gly His Asp Ser Asp Ser Asn Ser Leu
225                 230                 235                 240
Pro Ser Thr Ser Pro Val Val Ser Arg Thr Met Asp Pro Arg Arg Trp
                245                 250                 255
Ser Pro Thr Lys Ser Thr Trp Leu Glu Ser Ala Leu Asn Arg Pro Asp
            260                 265                 270
Ser Pro Lys His Lys Arg Gln His Ser Gln Gln Thr Ser Trp Ala Lys
        275                 280                 285
Asp Arg Gln Ser Arg Ala Ser Val Asp Leu Gly Arg Val Asn Ser Phe
    290                 295                 300
Lys Glu Val Thr Thr Val Gly Leu Met Arg Ser Ala Ala Pro Gly Ser
305                 310                 315                 320
His Tyr Lys Thr Pro Ser Val Ser Gly Ile Pro Asp Leu Pro Ser Asn
                325                 330                 335
Leu Asp Ile Asn Lys Ser Lys Glu Ser Arg Asp Gln Pro Leu Ser Tyr
            340                 345                 350
Ser Val Asp Ser Glu Pro Ser Pro Ala Glu Thr Leu Lys Val Glu Pro
        355                 360                 365
Thr Pro Asp His Glu Thr Thr Gln Lys Val Asp Asn Thr Arg Glu Ser
    370                 375                 380
Val Asp Met Lys Pro Glu Ala Ser Pro Thr Lys Lys Glu Gly Gly Pro
385                 390                 395                 400
Glu Gly Lys Ser Glu Asp Ala Pro Thr Arg Lys His Ala Pro Ser Leu
                405                 410                 415
Leu Val Pro Val Lys Lys Ser Glu Thr Arg Ala Pro Leu Ser Ser Pro
```

```
            420                 425                 430
Arg Asp Leu Leu Trp Asn Arg Pro Lys Pro Gln Ser Pro Val Ile Asp
        435                 440                 445
Phe Gly Ala Asn Leu Arg Lys Arg Glu Ile Thr Lys Asp Glu Ala Pro
    450                 455                 460
Lys Gln Glu Pro Glu Phe Lys Asn Val Phe Gly Lys Leu Lys Lys Thr
465                 470                 475                 480
Glu Ser Ser Thr Tyr Val Ala Pro Asp Glu Leu Arg Asn Asn Ile Leu
                485                 490                 495
Lys Gly Lys Ala Ala Leu Asn Ala Thr Gly Gly Pro Lys Lys Thr Ser
            500                 505                 510
Lys Val Asp Asp Leu Lys Glu Ser Ile Leu Arg Gln Lys Glu Ala Met
        515                 520                 525
Lys Ala Thr Gly Gly Leu Leu Arg Arg Asn Thr Ala Gly Glu Ile Asp
    530                 535                 540
Ala Pro Ala Lys Met Ile Pro Glu Ala Ile Ala Lys Arg Asn Asn Leu
545                 550                 555                 560
Ser Lys Ser Ser Ser Ser Ser Arg Ser Thr His Ser Gly Gly Ala Leu
                565                 570                 575
Ala Ser Pro Ser Ser Glu Asp Asn Ser Val Pro Asn Asp Leu Arg Asn
            580                 585                 590
Asp Gln Lys Ser Pro Ser Phe Pro Arg Lys Asp Glu Gln Ala Gln Glu
        595                 600                 605
Ala Gln Ser Ser Gln Thr Ala Ala Glu Val Ser Thr Pro Asn Glu Gly
    610                 615                 620
Lys Glu Gln Leu Ala Asp Leu Ala Ser Ser Glu Ala Gly Asn Gly Glu
625                 630                 635                 640
Ile Lys Lys Gly Asp Val Glu Asn Gln Leu Ile Thr Asp Ser Ala Val
                645                 650                 655
Thr Ala Glu Asn Thr Ser Glu Ile Arg Asp Lys Gln Ile Glu Glu Ala
            660                 665                 670
Ile Lys Pro Val Arg Ala Leu Pro Ser Gly Thr Val Ala Glu Ala Ala
        675                 680                 685
Glu Ala Pro Ala Ala Thr Glu Gly Leu Pro Thr Lys Gly Gln Leu Ala
    690                 695                 700
Gly Arg Ile Asn Pro Ala Leu Ala Asp Leu Leu Ser Arg Gly Pro Leu
705                 710                 715                 720
Ile Ile Gly Gly Asn Ser Asn Lys His Phe Ser Thr Asp Ser Ile Arg
                725                 730                 735
Glu Gly Ser Ser Lys Phe Ser Asp Thr Gln Ala Thr Ala Pro Leu Ala
            740                 745                 750
His Met Thr Lys Asn Arg Ala Lys Gly Pro Lys Arg Arg Pro Pro Lys
        755                 760                 765
Leu Ala Val Thr Glu Leu Thr Thr Pro Leu Ala Asn Asp Asp Ala Thr
    770                 775                 780
Ile Pro Glu Asn Asp Asn Ser Ser Ser Asp Phe His Glu Thr Gly Leu
785                 790                 795                 800
Ala Pro Ser Ser Ser Gln Asp Ile Ala Lys Thr Ser Val Gly Trp Pro
                805                 810                 815
Leu Pro Asp Ala Glu Thr Thr Gly Pro Ile Val Phe Glu Pro Thr Leu
            820                 825                 830
Pro Pro Leu Thr Tyr Thr Ala Ser Glu Lys Pro Val Glu Phe Lys Arg
        835                 840                 845
Thr Ile Pro His Leu Met Glu Arg Arg Leu Glu Gln Lys Leu Ala His
    850                 855                 860
Arg Asp Ser Lys Ser Ser Leu Asp Met Asn Pro Ser Pro Ser Pro Met
```

```
865                 870                 875                 880
Asp Asp Leu Glu Asp Ile Glu Asn Leu Gly Asp Ser Pro Ser Arg Arg
                885                 890                 895
Pro Thr Leu Pro Pro Lys Val Phe Lys Gly Ala Gly Arg Ser His Ser
            900                 905                 910
```

<210> 29475
<211> 87
<212> PRT
<213> A.fumigatus

<400> 29475

```
Phe Trp Ser Leu Pro Gln Gly His Thr Glu Tyr Asp Val Ala Met Asp
1               5                   10                  15
Met Asn Tyr Ile Thr Leu Val Glu His Met Leu Pro Val Glu Ala His
            20                  25                  30
Ala Arg Leu Arg Leu Ser Gln Val Leu Gly Asn Leu Met Tyr Lys Asp
        35                  40                  45
Met Gly His Ala Ile Glu Pro Lys Pro Arg Asn Ile Arg Tyr Cys Pro
    50                  55                  60
Thr Asn His Trp Lys Lys Ala Phe Ala Thr Glu Leu Thr Pro Arg Phe
65                  70                  75                  80
Ala Thr Thr Asn Ser Arg Leu
                85
```

<210> 29476
<211> 133
<212> PRT
<213> A.fumigatus

<400> 29476

```
His Gln Ile Pro Gly Phe Asp Thr Ile Val Ser Cys Leu Gly Arg Asn
1               5                   10                  15
Met Ile Ala Ala Gln Ile Asn Leu Ile Arg Ile Ala Glu Thr Cys Pro
            20                  25                  30
Asn Val Ile Arg Phe Phe Pro Ser Glu Tyr Gly Thr Asp Ile Glu Tyr
        35                  40                  45
Gly Pro Gln Ser Ala His Glu Lys Pro His Gln Phe Lys Leu Gln Val
    50                  55                  60
Arg Lys Phe Ile Arg Glu Glu Val Lys Arg Leu Glu His Thr Tyr Leu
65                  70                  75                  80
Val Thr Gly Pro Tyr Ala Asp Leu Tyr Leu Glu Asn Ala Ser Lys Cys
                85                  90                  95
Pro Arg Ala Gly Thr Phe Asp Val Ala Asn Lys Lys Ala Val Leu Leu
            100                 105                 110
Gly Asp Gly Asn Gly Arg Ile Ser Leu Thr Thr Met Ser Glu Tyr Val
        115                 120                 125
Ala Trp Thr Cys Pro
    130
```

<210> 29477
<211> 61
<212> PRT
<213> A.fumigatus

<400> 29477

```
Pro Leu Leu Leu Tyr Phe Pro Asn Ala Gly Arg Gln Pro Glu Asp Asn
1               5                  10                  15
Ala Phe Pro Leu Asp Phe Pro Gly Arg Thr Ala Glu Gln Tyr Pro Thr
            20                  25                  30
Ser Asp Ala Arg Trp Ala Ala Thr Tyr Thr Val Glu Cys Val Ser Val
        35                  40                  45
Pro Glu Tyr Ser Cys Ser Ser His Ala Ala Asp Asp Val
    50                  55                  60
```

<210> 29478
<211> 249
<212> PRT
<213> A.fumigatus

<400> 29478

```
Leu Ala Arg Gly Gly Glu Cys Leu Ser Gly Gly Asp Asp Ser Ala Ile
1               5                  10                  15
Arg Thr Arg Leu Arg Asp Leu Val Trp Ser Val Ser His Val Pro Asn
            20                  25                  30
Arg Ala Trp Asn Gly Ser Tyr Arg Phe Arg Asn Val Ser Ala Leu Tyr
        35                  40                  45
Trp His Cys His Gly Asp His Gly Gly Cys Tyr Asp Ile Pro Thr Ile
    50                  55                  60
Asp Asp Asn Tyr Ser Phe Arg Gln Ala Phe Pro Val Leu Cys Arg Ile
65                  70                  75                  80
Leu Thr Glu Leu Lys Leu Leu Gly Thr Asn Val Gly Val Ile Val Leu
                85                  90                  95
Ser Ala Gly Val Gly Asn Asp Val Val Gly Trp Val Leu Leu Ala Leu
            100                 105                 110
Cys Val Ala Leu Val Asn Ala Gly Ser Gly Ile Thr Ala Leu Trp Val
        115                 120                 125
Leu Leu Val Ala Ala Gly Tyr Ile Val Phe Leu Ala Leu Val Phe Arg
    130                 135                 140
Pro Leu Phe Met Arg Phe Leu Asn Lys Thr Gly Ser Leu Gln Lys Gly
145                 150                 155                 160
Pro Ser Gln Ser Val Val Thr Ile Thr Ile Leu Ile Ala Leu Ala Ser
                165                 170                 175
Ala Phe Phe Thr Gln Ile Ile Gly Ile His Ala Ile Phe Gly Gly Phe
            180                 185                 190
Ile Ile Gly Leu Leu Cys Pro His Glu Gly Gly Phe Ala Ile Lys Leu
        195                 200                 205
Thr Glu Lys Ile Glu Asp Leu Val Ala Val Leu Phe Leu Pro Leu Tyr
    210                 215                 220
Phe Asn Leu Ser Ala Tyr Ser Thr Asn Leu Val Leu Leu Val Phe Ala
225                 230                 235                 240
Thr Gly Leu Ala Gly Leu Ala Leu Arg
                245
```

<210> 29479
<211> 167
<212> PRT
<213> A.fumigatus

<400> 29479

```
Leu Asp Gln Ala Ser Ile Ile Ile Ile Leu Cys Arg Leu Ile His Trp
1               5                  10                  15
```

```
Pro Leu Ser Lys Leu Arg Gln Pro Arg Val Ile Ala Glu Val Ile Ala
            20                  25                  30
Gly Ile Val Leu Gly Pro Ser Val Met Gly Arg Ile Pro Gly Phe Thr
        35                  40                  45
Glu Ala Ile Phe Pro Ala Ala Ser Ile Pro Asn Leu Thr Leu Val Ala
    50                  55                  60
Asn Leu Gly Leu Val Leu Phe Leu Phe Leu Val Gly Leu Glu Thr Asp
65                  70                  75                  80
Leu Arg Phe Leu Ile Ser Asn Trp Arg Val Ala Ala Ser Val Ser Ala
                85                  90                  95
Ala Gly Met Ile Leu Pro Phe Gly Leu Gly Ser Ala Ile Ser Tyr Gly
            100                 105                 110
Leu Tyr His Thr Phe Arg Thr Glu Pro Gly Met Ala His Ile Asp Phe
        115                 120                 125
Gly Thr Tyr Leu Leu Phe Ile Gly Ile Ala Met Ala Ile Thr Val Gly
    130                 135                 140
Val Met Thr Ser Gln Arg Leu Met Thr Thr Thr His Ser Gly Arg Leu
145                 150                 155                 160
Ser Arg Ser Cys Ala Val Ser
                165
```

<210> 29480
<211> 102
<212> PRT
<213> A.fumigatus

<400> 29480

```
Leu Val Phe Ser His Ile Leu Arg Leu Ser Leu Leu Gln Leu Phe Phe
1               5                   10                  15
Arg Ala Thr Thr Ile Met Ala Glu Ala Leu Thr Asn Thr Asp Leu Gln
            20                  25                  30
Gly Ala Leu Pro Leu Ile Ala Arg Gly Lys Val Arg Asp Leu Tyr Glu
        35                  40                  45
Val Asp Asp Lys Thr Leu Leu Phe Ile Ala Thr Asp Arg Ile Ser Ala
    50                  55                  60
Tyr Asp Val Ile Met Glu Asn Val Arg Leu Tyr Val Leu Asp Ala Pro
65                  70                  75                  80
Ile Val Leu His Ile Gly Ser Ala Asn Glu Cys Leu Phe Arg Val Phe
                85                  90                  95
Arg Thr Arg Val Phe Phe
            100
```

<210> 29481
<211> 150
<212> PRT
<213> A.fumigatus

<400> 29481

```
Arg Met Ser Leu Gln Gly Ile Pro Asn Lys Gly Val Leu Leu Thr Leu
1               5                   10                  15
Cys Thr Lys Ala Trp Phe Lys Ile Leu Thr Asp Ala Ile Pro Ser Leu
            20                  25                  30
Arg Thr His Phe Ile Thr Leu Asp Leu Pro Pro Gln Ile Pro Pro Ser
        35                  40                  45
Leu Arg Pro Ala Leu Gln Asn Arg Ser Met Gln Val Arg Lys Leu Lys
    50                  55                  60
```

```
Ile Leu Pro Ile Glu Ala Ile Val Arg Gly Tyr Ile Thr Gly Ser Ala
65                  70                  75                  80
Trp Asn Glu Tyr Lys Lys Ser Gly Thr Val His Gly Ile Lys Val Ala
                85                  90                  95
Pro Gly Leu Arg Glu Ser Glu Ala Phe Pro Asp Gly Pro Ile Tyr Thr
            100                 105                 110
Pro Ser Thr Lys Ala Glu Gln Gly Glu His Asp Glu Asn Ile His Pro
        115                 120                 125
Asp Gln Gly Met His Gly Pro Pro Cys Ser Gly Asn Val Tyr Gln Val
    130                 135                 140
Ser Glu Trp Ile Gln Ser
145                 150
```

<210> 29482
<211> 191
<212> PRT
<213> A.fumigatus

<400> 29482

```
Lys Arg Ser Lys Lys Gln Lys Arg Ser Lys Met Ser Arg Tyr Leu Thr
1               5                   10                  15
Pro Ser Lys Ile Ala Leu Leu Cys Leu Ile Ser Val Tyr Thr Asp Gly
            20                  25                  30
Val Val Pro Asn Ser Ser Ala Ile Asp Val Leu Ser Phe Leu Met Ser
        35                  40                  45
Cys Leu Ser Pro Leu Gly Ser Asp Ala Ser Ser Ser Leu Asn Arg Gly
    50                  55                  60
Asp Ser Asn Tyr Ile Val Ala Ile Asp Asp Leu Glu Asp Ala Leu Ser
65                  70                  75                  80
Ser Lys Ala Ser Ser Ile Pro Gly Arg Ser Ile Trp Asp Leu Phe Leu
                85                  90                  95
Lys Lys Ile Trp Ser Ile Asp Ser Cys Asp Ala Leu Glu Val Phe Phe
            100                 105                 110
Thr Glu Ile Ser Asp Ile Leu Val Lys Ser Arg Glu Glu Gln Ile Arg
        115                 120                 125
Asp Arg Asp Asn Gly Leu Ala Pro Glu Thr Gly Arg Met Arg Leu Ser
    130                 135                 140
Arg Cys Ser Pro Leu Gly Ala Phe Val Arg Arg Ala Gln Leu Glu Phe
145                 150                 155                 160
Thr Arg Leu Gln Phe His Asp Ser Val Lys Leu Trp Lys Gly Phe Val
                165                 170                 175
Phe Thr Thr Gly Gly Arg Arg Ile Arg Ala Lys Arg Ile Pro Gln
            180                 185                 190
```

<210> 29483
<211> 72
<212> PRT
<213> A.fumigatus

<400> 29483

```
Arg Cys Pro Phe Leu Glu Pro Ser Leu Ala Thr Ser Thr Asp Ser Tyr
1               5                   10                  15
Ser Ser Asp Thr Val Gly Thr Leu Arg Leu Phe Arg Asn Ser Ile Ile
            20                  25                  30
Ser Leu Asp Ser Gly Ile Gly His Lys Ser Asn Val Ser Thr Leu Asp
        35                  40                  45
```

```
Val Thr Ile Phe Asn Ile Leu Ile Asn Arg Gln Asp Lys Pro Ile Glu
    50                  55                  60
Glu Phe Val Thr His Ser Cys Ser
65                  70
```

<210> 29484
<211> 117
<212> PRT
<213> A.fumigatus

<400> 29484

```
Ser Glu Phe Leu Thr Met Met Ala Arg Lys Met Lys Asp Thr Asp Ser
1               5                   10                  15
Glu Glu Glu Ile Arg Glu Ala Phe Lys Val Phe Asp Arg Asp Asn Asn
            20                  25                  30
Gly Phe Ile Ser Ala Ala Glu Leu Arg His Val Met Thr Ser Ile Gly
        35                  40                  45
Glu Lys Leu Thr Asp Asp Glu Val Asp Glu Met Ile Arg Glu Ala Asp
    50                  55                  60
Gln Asp Gly Asp Gly Arg Ile Asp Cys Thr Phe Ile Lys Gln Leu Ser
65                  70                  75                  80
Ser Val Ala Pro Arg Ser Ser Trp Asp Ile Ser Leu Ile Val Ser Arg
                85                  90                  95
Gln Arg Val Arg Ser Ala His Asp Ala Lys Ile Ser Leu Ser Phe Gly
            100                 105                 110
Cys Phe Val His Ser
        115
```

<210> 29485
<211> 63
<212> PRT
<213> A.fumigatus

<400> 29485

```
Leu Val Gly Cys Gln Tyr Ile Tyr Pro Leu Phe Pro Ser Asp Leu Ser
1               5                   10                  15
Cys Tyr Tyr Gly Val Ser Asn Lys Tyr Gly Ile Trp Thr Ala Ile Asp
            20                  25                  30
Ser Tyr Asp Pro Ser Ala Cys Ile Cys Trp Phe Ser Cys Gly Asp Ser
        35                  40                  45
Asp Met Ile Ala Leu Val Phe Thr Pro Tyr Val Glu Arg Ser Ser
    50                  55                  60
```

<210> 29486
<211> 84
<212> PRT
<213> A.fumigatus

<400> 29486

```
Pro Cys Ser Val Ile Thr Leu Pro Pro Thr Asp Met Lys Phe Gln Thr
1               5                   10                  15
Ser Ile Leu Ala Ala Thr Leu Leu Ala Gly Ser Ala Leu Ser Ala Pro
            20                  25                  30
Asn Gly Arg Ser Leu Glu Arg Ile Arg Ala Arg Ala Leu Ala Arg Gln
        35                  40                  45
Ser His Pro Met Asp Gly Pro Gly Ala Ser Pro Ala Glu Ala Asp Pro
```

```
    50                  55                  60
Asn Ala Glu His Arg Thr Ala Asp Cys Leu His Arg Gly Ala Ala Arg
65                  70                  75                  80
Ala Asp Ser His
```

<210> 29487
<211> 558
<212> PRT
<213> A.fumigatus

<400> 29487

```
Ser Phe Gly Leu Ser Lys Leu Gly Ile Lys Ala Phe Phe Gln Leu Val
1               5                   10                  15
Gln Ile Pro Val Ser Ser Leu Asp His Leu Leu Ser Ser Leu Gln Asp
            20                  25                  30
Thr Phe Thr Lys Asn Ser Glu Ile Val Tyr Glu Arg Ala Met Arg Gly
        35                  40                  45
Glu Pro Ala Ser Glu Leu Val Ser Glu Asn Lys Ser Ile His Glu Lys
    50                  55                  60
Met Asp Ala Ile Arg Leu Met Lys Gln Glu Lys Glu Glu Tyr Gln Ala
65                  70                  75                  80
Phe Glu Ala Lys Gln Glu Ser Leu Lys Lys Ala Leu Ile Gln Leu Ile
                85                  90                  95
Ser Arg Gly Cys Asp Pro Gln Thr Met Pro Asp Glu Leu Ala Gln Ser
            100                 105                 110
Arg Glu Val Thr Ser Lys Leu Gln Gln Ile Glu Glu Lys Met Ser Arg
        115                 120                 125
Leu Leu Arg Thr Ala Gly Ile Asp Thr Glu Thr Leu Asn Ser Met Ser
    130                 135                 140
Arg Asp Ala Lys Lys Ser Ser Ser Gln Pro Ala Ala Cys Asp Ser Arg
145                 150                 155                 160
Pro Cys Thr Thr Gly Ser Leu Arg Asn Gly Asp Met Glu Cys Leu Glu
                165                 170                 175
Arg Ala Arg Glu Val Pro His Ser His Ile Met Ser Pro Val Arg Asn
            180                 185                 190
Ser Phe Asp Arg Asn Leu Ser Arg Thr Ser Val Val Glu Arg Thr Ser
        195                 200                 205
Asp Thr Ser Phe Arg Thr Pro Gly Gly Gly Asp Asn Ala Arg Asp Glu
    210                 215                 220
Phe Asp Leu Asp Asp Pro Met Ile Tyr Glu Glu Arg Glu Ala Phe Thr
225                 230                 235                 240
Gly Thr Met Gly Thr Pro Ser Arg Pro Leu Gly Asn Val Asp Glu Phe
                245                 250                 255
Asp Leu Asp Ala Asp Asp Val Asp Met Leu Glu Ala Ala Glu Asp Phe
            260                 265                 270
Asp Asp Gly Leu Thr Leu Thr Thr Lys Thr Ser Gly Tyr Glu Ser Arg
        275                 280                 285
Arg Val Phe Ala Glu Thr Ser Gly Asn Ala Ser Arg Ile Pro Ala Thr
    290                 295                 300
Gln Lys Ser Gln Ile His Asn Pro Leu Trp Asn Gln Asn Pro Trp Thr
305                 310                 315                 320
Lys Asp Val Lys Asn Val Leu Arg Asp Arg Phe His Leu Arg Gly Phe
                325                 330                 335
Arg Met Asn Gln Leu Glu Ala Ile Asp Ala Thr Leu Ser Gly Lys Asp
            340                 345                 350
```

```
Thr Phe Val Leu Met Pro Thr Gly Gly Gly Lys Ser Leu Cys Tyr Gln
        355                 360                 365
Leu Pro Ser Ile Val Thr Ser Gly Ser Thr Arg Gly Val Thr Ile Val
    370                 375                 380
Val Ser Pro Leu Leu Ser Leu Met Gln Asp Gln Val Ser His Leu Lys
385                 390                 395                 400
Arg Leu Lys Ile Lys Ala Phe Leu Leu Asn Gly Glu Thr Lys Gln Glu
                405                 410                 415
Glu Arg Gln Trp Ile Met Gln Thr Leu Ser Gly Pro Ala Ala Glu Glu
            420                 425                 430
Gln Ile Glu Leu Leu Tyr Ile Thr Pro Glu Met Val Asn Lys Ser Gln
        435                 440                 445
Ala Leu Ile Arg Ser Leu Glu Lys Leu Asn Arg Arg Arg Arg Leu Ala
    450                 455                 460
Arg Ile Val Ile Asp Glu Ala His Cys Val Ser Gln Trp Gly His Asp
465                 470                 475                 480
Phe Arg Pro Asp Tyr Lys Ala Leu Gly Glu Val Arg Asp Gln Leu Pro
                485                 490                 495
Gly Val Pro Met Met Ala Leu Thr Ala Thr Ala Thr Glu Asn Val Lys
            500                 505                 510
Val Asp Val Ile His Asn Leu Lys Met Glu Gly Cys Glu Ile Phe Thr
        515                 520                 525
Gln Ser Phe Asn Arg Pro Asn Leu Thr Tyr Glu Val Arg Gln Lys Thr
    530                 535                 540
Lys Ser Ala Glu Val Leu Glu Asn Ile Ala Asp Ile Ile Lys
545                 550                 555
```

<210> 29488
<211> 137
<212> PRT
<213> A.fumigatus

<400> 29488

```
Arg Val Leu Lys Ser Asn Ile Leu Leu Cys Ile Met Pro Pro Ser Gly
1               5                   10                  15
Ser Gln Asp Asn Thr Pro Ser Cys Phe Thr Asp Thr His Gly Val Ile
            20                  25                  30
Thr Thr Thr Ala Asn Asp Leu Pro Gly Tyr Lys Ile Thr Lys Val Leu
        35                  40                  45
Gly Thr Val Tyr Gly Leu Thr Val Arg Thr Cys Asn Trp Gly Thr Asp
    50                  55                  60
Leu Gly Ala Ile Val Arg Ser Ser Val Gly Gly Glu Leu Arg Pro Phe
65                  70                  75                  80
Thr Asn Leu Met Tyr Thr Ser Arg Asn Glu Ala Val Glu Arg Leu Val
                85                  90                  95
Gly Glu Cys Met Gly Arg Gly Gly Asn Ala Leu Ile Ala Met Arg Phe
            100                 105                 110
Asp Val Ser Ser Ile Gly Ala Cys Ser Gln Val Cys Ala Tyr Gly Thr
        115                 120                 125
Ala Cys Val Val Glu Arg Tyr Glu Gly
    130                 135
```

<210> 29489
<211> 62
<212> PRT
<213> A.fumigatus

<400> 29489
Pro Leu Ile Ser Thr Tyr Thr Phe Gly Asn Asn His Leu Ala Arg Val
1 5 10 15
Tyr Glu Gly Arg Met Val Asp Ala Leu Arg Asn Phe Ser Thr Ser Lys
20 25 30
Ala Ser Ala Ser Pro Asn Pro Ser Gly Asn Glu Gln Gln Tyr Asp Asn
35 40 45
Val Cys Ser Ile Ala Ile Trp Gly Val Tyr Asn Ile Leu Leu
50 55 60

<210> 29490
<211> 113
<212> PRT
<213> A.fumigatus

<400> 29490
Gly Phe Arg Phe Tyr Met Ser Arg Leu Leu Ala Ser Leu His Ser Arg
1 5 10 15
His Phe His Thr Glu His Asn Phe Gln Val Gln Asp Thr Met Thr Asp
20 25 30
Lys Met Asn Val Asn Met Phe Lys Ala Glu Asp Pro Leu Cys Gln Pro
35 40 45
Ser Ser Ser Pro Glu Pro Pro Tyr Asp Pro Leu Pro Pro Val Glu Glu
50 55 60
Leu Pro Leu Pro Ser Ser Phe Glu Trp Gly Thr Ala Thr Ala Ala Tyr
65 70 75 80
Gln Ile Glu Gly Ala Pro Ser Val Asp Gly Lys Cys Arg Gln Ser Gly
85 90 95
Thr Arg Ser Pro Ile Leu Phe His Pro Gly Thr Met Ala Arg Asn Val
100 105 110
Thr

<210> 29491
<211> 232
<212> PRT
<213> A.fumigatus

<400> 29491
Lys Thr Val Phe Ala Lys Arg Trp Leu Ser Ile Met Thr Arg Ile Thr
1 5 10 15
Asn Val Gln Phe Glu His Tyr His Pro Pro Asn Thr Ile Gly Val Glu
20 25 30
Glu Thr Arg Pro Arg Ile Ser Trp Gln Phe Arg Asp Tyr Pro Pro Ser
35 40 45
Phe Gln Gln Asp Ala Phe Glu Ile Glu Val Ser Glu Val Ala Trp Asn
50 55 60
Ser Gln Val Thr Val Leu Ser Ser Thr Arg Gln Ser Ser Pro Ser Ser
65 70 75 80
Tyr Leu Val Pro Trp Pro His Ser Gln Pro Leu Ile Ser Arg Gln Gln
85 90 95
Val Ser Ile Arg Val Arg Ala Trp Asp Pro Asp Gly His Asp Thr Glu
100 105 110
Trp Ser Glu Pro Ala Ser Leu Glu Val Gly Leu Leu Asn Pro Ser Asp
115 120 125

```
Trp Gln Cys Glu Arg Ile Ala Ala Pro Trp Gly Pro Gly Thr Ser Lys
    130                 135                 140
Pro Asp Thr Glu Gln Leu Tyr Arg Arg Glu Phe Lys Leu Ala Asp Ser
145                 150                 155                 160
Phe Val Lys Ala Arg Leu Tyr Ile Thr Ala Gln Gly Val Tyr Glu Ala
                165                 170                 175
Glu Ile Asn Gly Arg Arg Val Gly Asp His Phe Leu Ala Pro Gly Trp
            180                 185                 190
Thr Thr Tyr Asp Gly Arg Leu Gln Tyr Gln Thr Tyr Asp Ile Thr Asp
        195                 200                 205
Tyr Leu Ser Thr Gly Asp Asn Cys Ile Gly Val Arg Val Ala Glu Gly
    210                 215                 220
Trp Phe Phe Trp Ser His Trp Phe
225                 230
```

<210> 29492
<211> 88
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (58),(74)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29492

```
Ser Asn Arg Leu Pro His Arg Tyr Glu Ala Arg Gly Glu Ile Leu Leu
1               5                   10                  15
Phe Leu Phe Ala Thr Gln Pro Ala Val Pro Glu Tyr Ser Leu Glu His
            20                  25                  30
Ala Arg Glu Phe Phe Ser Val Pro Thr Asp Cys Pro Gln Arg Asp Asp
        35                  40                  45
Arg Leu Gly Trp Val Gly Asp Leu Ala Xaa Phe Ala Pro Asn Ala Leu
    50                  55                  60
Leu Ile Tyr Asp Cys Phe Ser Phe Leu Xaa Asn Trp Leu Ile Asp Val
65                  70                  75                  80
Ala Tyr Asp His Asn Gly Leu Gly
                85
```

<210> 29493
<211> 103
<212> PRT
<213> A.fumigatus

<400> 29493

```
Gly His Met Phe Gln Ala Ser Gly Asn Thr Tyr Ser His Lys Ile Leu
1               5                   10                  15
Met Ser Ala His Ser Arg Leu Met Tyr Thr Asn Ile Tyr Lys Tyr Phe
            20                  25                  30
Glu Ile Ala Lys Val Val Phe Ile Ser Ile Thr Ala Lys Arg Pro Thr
        35                  40                  45
Pro Phe Asp Ser Arg Leu Gly Ile Tyr Glu Val His His Tyr Pro Arg
    50                  55                  60
Leu Phe Ala Asp Asn Arg Gln Gln Ile His Leu His Glu Ser Arg Leu
65                  70                  75                  80
Ala Glu His Val Lys Pro Leu Ile Asp Ile Ser Val Thr Leu Asn Arg
```

85 90 95
Leu Val Glu Pro Glu Leu Leu
100

<210> 29494
<211> 65
<212> PRT
<213> A.fumigatus

<400> 29494
Arg Ser Pro Arg Arg Thr Asp Val Arg Pro Leu Gly Ala Trp Gly Gly
1 5 10 15
Gly Gly Ser Ser Ser Asp Ile Met Ala Tyr Val Gly Lys Met Ala Leu
20 25 30
Met Val Gly Leu Gln Ala Ala Leu Asn Ala Ser Val Trp Gly Val Ile
35 40 45
Ser Gly Ala Ala Ile Arg Ile Gly Lys Arg Phe Cys Gly Trp Gly Asn
50 55 60
Leu
65

<210> 29495
<211> 398
<212> PRT
<213> A.fumigatus

<400> 29495
His Lys Leu Ile Arg Leu Val Phe Leu Ile Gly Phe Val Gly Met Asn
1 5 10 15
Asn Ile Lys Ala Asn Asp Tyr Leu Asn Val Val Val Gln Val Leu Ala
20 25 30
His Val Leu Pro Ile Arg Asn Tyr Phe Leu Leu His Gln Phe Pro Val
35 40 45
Pro Gly Thr Pro Glu Leu Ala Leu Arg Phe Ser Thr Leu Val Arg Lys
50 55 60
Leu Trp Asn Pro Lys Ala Phe Arg Ser His Val Ser Pro His Glu Leu
65 70 75 80
Leu Gln Glu Ile Ala Leu Arg Ser Ser Lys Arg Phe Thr Leu Thr Gln
85 90 95
Gln Ser Asp Pro Val Glu Phe Leu Ser Trp Phe Leu Asn Asn Leu His
100 105 110
Leu Ser Leu Gly Gly Ser Lys Lys Pro Ser Ser Thr Pro Thr Ser Val
115 120 125
Ile Gln Ala Ala Phe Gln Gly His Leu Arg Ile Glu Ser Gln Ala Ile
130 135 140
Thr Ala His Ser Asp Thr Gln Asn Ala Arg Leu Val Phe Thr Glu Ser
145 150 155 160
Gly Thr Ile Asn Ser Gln Thr Ile Pro Phe Leu Ile Leu Thr Leu Asp
165 170 175
Leu Pro Pro Thr Pro Leu Phe Gln Ser Ala Asn Arg Glu Ser Ile Ile
180 185 190
Pro His Val Pro Leu Thr Thr Leu Leu Asn Lys Tyr Asn Gly Ile Thr
195 200 205
Ala Ser Glu Lys Leu Ala His Arg Val Arg His Arg Leu Leu His Pro
210 215 220
Leu Pro Pro Tyr Leu Leu Phe His Ile Lys Arg Phe Ser Lys Asn Arg

```
225                 230                 235                 240
Phe Val Ser Glu Arg Asn Pro Thr Ile Val Thr Phe Pro Ser Pro Arg
                245                 250                 255
Ser Leu Asp Met Ser Pro Tyr Val Glu Pro Asn Pro Glu Ile Trp Pro
            260                 265                 270
Pro Gly Glu Pro Ile Leu Tyr Asp Leu Val Ala Asn Ile Ile Leu Asp
        275                 280                 285
Pro Thr Val Ala Ala Pro Gly Thr Thr Glu Asp Ala Ala Glu Lys Gly
    290                 295                 300
Leu Thr Ala Ala Gly Gly Thr Ser Ser Ala Gly Ala Gly Ala Gly Ser
305                 310                 315                 320
Glu Arg Val Ala Trp Leu Val Gln Leu His Asp Lys Ala Met Ala Glu
                325                 330                 335
Glu Asn Arg Arg His Gln Ser Gln Gly Ala Gly Glu Gln Gln Gly Pro
            340                 345                 350
Glu Trp Leu Glu Ile Gln Asp Leu Phe Val Lys Lys Ala Glu Ser Glu
        355                 360                 365
Thr Leu Phe Thr Arg Glu Gly Tyr Leu Met Val Trp Glu Arg Arg Lys
    370                 375                 380
Ile Pro Gly Met Asn Asn Arg Lys Gly Lys Gly Ala Ala Lys
385                 390                 395
```

<210> 29496
<211> 101
<212> PRT
<213> A.fumigatus

<400> 29496

```
Ser Tyr Ala Ala Asn Ile Pro Arg Ala Arg Val Pro Arg Ser Tyr Ala
1               5                   10                  15
Tyr Phe His Ala Leu Glu Val Gly His His Val Phe Ile Asn Ile Ser
            20                  25                  30
Thr Lys Lys Val Tyr Val Leu Pro Glu Gly Tyr Glu Val Lys Ser Lys
        35                  40                  45
Ser Leu Glu Asp Ile Lys Tyr Val Val Asp Pro His Tyr Ser Lys Glu
    50                  55                  60
Glu Val Ser Lys Leu Asp Lys Glu Val His Asp Ala Phe Asp Leu Ala
65                  70                  75                  80
Gly Asn Arg Tyr Arg Pro Gly Lys Tyr Phe Leu Ser Phe Leu Ser Glu
                85                  90                  95
Ile Ser Ser Thr Asn
            100
```

<210> 29497
<211> 80
<212> PRT
<213> A.fumigatus

<400> 29497

```
Gln Leu Lys Trp Val Gln Phe Ile Asn Ile Thr Arg Pro Glu Ile Gln
1               5                   10                  15
Ser Asp Val Cys Pro Thr Cys Ser Leu Ser Thr Ala Glu Gln Thr Gly
            20                  25                  30
Ser Ser Val Phe His Thr Leu Trp Ser Tyr Val Pro Glu Phe Thr Val
        35                  40                  45
Leu Trp Val Ile Val Asn Leu Pro Ser Ala Pro Tyr Val Leu Leu Gly
```

```
    50                  55                  60
Cys Tyr Thr Thr Asp Ile Ser His Leu Ser Pro Lys Phe Ala Thr Ile
65                  70                  75                  80

<210> 29498
<211> 65
<212> PRT
<213> A.fumigatus

<400> 29498
Thr Asn Leu Asp Ala Gln Leu Val Lys Arg Ala Glu Arg Val Ser Arg
1               5                   10                  15
Leu Gly Leu Thr Gly Gly Ile Val Gln Met Pro Glu Gly Cys Ala Pro
            20                  25                  30
Thr Glu Gln Ile Met Gly Ser Gly Met Thr Val Tyr Tyr Leu Val Asp
        35                  40                  45
Ser Leu Asp Met Val Ser Ser Leu Ser Asn Thr Ser Arg Leu Ile Pro
    50                  55                  60
Leu
65

<210> 29499
<211> 251
<212> PRT
<213> A.fumigatus

<400> 29499
Ser Phe Gln Pro Arg Gly Glu Asp Ile Leu Ala Lys Asp Tyr Tyr Thr
1               5                   10                  15
Asn Ala Phe Gly Asp Gln Asn Leu Thr Lys Arg Leu Gly Leu Pro Val
            20                  25                  30
Ile Pro Leu Ser Cys Leu Phe Phe Arg Val Ser Val Gln Thr Tyr Gln
        35                  40                  45
Met Phe Leu Ala Ala Leu Leu Pro His Gln Pro Ser Ser Thr Ala Val
    50                  55                  60
Glu Ser Thr Ser Leu Ala Ser Ile His Ser His Tyr Val Pro Ser Pro
65                  70                  75                  80
Ile Pro Ser Ala Pro Pro Leu Thr Leu Arg Thr Ile Leu Pro Val Ser
                85                  90                  95
Ala Ala His Ala Ser Ala Phe Phe Arg Arg Val Leu Ala Asn Ala Met
            100                 105                 110
Pro Ser Pro Ala Gln Ser Val Tyr Ile Phe Thr Ile Val Leu Ile Leu
        115                 120                 125
Thr Ala Phe Ile Leu Leu Leu Ile Leu Lys Leu Leu Leu Gly Met Leu
    130                 135                 140
Leu Leu Val Tyr Ser Arg Ser Arg Tyr Arg Arg Met Lys Val Arg Glu
145                 150                 155                 160
Ala Glu Gln Ala Ala His Lys Thr Asp Ser Gly Ser Ala Thr Gly Pro
                165                 170                 175
Ala Ser Arg Gly Arg Glu Phe Ala Ile Glu Gly Ser Arg Arg Val Gly
            180                 185                 190
Gly Trp Gly Ser Val Glu Val Asn Asp Asp Lys Arg Arg Trp Ile Tyr
        195                 200                 205
Thr Asp Asp Pro Glu Gly Leu Arg Arg Leu Lys Ala Arg Glu Glu Arg
    210                 215                 220
Asp Lys Glu Lys Ala Ala Lys Glu Gly Glu Ala Ser Met Asp His Val
```

225 230 235 240
Gln Arg Tyr Glu Met Val Ala Lys Arg Ile Trp
245 250

<210> 29500
<211> 61
<212> PRT
<213> A.fumigatus

<400> 29500
Pro His Leu Ala Thr Ala Ile Gly Ala Ser Trp Leu Phe Phe Arg Ser
1 5 10 15
Leu Tyr Leu Tyr Gly Tyr Val Tyr Ser Gly Lys Pro Gln Gly Lys Gly
20 25 30
Arg Leu Leu Gly Gly Phe Phe Trp Phe Ser Gln Gly Ala Leu Trp Ala
35 40 45
Leu Ser Val Phe Gly Val Ala Lys Asp Met Ile Ser Tyr
50 55 60

<210> 29501
<211> 232
<212> PRT
<213> A.fumigatus

<400> 29501
Ser Thr Phe Asp Asp Thr Gly Leu Gly Pro Tyr Ile Ala Val Ile Lys
1 5 10 15
Thr His Ile Asp Ile Leu Thr Asp Phe Ser Val Asp Thr Ile Asn Gly
20 25 30
Leu Asn Val Leu Ala Gln Lys His Asn Phe Leu Ile Phe Glu Asp Arg
35 40 45
Lys Phe Ile Asp Ile Gly Asn Thr Val Gln Lys Gln Tyr His Gly Gly
50 55 60
Ala Leu Arg Ile Ser Glu Trp Ala His Ile Ile Asn Cys Ser Val Leu
65 70 75 80
Pro Gly Glu Gly Ile Val Glu Ala Leu Ala Gln Thr Ala Ser Ala Gln
85 90 95
Asp Phe Pro Tyr Gly Pro Glu Arg Gly Leu Leu Val Leu Ala Glu Met
100 105 110
Thr Ser Lys Gly Ser Leu Ala Thr Gly Glu Tyr Thr Lys Ala Ser Val
115 120 125
Asp Tyr Ala Arg Lys Tyr Lys Asn Phe Val Met Gly Phe Val Ser Thr
130 135 140
Arg Ala Leu Thr Glu Val Gln Ser Asp Val Ser Ser Ala Ser Glu Asp
145 150 155 160
Glu Asp Phe Val Val Phe Thr Thr Gly Val Asn Leu Ser Ser Lys Gly
165 170 175
Asp Lys Leu Gly Gln Gln Tyr Gln Thr Pro Ala Ser Ala Ile Gly Arg
180 185 190
Gly Ala Asp Phe Ile Ile Ala Gly Arg Gly Ile Tyr Ala Ala Pro Asp
195 200 205
Pro Val Glu Ala Ala Gln Arg Tyr Gln Lys Glu Gly Trp Glu Ala Tyr
210 215 220
Met Ala Arg Val Cys Gly Lys Ser
225 230

<210> 29502
<211> 69
<212> PRT
<213> A.fumigatus

<400> 29502
Pro Ser Ile Pro Thr Met Ser Ser Lys Ser Gln Leu Thr Tyr Gly Ala
1 5 10 15
Arg Ala Ser Lys His Pro Asn Pro Leu Ala Lys Arg Leu Phe Glu Ile
20 25 30
Ala Glu Ala Lys Lys Thr Asn Val Thr Val Ser Ala Asp Val Thr Thr
35 40 45
Thr Arg Glu Leu Leu Asp Leu Ala Asp Arg Thr Glu Ala Val Gly Ser
50 55 60
Asn Thr Tyr Ala Val
65

<210> 29503
<211> 369
<212> PRT
<213> A.fumigatus

<400> 29503
Ile Cys Thr Glu Leu Leu Tyr Gln Pro Leu Thr Leu Leu Asn Cys Leu
1 5 10 15
His Thr Phe Cys Gly Ser Cys Leu Lys Glu Trp Phe Ala Ala Gln Ala
20 25 30
Ser Arg Arg Arg Pro Ser Ser Ser Ile Pro Gln Phe Thr Cys Pro Ala
35 40 45
Cys Arg Ala Val Val Arg Asp Thr Arg Pro Asn Ala Thr Val Thr Thr
50 55 60
Leu Leu Asp Met Val Leu Ala Ala Asn Pro Glu Arg Val Lys Ser Ala
65 70 75 80
Glu Glu Lys Glu Glu Val Ala Gln Arg Tyr Lys His Gly Glu Ser Val
85 90 95
Phe Pro Val Leu Ser Ser Ser Gly Gln Asp Gly Thr Ala Ser Asp Val
100 105 110
Glu Asp Arg Arg Leu Leu Glu Glu Val Arg Glu Leu Ser Leu Arg Glu
115 120 125
Ser Arg Ala Gly Thr Gly Gln Ser Ser Arg Ser Arg Gln Ala Glu Ser
130 135 140
Val Asp Ala Asp Gly Arg Arg Ala Asp Gly Arg Ser Arg Arg Arg Arg
145 150 155 160
Glu Glu Glu Arg Val Leu Arg Arg Gln Pro Gly Ala Arg Thr Glu Asp
165 170 175
Asn Ser Glu Arg Thr Arg Arg Ile Glu His Gln Ser Ser Leu Arg Ser
180 185 190
Leu Leu Ser Phe Ser Asp Thr Glu Thr Met Glu Glu Glu Ile Leu Arg
195 200 205
Gln Ile Ile Glu Asp Gly Leu Leu Asn Gly Ile Asp Leu Asp Asn Leu
210 215 220
Gly Pro Ala Gln Glu Glu Glu Leu Thr Glu Arg Ile Ala Asp Ala Tyr
225 230 235 240
Arg Arg Arg His Met Arg Arg Pro Arg Ser Arg Gln Arg Gln Glu Ala
245 250 255
Asp Glu Glu Pro Gln Ala Ser Pro Arg Pro Arg Ala Arg Ser Gln Ser

```
            260                 265                 270
Val Gln Arg Pro Pro Ala Ser Pro Thr Pro Gln Pro Ser Ser Arg Asn
        275                 280                 285
Pro Pro Val Ser Arg Pro Tyr Leu Leu Glu Pro Leu Val Ser Arg Ser
    290                 295                 300
Glu Gly Phe Asn His Gln Arg Arg Leu Ser Asp Gln Gly Thr Arg Arg
305                 310                 315                 320
Arg Arg Thr Ser Pro Ala Pro Val Asn Ala Ala Ser Thr Ser Glu Gly
                325                 330                 335
Arg Leu Ala Thr Cys Cys Glu Ile Val Gln Arg Tyr Ser Phe Gly Ser
            340                 345                 350
Pro Ser Ser Phe Ser Val Leu Ser Ser Ser Arg Gly Arg Ile Val Asp
        355                 360                 365
Cys
```

<210> 29504
<211> 78
<212> PRT
<213> A.fumigatus

```
<400> 29504
Glu Gly Ala Glu Glu Met Leu Glu His His Pro Gly His Val Ser Val
1               5                   10                  15
Asp Thr Ala Ser Thr Ala Gly Ser Ser Gly Val Asp Ala Ser Thr Gly
            20                  25                  30
Tyr His Val Gly Ser Asp Gly Pro Trp Ser Asp Thr Asn Pro Thr Ala
        35                  40                  45
Glu Leu Val Arg Asp Tyr Val Glu Asp Asp Thr Thr Glu Trp Lys Gly
    50                  55                  60
Met Tyr Arg Trp Phe Trp Glu Lys Gln Lys His Glu Gln Glu
65                  70                  75
```

<210> 29505
<211> 237
<212> PRT
<213> A.fumigatus

```
<400> 29505
Pro Asp Val Leu Asp Asn Phe Ser Lys Pro Thr Pro Gln Pro Ser Thr
1               5                   10                  15
Ser Ala Pro Pro Pro Ala Thr Ala Pro Ala Ser Ala Thr Glu Asp Phe
            20                  25                  30
Asp Glu Asp Ala Phe Met Arg Gln Leu Glu Gln Asp Met Ala Lys Met
        35                  40                  45
Met Asn His Ala Ala Gln Glu Ser Gly Ala Pro Asp His Lys Glu Phe
    50                  55                  60
Glu Asn Ala Ile Asn Gln Gly Ala Asp Ala Phe Thr Lys Gln Leu Glu
65                  70                  75                  80
Glu Ser Gly Ile Pro Pro Gly Asp Phe Leu Lys Gln Leu Leu Ala Asp
                85                  90                  95
Val Met Ala Glu Glu Gly Glu Ser Ala Gly Ala Ala Ala Gly Ala Gly
            100                 105                 110
Ala Arg Val Gly Pro Ser Ala Gly Gly Ser Ser Gly Ser Ala Thr Gly
        115                 120                 125
Ala Glu Lys Ala Thr Ala Pro Glu Ser Phe Asn Asp Ala Ile Gln Arg
```

```
    130                 135                 140
Thr Ile Asn Arg Met Lys Glu Ser Gly Asp Lys Ala Thr Ala Ala Ala
145                 150                 155                 160
Thr Glu Asp Gly Gly Ile Ser Glu Asp Met Leu Met Gln Leu Leu Lys
                165                 170                 175
Gly Leu Glu Ala Gly Val Gly Asn Gly Gly Asp Asn Leu Asp Leu Thr
            180                 185                 190
Gln Met Ile Ala Gly Val Met Glu Gln Phe Ser Asn Lys Glu Met Leu
        195                 200                 205
Tyr Glu Pro Met Lys Glu Leu Asp Ala Lys Trp Gly Pro Trp Leu Lys
    210                 215                 220
Glu Asn Lys Gly Lys Val Pro Ala Glu Asp Met Val Phe
225                 230                 235
```

<210> 29506
<211> 149
<212> PRT
<213> A.fumigatus

<400> 29506

```
Pro Ser Leu Ser Ala Ala Gln Thr Arg Arg Ser Ile Cys Leu Val Val
1               5                  10                  15
Pro Val Phe Asp Thr Ser Ile Leu Asn Ala Arg Leu Tyr Ile Leu Trp
            20                  25                  30
Ser Val Phe Arg Phe Gly Leu Pro Leu Val Leu Pro Ser Thr Tyr Met
        35                  40                  45
Arg Ser Pro Ser Asp Ile Lys Pro Asn His Ile Met Phe Gly Ile Ala
    50                  55                  60
Asp Asp Ser Phe Ser Ala Thr Gly Arg Ala Gly Ala His Ser Ser Cys
65                  70                  75                  80
Pro Arg Lys Glu Leu Asp Arg Arg Ile Ile Tyr Val Ser Arg Glu Leu
                85                  90                  95
Arg Met Pro Arg Val Trp Ser Ala Pro Val Leu Cys Asp Phe Gly Ser
            100                 105                 110
Gly Val Ser Ser Gly Ile Glu His Ser Glu Asp Ile Gln Pro Asn Ile
        115                 120                 125
Tyr Arg Thr Pro Glu Val Ile Val Glu Val Pro Trp Thr Tyr Ser Val
    130                 135                 140
Asp Val Trp Asp Val
145
```

<210> 29507
<211> 563
<212> PRT
<213> A.fumigatus

<400> 29507

```
Trp Arg Gly Ser Phe Gln Pro Arg Gly Glu Asp Met Asn Asp Asp Leu
1               5                  10                  15
Lys Met Lys Asp Tyr Gln Ile Val Gly Ile Asn Trp Leu Ser Leu Leu
            20                  25                  30
Phe Glu Lys Gln Leu Ser Cys Ile Leu Ala Asp Asp Met Gly Leu Gly
        35                  40                  45
Lys Thr Cys Gln Val Ile Ala Phe Leu Ala His Leu Tyr Glu Lys Gly
    50                  55                  60
Ile Lys Gly Pro His Leu Val Val Val Pro Ser Ser Thr Ile Glu Asn
```

```
65                  70                  75                  80
Trp Leu Arg Glu Phe Gln Lys Phe Cys Pro Thr Leu Ser Val Met Pro
                85                  90                  95
Tyr Tyr Ala Gly Gln Ala Glu Arg Ala Val Ile Arg Gln Thr Ile Glu
            100                 105                 110
Asp Asn Arg Asp Asp Ile Asn Val Ile Ile Thr Thr Tyr Thr Val Ala
        115                 120                 125
Lys Ala Lys Val Asp Ala His Phe Leu Arg Asn Met Asp Phe Cys Val
    130                 135                 140
Cys Val Tyr Asp Glu Gly His Met Leu Lys Ser Ser Thr Ser Val Leu
145                 150                 155                 160
Tyr Glu Lys Leu Ile Arg Ile Pro Ala Arg Phe Arg Leu Leu Leu Thr
                165                 170                 175
Gly Thr Pro Leu Gln Asn Asn Leu Gln Glu Leu Ala Ser Leu Leu Gly
            180                 185                 190
Phe Ile Leu Pro Lys Val Phe Gln Glu Arg Lys Glu Asp Leu Gln Tyr
        195                 200                 205
Ile Phe Ala Asn Lys Ala Lys Thr Val Asp Glu Ser His Ser Thr Leu
    210                 215                 220
Leu Ser Ala Gln Arg Ile Glu Arg Ala Lys Ser Met Leu Lys Pro Phe
225                 230                 235                 240
Val Leu Arg Arg Lys Lys His Gln Val Ile Asp Leu Pro Arg Lys Thr
                245                 250                 255
Ser His Val Glu Tyr Cys Glu Leu Asn Ser Ala Gln Arg Glu Ile Tyr
            260                 265                 270
Glu His Glu Lys Glu Glu Val Arg Gln Leu Leu Ala Asp Arg Ala Ala
        275                 280                 285
Gly Lys Lys Thr Gly Asn Arg Ser Ala Asn Ile Leu Met Lys Leu Arg
    290                 295                 300
Gln Ala Ala Ile His Pro Leu Leu Tyr Arg Arg His Tyr Thr Asp Thr
305                 310                 315                 320
Ile Leu Ser Arg Met Ala Lys Ala Cys Leu Lys Glu Glu Gln Trp Ser
                325                 330                 335
Gln Ser Asn Pro Asp Ile Ile Phe Glu Glu Leu Gln Ala Tyr Asn Asp
            340                 345                 350
Phe Glu Cys His Gln Leu Cys Leu Asn His Pro His Ser Leu Gly Lys
        355                 360                 365
Phe Ala Leu Lys Asn Glu Glu Trp Met Asn Ser Gly Lys Val Asp Lys
    370                 375                 380
Leu Cys Glu Leu Leu Lys Arg Phe Gln Glu Asn Gly Asp Arg Thr Leu
385                 390                 395                 400
Val Phe Ser Gln Phe Thr Leu Val Met Asp Ile Leu Glu His Val Leu
                405                 410                 415
Glu Thr Leu His Leu Gly Phe Val Arg Leu Asp Gly Arg Thr Asn Val
            420                 425                 430
Glu Asp Arg Gln Ser Ile Leu Asp Ala Phe His Glu Arg Thr Asp Ile
        435                 440                 445
Pro Val Phe Leu Leu Ser Thr Lys Ala Gly Gly Ala Gly Ile Asn Leu
    450                 455                 460
Ala Cys Ala Asn Lys Val Val Ile Phe Asp Ser Ser Phe Asn Pro Gln
465                 470                 475                 480
Glu Asp Val Gln Ala Glu Asn Arg Ala His Arg Val Gly Gln Thr Arg
                485                 490                 495
Glu Val Glu Val Ile Arg Leu Val Thr Lys Asp Thr Ile Glu Glu Gln
            500                 505                 510
Ile Tyr Ala Leu Gly Gln Thr Lys Leu Ala Leu Asp Gln Ala Val Ala
```

```
        515                 520                 525
Gly Asp Glu Thr Glu Ser Lys Lys Gly Glu Glu Ala Gly Met Lys Val
    530                 535                 540
Val Glu Asp Met Leu Leu Ala Lys Gln Glu Glu Val Lys Thr Asp Ser
545                 550                 555                 560
Thr Asn Ala
```

<210> 29508
<211> 94
<212> PRT
<213> A.fumigatus

<400> 29508

```
Val Thr Ser Ser Ile Thr Lys Leu Ser Thr Val Gln Ser Ile Tyr Leu
1               5                   10                  15
Phe Met Asn Ala Ile Ser Ser Ala Ile Gln Gln Gly Leu Thr Ala Leu
            20                  25                  30
Ser Thr Asp Pro Leu Leu Ile Trp Asn Tyr Gly Phe Val Ala Val Leu
        35                  40                  45
Ala Phe Val Ala Gly Asn Leu Phe Tyr Leu Thr His Tyr Ser Leu Asp
    50                  55                  60
Lys Glu Glu Asp Arg Leu Asn Asn Leu Glu Ala Ser Ala Tyr Leu Gly
65                  70                  75                  80
Thr Asn Pro Gly Ala Arg Asp Glu Lys Ile Asp Pro Glu Pro
                85                  90
```

<210> 29509
<211> 208
<212> PRT
<213> A.fumigatus

<400> 29509

```
Ala Tyr Ala Val His His His Tyr Thr Arg Pro Cys Ile Lys His Gly
1               5                   10                  15
Lys Phe Cys Lys Ser Arg Arg His Ile Pro Thr Gln Asp Ala Lys Lys
            20                  25                  30
Lys Lys Thr Lys Gln Asp Arg Lys Ser Thr Arg Leu Lys Glu Arg Gln
        35                  40                  45
Gly Pro His Ala Ser Arg Ser Ser Thr Lys Gln Lys Ser Thr Arg Asp
    50                  55                  60
Lys Phe Thr Ser Ser Pro Ser Pro Pro Ser Pro Pro Ser Pro Arg Ala
65                  70                  75                  80
Phe Pro Ser Ala Pro Ala Gln Pro Ala His Ser His Arg Leu Asp Ala
                85                  90                  95
His Glu Ala Ser His Thr Ala Ala Asp Ala Ser Ala Ser Thr Ala Pro
            100                 105                 110
Pro Gln Gln Gln Pro Tyr Leu Ser Thr Asp Arg His Ser Glu Asp His
        115                 120                 125
Ala Pro Gln Gln Gly Ser Glu Ser Glu Ser Ala Pro Pro Pro Ser Arg
    130                 135                 140
Pro Gln Pro Ser Ser Pro Ser Ser Pro His Leu Ala Thr Pro Tyr Pro
145                 150                 155                 160
Ser Ser Asp Pro Arg Ser Gln Thr Pro Pro Thr Gln Pro Ala Gln Arg
                165                 170                 175
Gly Leu Gly Pro Ala His Thr His Ala Pro Ala Arg Ser Ser Ala Asn
```

```
            180                 185                 190
Arg Ser Gly Thr Gly Cys Gly Ser Pro Trp Gln Thr Ser Gln Ser Cys
        195                 200                 205
```

<210> 29510
<211> 263
<212> PRT
<213> A.fumigatus

<400> 29510

```
Thr Ile Thr Asn Leu Asn Phe Ile Arg Glu Val Leu Lys Gly Gly Thr
1               5                  10                  15
Val Gly Gly Ile Val Gly Leu Ile Gly Gly Phe Ala Gly Val Val Ala
            20                  25                  30
Ala Ser Lys Arg Tyr Ala Thr Ile Arg Asn Leu Thr Leu Pro Met Lys
        35                  40                  45
Ser Phe Leu Val Thr Ser Ser Gly Thr Phe Phe Gly Ile Ile Ala Ala
    50                  55                  60
Asp His Ala Ser Arg Ser Phe Glu Ala Ser Arg Asn Ala Glu Arg Gln
65                  70                  75                  80
Trp Tyr Glu Ser Arg Glu Glu Arg Leu Arg Gln Glu Glu Leu Ala Gly
                85                  90                  95
Met Ser Phe Ile Asp Arg Thr Met Ala Phe Ala Arg Arg Glu Lys Tyr
            100                 105                 110
Lys Ile Val Gly Ala Thr Trp Val Ala Ser Met Ile Gly Ser Phe Ala
        115                 120                 125
Met Val Ser Arg Asn Pro Tyr Leu Thr Gly Ser Gln Lys Ile Val Gln
    130                 135                 140
Ala Arg Val Tyr Ala Gln Gly Leu Thr Leu Ala Val Leu Val Ala Ser
145                 150                 155                 160
Ala Ala Phe Glu Ile Ser Asp Gln Arg Lys Gly Lys Gly Leu Leu Asp
                165                 170                 175
Ala Ala Lys Lys Gly Lys Lys Ala Ala Gly Glu Lys Glu Ala Ala Pro
            180                 185                 190
Thr Gln Thr Pro Thr Pro Ala Ala Ala His Asp Pro Gln Ser Gly Asp
        195                 200                 205
Leu Trp Lys Asp Met Val Ala Ala Glu Glu Glu Arg Leu Lys Gln Lys
    210                 215                 220
His Gln Pro Leu Tyr Glu Lys Pro His Glu His Gln Asp Asp Ala Ser
225                 230                 235                 240
Ala Gln Ala Ala Pro Ala Pro Thr Glu Lys His Glu Glu Lys Glu Glu
                245                 250                 255
Lys Glu Glu Lys Glu Lys Lys
            260
```

<210> 29511
<211> 99
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (43)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29511

```
Gly Gln Ile Pro Phe Pro Gly Thr Leu Trp Pro Pro Tyr Ser Arg Tyr
1               5                  10                  15
Gly Asn Ala Leu Lys Ala His Arg Phe Gly Ile Leu Gly Met Phe Ile
            20                  25                  30
Phe Pro Ser Ala Lys Cys Pro Arg Thr Asn Xaa Ile Leu Ile Asn Pro
        35                  40                  45
Cys Thr Arg Leu Arg Gly Arg Ala Pro Cys Ala Lys Arg Asn Ser Tyr
    50                  55                  60
Pro Ser Ser Met Lys Cys Ala Thr Pro Asn Gln Pro Ala Thr Ile Pro
65                  70                  75                  80
Val Ile Lys Ser Gln Ile Ser Ile Gly Ile Gln Met Pro Glu Thr Arg
                85                  90                  95
Val Ala Thr
```

<210> 29512
<211> 134
<212> PRT
<213> A.fumigatus

<400> 29512

```
Ala Glu Glu Pro Gly Trp Met Arg Asp Pro Leu Phe Arg His Leu Tyr
1               5                  10                  15
Arg Ile Arg Thr Leu Glu Gly Ala Ala Glu Ser Asp Glu Arg Ser Val
            20                  25                  30
Asn Tyr Ala Leu Leu Leu Ala Gly Ala Asp Asn Phe Glu Glu Ala Ser
        35                  40                  45
Gly Ile Val Tyr Glu Ala Met Val Ser Lys Leu Val Lys Ala Leu Asn
    50                  55                  60
Ile Ser Gln Gly Asp Val Asp Pro Ser Lys Pro Leu His Ala Leu Gly
65                  70                  75                  80
Val Asp Ser Leu Val Ala Val Glu Leu Arg Thr Trp Met Leu Lys Gln
                85                  90                  95
Leu Asp Ala Asp Val Ala Val Phe Asp Leu Met Glu Val Ala Ser Leu
            100                 105                 110
Arg Ala Leu Ala Ser Leu Ile Ala Thr Arg Ser Gly Tyr Val Lys Lys
        115                 120                 125
Asp Asn Gly Lys Glu Lys
    130
```

<210> 29513
<211> 71
<212> PRT
<213> A.fumigatus

<400> 29513

```
Val Ser Asp Thr Pro Ser Ala Ala Glu Arg Trp Met Gly Glu Asp Gln
1               5                  10                  15
Glu His Phe Glu Ala Ser Thr Asp Ser Leu Ser Ser Ile Trp Leu Asp
            20                  25                  30
Glu Arg Ile Pro Leu Gly Pro Ile Ser Ser Ser Met Gln Gln Tyr Val
        35                  40                  45
Cys Asp Ile Asp Leu Asn Asn Leu Val Asn Arg Cys Ile Ser Met Gln
    50                  55                  60
Pro Val Ala Ser Cys Leu Pro
65                  70
```

<210> 29514
<211> 370
<212> PRT
<213> A.fumigatus

<400> 29514

```
Val Gly Ser Ser Leu Glu Leu Ser Gln Arg Leu Asp Glu Pro Ile Tyr
1               5                  10                  15
Asn Met Pro Thr Gln Ser Asn Pro Thr Gln Asp Ser Thr Ile Pro Glu
            20                  25                  30
Thr Met His Ile Phe Asp Ile Arg Arg Ser Asn Ser Val Thr Glu Leu
        35                  40                  45
Trp Lys Arg Phe Glu Phe Asn Pro Ala Gly Arg Glu Thr Glu Asp Ala
    50                  55                  60
Lys Lys Ala Val Glu Ser Thr Ser Asp Asn Ser Thr Pro Pro Ser Pro
65                  70                  75                  80
Asp Gly Arg Val Ser Asn Ala Gly Leu Ala Ser Asn Glu Gly Ser Glu
                85                  90                  95
Pro Leu Leu Ala Ala Phe Glu Thr Glu Met Ala Lys Ile Leu Ser Ala
            100                 105                 110
Ser Glu Pro Arg Asn Thr Asp Asn Ala Glu Glu Ile Pro Ser Ser Thr
        115                 120                 125
Glu Val Pro Asn Glu Pro Pro Ser Ser Gly Arg Arg Thr Asn Pro Ala
    130                 135                 140
Leu Ala Leu Ala Gln Ala Met His His Leu Ile Asn Gly Ala Glu Met
145                 150                 155                 160
Ile Gly Ser Glu Val Arg Ser Arg Leu Pro Glu Leu Glu His Gln Leu
                165                 170                 175
Glu His His Leu Gln Asn Ala Gln Arg Val Leu Pro Glu Asn Val Gly
            180                 185                 190
Ser Thr Val Gln Ala Ala Leu Ala Ser Leu Asp Ala Gln Met Arg Asn
        195                 200                 205
Leu Thr Asn Ala Leu Asn Asn Ala Ser Ser Ala Arg Asp Arg Arg Thr
    210                 215                 220
Ser Asn Met Phe Arg Gly Asp Val Arg Thr Pro Ala Asp Ala Val Asp
225                 230                 235                 240
Ser Leu Tyr Asn Met Ala Ser Glu Leu Gly Gln Met Gly His Thr Leu
                245                 250                 255
Tyr Ser Ala Phe Glu Thr Glu Phe Gly Ser Arg Ile Gly Ala Arg Asp
            260                 265                 270
Ala Ser Gln Pro Ser Asp Glu Ser Leu Gln Lys Ser Thr Pro Gly Asp
        275                 280                 285
Glu Ala Ala Val Asn Gly Asp Pro Ser Ala Ala Ala Ser Val Leu Ser
    290                 295                 300
Thr Lys Thr Glu Glu Thr Ala Lys Ile Pro Leu Thr Ala Glu Glu Ser
305                 310                 315                 320
Asp Thr Thr Ser Arg Gly Gln Gly Ser Lys Asn Arg Glu Glu Pro Arg
                325                 330                 335
Ser Ser Ser Asn Arg Thr Glu Glu Pro Gly Arg Ala Gln Arg Val Pro
            340                 345                 350
Ser Gln Gln Asp Glu Pro Ser Glu Leu Pro Ser Ser His Thr Ala Ala
        355                 360                 365
Gly Arg
    370
```

<210> 29515
<211> 284
<212> PRT
<213> A.fumigatus

<400> 29515
Pro Tyr Arg Ile Ala Arg Met Leu Pro Pro Pro Val Arg Glu Glu Leu
1 5 10 15
Pro Thr Pro Glu Ile Asn Leu Phe Ala Ala Gly His Asp Thr Gly Val
20 25 30
Met Val Phe Lys Leu Glu Arg Glu Arg Pro Ala Ser Ala Val Tyr Gln
35 40 45
Asn Gln Leu Phe Tyr Ile Thr Lys Glu Lys His Val Lys Ser Tyr Asp
50 55 60
Phe Ala Lys Asn Leu Glu Ser Pro Pro Met Leu Ser Leu Arg Lys Leu
65 70 75 80
Gly Ser Pro Trp Val Pro Pro Arg Thr Leu Ser Tyr Asn Pro Ala Glu
85 90 95
Arg Ala Ile Leu Val Thr Ser Pro Thr Asp Gly Gly Ala Tyr Glu Leu
100 105 110
Ile His Leu Pro Arg Asp Ala Thr Gly Ala Val Glu Pro Thr Asp Val
115 120 125
Lys Arg Gly Gln Ala Ser Ser Ala Val Phe Val Ala Arg Asn Arg Phe
130 135 140
Ala Val Phe Ser Gln Ala Asn Gln Gln Val Asp Ile Lys Asp Leu Ser
145 150 155 160
Asn Ser Thr Thr Lys Thr Ile Lys Pro Pro Ser Gly Thr Thr Asp Ile
165 170 175
Tyr Phe Gly Gly Thr Gly Ala Leu Leu Phe Ile Thr Pro Thr Ser Val
180 185 190
Val Leu Phe Asp Ile Gln Gln Lys Lys Gln Leu Ala Glu Leu Ala Val
195 200 205
Ser Gly Val Lys Tyr Val Val Trp Ser Asn Asp Gly Leu Tyr Ala Ala
210 215 220
Leu Leu Ser Lys His Asn Val Thr Ile Val Thr Lys Ser Leu Glu Gln
225 230 235 240
Val Ser Ser Leu His Glu Thr Ile Arg Ile Lys Ser Ala Ala Trp Asp
245 250 255
Asp Ala Gly Arg Pro Ser Leu Leu Asp Leu Glu Ser Arg Gln Ile Leu
260 265 270
Ser Ser Lys Trp Val Cys Ile Asp Phe Pro Phe His
275 280

<210> 29516
<211> 193
<212> PRT
<213> A.fumigatus

<400> 29516
Leu Tyr Ser Thr Asn Ser Gln Ala Asp Pro Leu Ala Tyr Leu Thr Ala
1 5 10 15
Lys Ser His Gly Leu Thr Glu Glu Ala Glu Ser Ile Leu Glu Ala Cys
20 25 30
Gly Leu Thr Glu Asp Gln Ile Thr Leu Pro Thr Thr Glu Glu Pro Leu
35 40 45
Arg Val Pro Gln Pro Ile Val Pro Thr Phe Lys Ser Asn Trp Pro Val

```
    50                  55                  60
Lys Ala Ala Ala His Ser Ser Phe Glu Lys Ala Leu Leu Gly Glu Val
65                  70                  75                  80
Gly Val Glu Asp Glu Asp Ala Ala Ala Leu Gly Leu Glu Pro Glu Glu
                85                  90                  95
Glu Gly Glu Glu Ala Val Leu Ala Arg Glu Thr Leu Glu Asp Glu Glu
            100                 105                 110
Glu Asp Val Ala Gly Trp Asp Met Gly Glu Glu Ile Asn Met Glu Asp
        115                 120                 125
Asp Val Asp Phe Leu Asn Val Asp Ser Ala Asp Ala Gly Ala Cys Ser
    130                 135                 140
Ser Asp Ala Asp Leu Trp Ala Pro Asn Ser Pro Leu Ala Ala Asp His
145                 150                 155                 160
Val Ala Ala Gly Ser Phe Arg Tyr Arg His Ala Pro Thr Gln Ser Val
                165                 170                 175
Ser Trp Cys Gly Gln Leu Pro Ser Ser Gln Asp Ser Leu Pro Arg Tyr
            180                 185                 190
Tyr
```

<210> 29517
<211> 204
<212> PRT
<213> A.fumigatus

<400> 29517

```
Lys Pro Phe Ser Asp Asn Gly Ile Ile Arg Thr Leu Asp His Thr Val
1               5                   10                  15
Tyr Leu Val Lys Val Lys Gly Lys Ser Val Tyr Cys Leu Asp Arg Asn
            20                  25                  30
Ala Lys Pro Arg Val Leu Glu Ile Asp Pro Thr Glu Tyr Arg Phe Lys
        35                  40                  45
Leu Ala Leu Val Lys Arg Asn Tyr Asp Glu Met Leu Gln Ile Ile Lys
    50                  55                  60
Thr Ser Ser Leu Val Gly Gln Ser Ile Ile Ser Tyr Leu Gln Lys Lys
65                  70                  75                  80
Gly Tyr Pro Glu Ile Ala Leu Gln Phe Val Gln Asp Leu Gln Thr Arg
                85                  90                  95
Phe Glu Leu Ala Leu Glu Cys Gly Asn Leu Glu Val Ala Ile Glu Met
            100                 105                 110
Ala Arg Glu Leu Asp Val Arg Lys Leu Trp Ser Arg Leu Gly Met Glu
        115                 120                 125
Ala Leu Ala His Gly Asn His Gln Thr Val Glu Met Thr Tyr Gln Lys
    130                 135                 140
Gln Arg Asn Phe Asp Lys Leu Ser Phe Leu Tyr Leu Ser Ile Gly Asp
145                 150                 155                 160
Ser Glu Lys Leu Ala Arg Met Ala Lys Ile Ala Glu His Arg Gly Asp
                165                 170                 175
Phe Thr Ser Arg Phe Gln Asn Ala Ile Tyr Arg Gly Asp Val Asp Asp
            180                 185                 190
Arg Ile Gln Met Phe Lys Glu Val Asp Leu Cys Lys
        195                 200
```

<210> 29518
<211> 211
<212> PRT

<213> A.fumigatus

<400> 29518

```
Pro Lys Thr Arg Ser Arg Ser Pro Gln Pro Arg Ser Leu Cys Gly Cys
1               5                  10                  15
Leu Ser Pro Leu Ser Leu Leu Ser Ser Arg Ile Gly Pro Leu Arg Leu
            20                  25                  30
Gln Pro Ile Arg Arg Leu Arg Arg His Cys Leu Glu Lys Leu Val Trp
        35                  40                  45
Lys Met Arg Met Leu Pro Pro Leu Ala Ser Ser Pro Arg Arg Lys Ala
    50                  55                  60
Arg Arg Pro Phe Trp Pro Val Arg Leu Leu Arg Met Lys Arg Lys Met
65                  70                  75                  80
Leu Pro Ala Gly Thr Trp Val Lys Arg Ser Thr Trp Arg Met Met Ser
                85                  90                  95
Thr Ser Leu Thr Leu Thr Ala Gln Thr Leu Ala His Ala Ala Pro Met
            100                 105                 110
Pro Thr Phe Gly Leu Pro Thr Leu Pro Trp Arg Leu Ile Met Ser Leu
        115                 120                 125
Leu Gly Leu Phe Asp Thr Ala Met Leu Leu Leu Asn Pro Ser Val Gly
    130                 135                 140
Ala Val Asn Phe Pro Pro Leu Lys Ile Pro Phe Pro Asp Ile Ile Asn
145                 150                 155                 160
Ala Ser Thr Thr Tyr Leu Pro Leu Ile Ala Gly Pro Leu Leu Gly Leu
                165                 170                 175
Thr Ile Cys Val Pro Pro Val Glu Arg Lys Leu Thr Pro Ala Asn Ser
            180                 185                 190
Trp Pro Tyr Phe Pro Ser Val Phe Leu Ile Thr Leu Ala Phe Val Pro
        195                 200                 205
Pro Ser Gly
    210
```

<210> 29519
<211> 124
<212> PRT
<213> A.fumigatus

<400> 29519

```
His Ser Thr Cys Arg Arg Gly Phe Ala Tyr Ile Leu Gln Thr Cys Thr
1               5                  10                  15
Lys Glu Gly Met Ala Lys Ile Ala Gly Pro Lys Val Asp Phe Asn Asp
            20                  25                  30
Leu Ile Gly Ala Ala Ser Ala Leu Asn Gln Leu Ser Thr Leu Ile Thr
        35                  40                  45
Gly Ser Ser Asn Glu Ser Val Lys Asp Pro Gln Gly Arg Arg Tyr Val
    50                  55                  60
His Pro Leu Val Leu Leu His Val Ala Arg Ala Arg Gln Arg Pro Arg
65                  70                  75                  80
Ser Ser Thr Asp Gln Gly His Ser Pro Val Gly His Asp Phe Gly Phe
                85                  90                  95
Gln Ile Ser Phe Glu Gly Gly Ile Lys Cys Gln Ile Met Asn Ser Ala
            100                 105                 110
Glu Ala Thr Asn Leu Lys Thr Arg Lys Ser Gln Tyr
        115                 120
```

<210> 29520

<211> 494
<212> PRT
<213> A.fumigatus

<400> 29520
Val Phe Ala Phe Ser Pro Val Ala Gln Cys Ile Asp Gly Asp Cys Ser
1 5 10 15
Asp Gly Asp Gly Asp Val Asp Asp Asp Ala Lys Trp Trp Asp Ser Leu
20 25 30
Thr Leu Gly Leu Asp Asp Leu Cys Val Arg Phe Ile Ile Asn Leu Pro
35 40 45
Arg Glu Glu Leu Glu Ser Val Glu Arg Ile Cys Phe Gln Val Glu Glu
50 55 60
Ala Gln Trp Phe Tyr Glu Asp Phe Ile Arg Pro Leu Asp Pro Ala Leu
65 70 75 80
Pro Ser Leu Ser Leu Lys Ala Phe Ala Leu Arg Ile Phe Gln His Cys
85 90 95
Pro Leu Met Ser Gln Trp Ser His Tyr His His Ile Thr Ala Phe Ser
100 105 110
Glu Phe Leu Ala Tyr Lys Thr Arg Val Pro Val Arg Gly Ala Ile Leu
115 120 125
Leu Asn Gln Asp Met Asp Glu Val Val Leu Val Lys Gly Trp Lys Lys
130 135 140
Gly Ala Asn Trp Ser Phe Pro Arg Gly Lys Ile Asn Lys Asp Glu Lys
145 150 155 160
Asp Leu Asp Cys Ala Ile Arg Glu Val Tyr Glu Glu Thr Gly Tyr Asp
165 170 175
Val Arg Glu Ala Gly Leu Val Lys Asp Glu Lys Asp Val Lys Tyr Ile
180 185 190
Glu Ile Thr Met Arg Glu Gln His Met Arg Leu Tyr Val Phe Arg Gly
195 200 205
Val Pro His Asp Ala His Phe Glu Pro Arg Thr Arg Lys Glu Ile Ser
210 215 220
Lys Ile Glu Trp Tyr Lys Leu Ser Asp Leu Pro Thr Leu Met Lys Lys
225 230 235 240
Ser Lys Pro Asn Asp Glu Asn Met Ala Val Ala Asn Ala Asn Lys Phe
245 250 255
Tyr Met Val Ala Pro Phe Met His Pro Leu Lys Lys Trp Ile Ala Gln
260 265 270
Gln Arg Arg Leu Asp Ala Lys Ala Gln Ser Gly Gly Val Lys Gln Gln
275 280 285
Ser Gln Leu Glu Gly Glu Thr Ser Met Asp Glu Ala Ser Gln Pro Ala
290 295 300
Ile His Gln Thr Pro Ala Arg His Ala Ala Pro Ser Asp Leu Pro Glu
305 310 315 320
Val Thr Ser Ala Glu Asp Ala Ser Ser His Leu Lys Arg Leu Leu Asn
325 330 335
Ile His Ser Ala Ser Thr Gln Thr Pro Phe Pro Pro Pro Gln Thr Ser
340 345 350
Ala Pro Asp Ala Ser Lys Ser Asn Ala Leu Leu Glu Leu Leu Arg Ser
355 360 365
Gly Ser Ser His Lys Pro Thr His Glu Ala Pro Thr Asn Asp Gln Glu
370 375 380
Leu Pro Pro Asn Val Leu His Glu Ala Met Pro Pro Pro His Gln Pro
385 390 395 400
Gln Thr Leu Ser Ala Pro Asp Phe Phe Pro Gly Phe Pro Gln Gln Val

```
                405                 410                 415
Ala Tyr Ser Gly Gln His Asp Asn Leu Leu His Ile Ser Gly Gln Pro
            420                 425                 430
Asn His Gly Ala Ala Leu Ser His Leu Pro Thr Pro Val His Ser Leu
        435                 440                 445
Gly Val Gly Gly Pro His Ala Gly Tyr His Gly Val Ser Gln Phe Ser
    450                 455                 460
Asn Arg His Pro Ser Glu Leu His Ala Ala Ala Gln Thr Gln Arg Pro
465                 470                 475                 480
Ala Pro Ala Pro Ala Pro Tyr Gln Arg Thr Gly Asp Val Phe
                485                 490
```

<210> 29521
<211> 451
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (440)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29521

```
Ser Arg Ala Leu Ser Asp Lys His Arg Ala Glu Thr Leu Tyr Gln Leu
1               5                   10                  15
Asp Ser Gln Leu Arg Val Ile Asp Pro Arg Gln Asp Asp Leu Leu Asp
            20                  25                  30
Thr Val Met Ala Ser Ala Pro Ser His Ser Ser Gln Lys Arg Pro Leu
        35                  40                  45
Pro Ala Glu Pro Asn Pro Val Leu His Ala Ser Gln Thr Gln Trp Leu
    50                  55                  60
Phe Thr Asp Glu Glu Leu Thr Arg Thr Pro Ser Gln Leu Asp Gly Met
65                  70                  75                  80
Lys Met Glu Ala Glu His Thr Ser Arg Ser Lys Gly Val Asn Phe Ile
                85                  90                  95
Thr Gln Val Gly Ile Met Leu Lys Leu Pro Gln Leu Thr Leu Ala Thr
            100                 105                 110
Ala Ala Val Tyr Leu His Arg Phe Phe Met Arg Tyr Ser Met Val Asp
        115                 120                 125
Ile Pro Gln Arg Pro Gly Met His Pro Tyr Pro Ile Ala Ala Thr Ala
    130                 135                 140
Leu Phe Leu Ala Thr Lys Val Glu Glu Asn Val Arg Arg Met Arg Glu
145                 150                 155                 160
Leu Val Val Ala Cys Cys Arg Val Ala Gln Lys Gln Pro Asn Leu Val
                165                 170                 175
Val Asp Glu Gln Ser Lys Glu Phe Trp Lys Trp Arg Asp Thr Ile Leu
            180                 185                 190
His His Glu Asp Leu Leu Leu Glu Ala Leu Cys Phe Asp Leu Gln Leu
        195                 200                 205
Glu Gln Pro Tyr Arg Ile Leu Tyr Asp Phe Ile Cys Phe Phe Gly Val
    210                 215                 220
Asn Asp Asn Lys Pro Leu Arg Asn Ala Ala Trp Ala Phe Val Asn Asp
225                 230                 235                 240
Ser Met Phe Thr Val Leu Cys Leu Gln Phe Thr Ala Arg Thr Ile Ala
                245                 250                 255
Ala Ala Ala Leu Tyr Ala Ala Ala Arg His Cys Asp Val Gly Phe Pro
```

```
            260                 265                 270
Asp Asp Asp Arg Gly Arg Ala Trp Trp Glu Gln Ile Asp Val Asp Leu
        275                 280                 285
Thr Gln Val Arg Arg Ala Cys Met Arg Met Ala Gln Leu Tyr Glu Asn
    290                 295                 300
Asn Ala Met Gln Lys His Ser Gln Tyr Tyr Pro Thr Thr Pro Ile Leu
305                 310                 315                 320
Ser Asp Glu Gly Thr Glu Lys Thr Arg Ile Pro His Asp Gly Ser Pro
                325                 330                 335
Ala Asn Leu Pro Pro Ala Glu Ser Asp Val Thr His Gly Arg Lys Arg
            340                 345                 350
Ser Lys Glu Pro Glu Asp Ser Gly Glu Pro Arg Gly Asp Gly Ser Ala
        355                 360                 365
Pro Ser Asn Gly Glu Arg Ser Pro Lys Arg Pro Arg Arg Asp Ala Asp
    370                 375                 380
Ala Ala Pro Arg Gly Ser Trp Gln Asp Gln Gln Ser Pro Ser Ala Pro
385                 390                 395                 400
Ser Ser Gln Ser Leu Pro Asn Ala Gly Ser Pro Ser Ser Ser Ser Gln
                405                 410                 415
Gly Arg Pro His Leu Asn Gly Gln Ala Pro Pro Ser Leu Pro His Pro
            420                 425                 430
Pro Val Gln Pro Gly His Arg Xaa Leu Pro Lys Gly Arg Gln Gly His
        435                 440                 445
Ala Phe Lys
    450
```

<210> 29522
<211> 140
<212> PRT
<213> A.fumigatus

<400> 29522

```
Pro Ala Ile Ser Leu Thr Asn Gln Cys Ser Leu Pro Ala Met Arg Arg
1               5                   10                  15
Ser Ser Ser Ser Ser His Ser Trp Gln Ser Ala Leu Gln Lys Val Phe
            20                  25                  30
Arg Arg Arg Ser Ser Glu Ser Lys Gly Lys Gln Pro Ala Leu Asp Asp
        35                  40                  45
Asp Phe Lys Ile Gly Glu His Lys Asp Gly Phe Tyr Lys Tyr Ser Gln
    50                  55                  60
Glu Val Leu Glu Lys Lys Asn Arg Lys Phe Glu Pro Pro Thr Met Arg
65                  70                  75                  80
Ala Leu Asp Ser Ala Glu Val Tyr Asp Met Arg Ala Tyr Ser Thr Val
                85                  90                  95
Ser Ser Thr Val Arg Val Ser Arg Val Arg Gly Ser Asp Ser Thr Glu
            100                 105                 110
Thr Ser Tyr Ala Ser Ala Val Ser Gly Arg Asn Ile Leu Ser Trp Gln
        115                 120                 125
Phe Ala Lys Pro Glu Arg Arg Glu Lys Lys Leu Thr
    130                 135                 140
```

<210> 29523
<211> 75
<212> PRT
<213> A.fumigatus

<400> 29523
Ser Phe Ser Thr Arg Pro Ser Gln Phe Lys Asn Ser Gly Cys Ala Pro
1 5 10 15
Arg Gln Val Leu Asn Phe Lys Thr Leu Ser Leu Gly Phe Leu Ser Thr
20 25 30
Ser Ile Ala Asn Cys His Gly Val Met Pro Asp Arg Ser Asn Ile Arg
35 40 45
Val Ser Arg Pro Val Thr Pro Met Ser Leu Gly Phe Pro Met Pro Ala
50 55 60
Ser Lys Phe Gln Ala Val Leu Pro Gly Ala Gly
65 70 75

<210> 29524
<211> 647
<212> PRT
<213> A.fumigatus

<400> 29524
Arg Arg Cys Asn Asp Pro Leu Arg Val Thr Pro Leu Pro Lys Pro Pro
1 5 10 15
Ala Leu Asn Gly Leu Ala Ser Pro Glu His Thr Phe Gly Gln Gln Pro
20 25 30
Ser Gly Ser Trp Gln Glu Thr Phe Tyr Asn Ala Arg Asn Ser Thr Val
35 40 45
Gly Arg Val Val Arg Lys Val Phe Ser Tyr Ala Trp Ser Thr Val Thr
50 55 60
Arg Leu Phe Lys Pro Ser Gly Val Ser Ser Arg Arg Thr Ala Ala Ala
65 70 75 80
Val Ser Thr Ser Pro Thr Arg Ala Asn Leu Arg Asn Phe Pro Glu Gln
85 90 95
Gln Arg Gln Gln Leu Lys Ser His Gln Trp Arg Lys Glu Arg Gly Tyr
100 105 110
Pro Thr Val Glu His Tyr Pro Phe Pro Glu Leu Ser Leu Asp Ile Pro
115 120 125
Leu Tyr Pro Ala Gly Ala Ala Ser Gln Ala Glu Ser Thr Ala Glu Val
130 135 140
Arg Gly Arg Ser Val Ser Lys Lys Pro Ser Gly Thr Pro Arg Gln Pro
145 150 155 160
Arg Lys Arg Ile Gly Thr Ser Gly Pro Arg Thr Val Ser Leu Lys Glu
165 170 175
Arg Gly Lys His Gly Met Glu Lys Arg Ala Arg Val Asp Ser Leu Ser
180 185 190
Pro Arg Leu Lys Arg Arg Leu Leu Ala Gly Thr Arg Leu Ser Arg Trp
195 200 205
Arg Asn Ala Arg Arg Glu Arg Ala Leu Ala His Ala Leu Glu Thr Thr
210 215 220
Glu His Asp Ala Val Arg Pro Val Gln Thr Ser Ala Gln Ala Leu Ser
225 230 235 240
Ile Ser Pro Ile Glu Ser Arg Arg Ser Thr Leu Ile Gln Pro Arg Ala
245 250 255
Thr Ile Glu Pro Lys Ser Lys Pro Lys Arg Val Arg Phe Gln Glu Pro
260 265 270
Leu Thr Glu Thr Pro Thr Leu Thr Ala Pro Thr Leu Leu Thr Glu Leu
275 280 285
Ala Pro His Leu Thr Pro Pro Ser Pro Lys Ile Asp Arg Val Ala His
290 295 300

```
Arg Thr Glu Gln Ile Val Glu Glu Lys Glu Asn Val Pro Pro Ala Pro
305                 310                 315                 320
Glu Ala Ala Lys Thr Val Glu His Ala Ala His Asp Asp Glu Leu Arg
                325                 330                 335
Thr Arg His Asp Asp Trp Leu Arg Thr Glu Phe Pro Phe Gly Arg Pro
            340                 345                 350
Val Ser Ala Val Arg Leu Phe Tyr Pro Val Gln Lys Pro Leu Pro Pro
        355                 360                 365
Gly Arg Thr Glu Ser Ile Tyr Ala Ala Glu Trp Arg Lys Ile Glu Glu
    370                 375                 380
Glu Gln Lys Ala Lys Gln Lys Pro Val Arg Val Lys Pro Glu Gly Pro
385                 390                 395                 400
Ala Val Arg Pro Leu Pro Pro Lys Trp Glu Ala Lys Val Ser Glu Ile
                405                 410                 415
Lys Ser Met Pro Asn Asn Arg Gln Ile Ala Thr Thr Leu Ser Gly Asp
            420                 425                 430
Pro Leu Thr Lys Arg Asp Leu Ala Thr Cys Tyr Thr Pro Met Ala Trp
        435                 440                 445
Leu Asn Asp Lys Ile Ile Asn Ser Tyr Leu Ala Leu Ile Val Asp Tyr
    450                 455                 460
Leu Arg Arg Ser His Gly Asn Ala Gly Arg His Asp Lys Pro Arg Phe
465                 470                 475                 480
His Ala Phe Asn Thr Phe Phe Phe Ser Asn Leu Arg Asp Lys Gly Tyr
                485                 490                 495
Gln Ser Val Arg Arg Trp Ala Thr Arg Ala Lys Ile Gly Gly Glu Ala
            500                 505                 510
Leu Leu Asn Val Asp Thr Val Phe Ile Pro Val His Asn Ser Ala His
        515                 520                 525
Trp Thr Leu Ile Val Val Lys Pro Gly Glu Arg Thr Ile Glu His Phe
    530                 535                 540
Asp Ser Leu Gly Ser Leu Ser Arg Arg His Val Gly Leu Val Gln Gly
545                 550                 555                 560
Trp Leu Arg Ala Glu Leu Ala Ser Arg Tyr Val Glu Glu Glu Trp Thr
                565                 570                 575
Val Leu Pro Ser Ile Ser Pro Gln Gln Asp Asn Gly Ser Asp Cys Gly
            580                 585                 590
Val Phe Leu Leu Ser Thr Ala Lys Ala Val Ala Ile Gly Leu Glu Pro
        595                 600                 605
Leu Ser Tyr Gly Ala Lys Asp Ile Gly Val Leu Arg Arg Lys Ile Val
    610                 615                 620
Ala Glu Leu Met Asn Gly Gly Leu Glu Gly Asp Phe Asp Pro Thr Ser
625                 630                 635                 640
Gly Gly Gly Glu Pro Leu Leu
                645
```

<210> 29525
<211> 90
<212> PRT
<213> A.fumigatus

<400> 29525

```
Ser Asn Ile Ala Ser Ser Leu Gln Leu Gly Gln Gly Ser Ile Trp Cys
1               5                   10                  15
Arg Tyr Ala Ser Gly Ser Ser Tyr Asn Gln Leu His Val Glu Ala Arg
            20                  25                  30
Ala Lys Met Pro Phe Phe Thr His Leu Ser Cys Asn Gln Gly Arg Val
```

```
        35                  40                  45
Ala His Trp Thr Phe Gly Val Glu Ser Ser Asp Val Pro Tyr Tyr Ala
    50                  55                  60
Thr Ser Arg Cys Ile Tyr Ile Glu Glu Val Pro Ala Arg Thr Ser Leu
65                  70                  75                  80
Ser His Cys Leu Tyr His His Ser Ser Phe
                85                  90
```

<210> 29526
<211> 81
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (52),(53),(60),(63),(78)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29526

```
Asn Leu Ala Phe Gly Gln Thr Ile Val Ser Pro Pro Thr Ala Thr Leu
1               5                   10                  15
Asp Gly Thr Arg Gly Leu Asp Gly Leu Tyr Val Val Val Ser Arg Cys
            20                  25                  30
Pro Leu Ile Arg Met Arg Pro Ala Trp Phe Gly Ala Leu Arg Ile Trp
        35                  40                  45
Cys Leu Thr Xaa Xaa Asp Ser Ala Trp Gly Leu Xaa Gly His Xaa Gly
    50                  55                  60
Phe Leu Ile Ser Pro Lys Pro Arg Ala Leu Leu Ile Asn Xaa Met Thr
65                  70                  75                  80
Thr
```

<210> 29527
<211> 178
<212> PRT
<213> A.fumigatus

<400> 29527

```
Arg Ser Ser Arg Gln Asn Phe Ser Leu Ala Leu Pro Leu Pro Ser Leu
1               5                   10                  15
Leu Ile Leu Ser Arg Lys Cys Ser Ser Lys Asp Thr Met Pro Pro Phe
            20                  25                  30
Ala Phe Lys Gly Leu Ala Leu Ile Ala Leu Gly Thr Ala Val Ala Gln
        35                  40                  45
Ala Gln Leu Trp Asn Gln Ile Ile Gln Thr Asn Tyr Gly Pro Val Gln
    50                  55                  60
Gly Phe Lys Tyr Phe Asn Glu Ser Thr Leu Glu Arg Phe Phe Gly Val
65                  70                  75                  80
Ser Glu Ser Asn Val Thr Ala Phe Leu Gly Ile Pro Phe Ala Ala Asp
                85                  90                  95
Thr Gly Tyr Gln Asn Arg Trp Lys Pro Pro Gln Pro Arg Glu Pro Trp
            100                 105                 110
Asn Glu Thr Leu Lys Ala Thr Arg Phe Gly Pro Arg Cys Pro Thr Gly
        115                 120                 125
Glu Ser Ser Tyr Ile Ser Glu Asp Cys Leu Ser Leu Asn Leu Trp Thr
    130                 135                 140
```

```
Asn Ala Gly Ser Ala Asp Ala Lys Leu Pro Val Met Val Trp Asn Gln
145                 150                 155                 160
Gly Ser Asp Glu Thr Ser Asp Gln Ser Trp Trp Tyr Gly Gly Gly Met
                165                 170                 175
Ala Leu
```

<210> 29528
<211> 102
<212> PRT
<213> A.fumigatus

<400> 29528

```
Asp Val Ile Leu Ile Thr Phe Asn Arg Arg Asp Asp Val Phe Gly Tyr
1               5                   10                  15
Leu Ala His Pro Asp Leu Asn Ala Glu Gly Leu Ala Val Thr Gly His
            20                  25                  30
Asn Thr Ser Gly Asn Tyr Gly Val Leu Asp Gln Leu Glu Val Leu Lys
        35                  40                  45
Trp Val Lys Lys Asn Ile Ala Asp Phe Gly Gly Asp Pro Asp Arg Val
    50                  55                  60
Val Val Ala Gly Gln Ser Phe Gly Ser Ser Pro Gly Val Ser Cys Cys
65                  70                  75                  80
Glu Gln Ser Thr Val Gln Arg Leu Leu Pro Trp Trp Asn Leu Ser Val
                85                  90                  95
Arg His Pro Ile Pro Ile
            100
```

<210> 29529
<211> 65
<212> PRT
<213> A.fumigatus

<400> 29529

```
Leu Ile Gln Arg His Arg Pro Leu Ser Ser Phe Phe Ile Lys Ser Thr
1               5                   10                  15
Gly Ala Thr Thr Gly Leu Asp Asn Ser Leu Ile Tyr Pro Phe Leu Ser
            20                  25                  30
Ile Leu Leu Arg Tyr Leu Tyr Arg Ala Ser Ser Ser Ser Tyr Asn Ile
        35                  40                  45
Ala Asn Arg Gly Leu Tyr Ser Ser Asn Phe Pro Leu Ser Ser Tyr Ile
    50                  55                  60
Leu
65
```

<210> 29530
<211> 60
<212> PRT
<213> A.fumigatus

<400> 29530

```
Arg His Glu Leu Phe Glu Glu Ser Leu Glu Gln Phe Val Val Ser Thr
1               5                   10                  15
Val Ser Leu Ala Ile Ile Glu Pro Thr Arg Gly Phe His Ile Val Phe
            20                  25                  30
Glu Thr Leu Ser Tyr Leu Ser Ile Asp Ser Ser Ala Ile Leu Glu Ala
```

```
        35                  40                  45
Leu Pro Asp Gly Gln Asn Gly Lys Tyr Leu Tyr Thr
    50                  55                  60

<210> 29531
<211> 151
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (10)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29531
Thr Leu Thr Lys Arg Phe Ala Met Phe Xaa Asn Gln Val Glu Ala Ser
1               5                  10                  15
Val Gly His Tyr Arg Arg Gln Ser Gln Pro Val Gln Gly Met Asn Gly
            20                  25                  30
Ile Ser Arg Thr His Ser Asn Ala Ser Ser Asn Thr Ile Ser Gly Val
        35                  40                  45
Thr Gly Arg Ser Arg Ala Asp Ser Ala Val Ser Gln Asp Asp Pro Phe
    50                  55                  60
Pro Asp Asn Arg Gly Ser Met Ala Leu Asp Ser Leu Ala Asn Glu Leu
65                  70                  75                  80
Glu Ala Leu Arg Ser His Trp Glu Ser Thr Asn Arg Asn Tyr Arg Leu
                85                  90                  95
Ser Thr Gln Ser Asp Phe Asp Arg Thr Pro Thr Lys Glu Thr His Gly
            100                 105                 110
Leu Ser Asp Ser Leu Ala Glu Trp Arg Arg Lys Leu Asp Glu Glu Glu
        115                 120                 125
Ala Arg Ala Gly Ser Pro Glu Lys Asn Lys Pro Arg Ala Ala Gly Glu
    130                 135                 140
Gln Ala Ala Ala Asn Met Ile
145                 150

<210> 29532
<211> 346
<212> PRT
<213> A.fumigatus

<400> 29532
Pro Pro Pro Pro Gly Glu Pro Lys Glu Trp Leu Lys Thr His Val Lys
1               5                  10                  15
Ser Gly Asp Pro Thr Glu Arg Leu Ser Ala Gly Ile Gly Arg Ala Ser
            20                  25                  30
Ser Leu Asn Ser Glu Thr Ser Ile Arg Gln Met Pro Asp Gln Arg Val
        35                  40                  45
Val Ala Leu Glu Ala Gln Val Asp Arg Val Asn Lys Leu Ala Lys Gly
    50                  55                  60
Asn Gln Ala Ala Ala Asp Glu Ala Ala Asp Lys Met Arg Arg Ala Glu
65                  70                  75                  80
Glu Arg Ile Ala Gly Leu Glu Ala Tyr Gln Glu Gln Ala Ser Arg Glu
                85                  90                  95
Gly Leu Gln Leu Arg Arg Gln Leu Gln Ala Ile Met Lys Glu Ser Gln
            100                 105                 110
```

```
Ala His Ala Ala Glu Asn Arg Glu Leu Lys Ser Lys Met Glu Asn Gln
        115                 120                 125
Gln Arg Glu Ala Gly Ala Leu Ala Ile Gln His Ala Ala Leu Lys Asp
    130                 135                 140
Leu Leu Ala Glu Arg Gly Val Ser Tyr Thr Asp Ser Arg Arg Ser Pro
145                 150                 155                 160
Arg Leu Glu Ser Pro Gly Ser Arg Phe Gly Thr Pro Glu Gln Thr Arg
                165                 170                 175
Leu Arg Glu Leu Glu Gln Gln Leu Ser Ala Ser Leu Lys Ala His Glu
            180                 185                 190
Glu Leu Lys Ala Ser Phe Glu Thr Arg Glu Gln Glu Ala Asp Arg Ala
        195                 200                 205
Tyr Arg Glu Lys Leu Glu Gln Leu Glu Asn Asp Tyr Gln Ser Ala Val
    210                 215                 220
His Tyr Val Lys Gly Thr Glu Lys Met Leu Lys Arg Met Lys Asp Glu
225                 230                 235                 240
Leu Thr Arg Tyr Lys Ala Gln Asn Ala Lys Ile Gln Ala Asp Leu Glu
                245                 250                 255
Ala Ala Gln Arg Ser Ile Ser Gln Ala Ser Gly Leu Gly Ser Glu Pro
            260                 265                 270
Pro Ala Glu Trp Glu Ser Glu Arg Ser Lys Leu Gln Gln Ser Ile Ser
        275                 280                 285
Asp Leu Gln Gln Asp Thr Ala Ser Ser Ile Ala Asn Leu Glu Ser Gln
    290                 295                 300
Ile Ala Asn Leu Lys Glu Asp Leu Ser Ala Ala Glu Ala Glu Lys Asp
305                 310                 315                 320
Lys Ser Arg Ser Glu Tyr Glu Ser Val Lys Gln Lys Phe Ile Ala Ala
                325                 330                 335
Ala Glu Lys Ile Arg Ala Asn Trp Ser Ser
            340                 345
```

<210> 29533
<211> 101
<212> PRT
<213> A.fumigatus

```
<400> 29533
Ser Arg Met Ile Ser Asn Val Asp Gly Gln Leu Ser Ser Met Thr Ala
1               5                   10                  15
Ile Trp Leu Leu Pro Ile Ala Ser Cys Val Val Ala Ser Gly Thr Gly
            20                  25                  30
Ala Val Val Ala Asp Leu Leu Phe Asn Pro Asn His Ala Leu Trp Thr
        35                  40                  45
Ile Ile Val Ser Tyr Val Leu Trp Gly Val Gly Ile Cys Leu Ser Met
    50                  55                  60
Ile Val Tyr Val Ile Tyr Phe Gln Arg Leu Thr Val His Lys Leu Pro
65                  70                  75                  80
His Lys Gly Val Ile Met Ser Val Phe Leu Pro Met Gly Pro Leu Gly
                85                  90                  95
Ser Gly Thr Phe Ala
            100
```

<210> 29534
<211> 110
<212> PRT
<213> A.fumigatus

<400> 29534
Phe Thr Pro Asn Pro Ser Gly Phe Arg Ala Leu Lys Leu Gly Thr Ala
1 5 10 15
Gly Lys Thr Val Leu Ser Lys Thr Gln Met Leu Asn Asp Ser Ser Ala
20 25 30
Ala Ser Ile Val Tyr Val Val Gly Ala Met Thr Ala Leu Ile Leu Trp
35 40 45
Ala Phe Gly Leu Pro Trp Leu Phe Phe Ala Phe Ala Ser Val Leu Lys
50 55 60
Ser Gly Arg Phe Pro Phe Asn Met Gly Trp Trp Ala Phe Thr Phe Pro
65 70 75 80
Val Gly Ala Tyr Ala Met Gly Thr Cys Gln Leu Gly Arg Gln Leu Ala
85 90 95
Ser Ala Phe Phe Lys Val Leu Gly Thr Ser Ser Leu His Glu
100 105 110

<210> 29535
<211> 68
<212> PRT
<213> A.fumigatus

<400> 29535
Gly His Gly Phe Lys Met Gly Ile Met Ala Ser Leu Asp Pro Trp Ser
1 5 10 15
Glu Tyr Ser Phe Gly Ile Leu Asp Asn Cys Leu Phe Phe Ser Gly Leu
20 25 30
Ala Gly Val Ser Cys His Cys Ser Phe Gly Pro Lys Arg Arg Leu Pro
35 40 45
Ser Pro Ile Ser Pro Tyr Arg Ile Arg Ile Leu Lys Lys Asn Leu Ile
50 55 60
Tyr Arg Ser Ile
65

<210> 29536
<211> 74
<212> PRT
<213> A.fumigatus

<400> 29536
Leu Cys Ser Pro Ile Phe Trp Leu Cys Asn Gly Gln Ala Asn Asn Asn
1 5 10 15
Leu Val Ser Gln Ala Ser Ser Leu Lys Thr Tyr Gly Met Pro His Asp
20 25 30
Met Ser Met Ser Ser Ile Glu Leu Val Ile Arg Ala Leu Ser Asn Val
35 40 45
Tyr Ser Gly Pro Leu Gln Pro Ser Asp His Phe Asp Cys Arg Pro Ser
50 55 60
Ile Val Cys Cys Phe Thr Ser Phe His Val
65 70

<210> 29537
<211> 65
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (51)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29537
Ser Gln Pro Phe Glu Asn Val Ile Lys Gln Ile Cys Ala Pro Arg Arg
1 5 10 15
Leu Asp Gln Asp Phe Gly Val Ala Ile Met Leu Cys Thr Glu Trp Ser
20 25 30
Ile Leu Ser Arg Ile Ile Ser Thr Leu Phe Glu Glu Asp Glu Ile Leu
35 40 45
Phe Asn Xaa Asn Asn Pro Ile Ser Met Asp Ile His Ser Leu Ile Asn
50 55 60
Leu
65

<210> 29538
<211> 76
<212> PRT
<213> A.fumigatus

<400> 29538
Ile Val His Gln Thr Arg Arg Arg Phe Ser Tyr Leu Asp Pro Ala Phe
1 5 10 15
Leu Arg His Val Gly Arg Asn Ser Thr Leu Leu Thr Leu Thr Glu Glu
20 25 30
Gly Arg Asp Lys Leu Gly Gly Val Glu Tyr Arg Ala Val Cys Leu Leu
35 40 45
Thr Ile Ile Val Pro Val Tyr Tyr Val Ala Trp Pro Pro Ser Val Ser
50 55 60
Ala Ser Trp Arg Arg Val Ile Leu Ser Val Ile Arg
65 70 75

<210> 29539
<211> 295
<212> PRT
<213> A.fumigatus

<400> 29539
His Asp Gln Asn Trp Leu Asn Lys Pro Asp Gly Asp Glu Gly Trp Ala
1 5 10 15
Ser Tyr Ser Leu Ser Gln Gly Tyr Glu Cys Tyr Leu Leu Asp His Thr
20 25 30
Ser Arg Gly Arg Ser Pro Trp Asp Ser Arg Asn Gly Gln Leu Arg Lys
35 40 45
Tyr Ser Ala Glu His Leu Gln Lys Tyr Phe Thr Asp Thr Ala Lys Tyr
50 55 60
Asn Leu Trp Pro Gln Ala Ser Leu His Thr Gln Trp Pro Gly Thr Gly
65 70 75 80
Val Met Gly Asp Pro Ile Phe Asp Ser Tyr Tyr Ala Ser Thr Val Pro
85 90 95
Ser Leu Ala Glu Asn Ala Ala Gln Glu Ala Ser Met Gln Pro Ala Gly
100 105 110
Ala Ala Leu Leu Asp Ala Ile Gly Lys Pro Val Ile Leu Ile Ala His
115 120 125

```
Ser Gln Gly Gly Ala Met Ala Arg Val Thr Ala Asp Arg Lys Pro Asp
    130                 135                 140
Leu Val His Ser Ile Val Ser Ile Glu Pro Ser Gly Pro Pro Phe Gln
145                 150                 155                 160
Asn Ala Ile Phe Gly Ser Gly Pro Ala Arg Pro Tyr Gly Leu Thr Asp
                165                 170                 175
Ile Pro Ile Thr Tyr Ser Pro Pro Ala Thr Asp Pro Asp Ala Asp Phe
            180                 185                 190
Val Lys Gln Thr Ile Thr Ser Asn Ser Ser Ala Ile Ser Asp Cys Val
        195                 200                 205
Ile Gln Ala Asp Asp Pro Pro Pro Arg Gln Leu Ala Asn Leu Ser Lys
    210                 215                 220
Ile Arg Thr Leu Val Val Thr Ala Glu Ala Ser Tyr His Ala Thr His
225                 230                 235                 240
Asp Trp Cys Thr Ala Arg Phe Leu Lys Gln Ala Gly Val Pro Thr Lys
                245                 250                 255
His Leu Gln Leu Arg Glu Val Gly Ile His Gly Asn Gly His Met Met
            260                 265                 270
Phe Leu Glu Lys Asn Ser Asp Gln Val Val Arg Ala Ile His Asn Trp
        275                 280                 285
Ile Glu Asp Ser Thr Phe Ser
    290                 295

<210> 29540
<211> 200
<212> PRT
<213> A.fumigatus

<400> 29540
Glu Ile Pro Tyr Ala Val Leu Lys Ser Asp Phe Cys Arg Tyr Leu Val
1               5                   10                  15
Leu Phe Gly Arg Gly Gly Val Tyr Ser Asp Leu Asp Val His Leu Val
            20                  25                  30
Gln Pro Leu Pro Trp Thr Val Met Gly Ser Glu Asp Arg His His Arg
        35                  40                  45
Pro Pro Asn Val Ile Ile Gly Leu Glu Gly Asp Ala Thr Thr Lys Gly
    50                  55                  60
Leu Pro Arg Ser Pro Gln Phe Val Gln Trp Thr Met Ala Ser Thr Ala
65                  70                  75                  80
Leu His Pro Met Phe Arg Asp Leu Leu Thr Arg Ile Ala Glu Arg Thr
                85                  90                  95
Pro Asn Phe Val Lys Gln Ala Gln Ala Leu Glu Gly Asp Ala Glu Val
            100                 105                 110
Asn Val Met Asp Trp Thr Gly Pro Ser Val Trp Thr Asp Thr Ile Leu
        115                 120                 125
Asp Tyr Leu Gly Cys Ser Glu Glu Gln Ile Gln Asn Leu Arg Asp Leu
    130                 135                 140
Lys Asp Pro Val Arg Ile Arg Asp Met Met Ile Leu Pro Lys Arg Ser
145                 150                 155                 160
Phe Ala Val Thr Gln Gly Glu Asp His Thr Leu Pro Asp Val Leu Val
                165                 170                 175
Lys His Tyr Phe Ser Gly Thr Trp Lys Gly Cys Lys Asn His Trp His
            180                 185                 190
Gly Trp Ser Leu Pro Trp Leu Cys
        195                 200
```

<210> 29541
<211> 71
<212> PRT
<213> A.fumigatus

<400> 29541
Ile His Leu Phe Leu Asn His Phe Leu Ala Thr Thr Tyr Asn Met Leu
1 5 10 15
Ile Val His His Leu Gln Arg Phe Gln Ser Glu Arg Ile Val Trp Leu
20 25 30
Cys Glu Glu Leu Gly Ile Pro Tyr Glu Leu Arg Thr Tyr Gln Arg Asp
35 40 45
Ala Lys Thr Leu Leu Ala Pro Pro Glu Leu Gln Gln Leu Tyr Gly Ser
50 55 60
Pro Gly Ile Ser Arg Ser Lys
65 70

<210> 29542
<211> 165
<212> PRT
<213> A.fumigatus

<400> 29542
Leu Asn Pro Ser Phe Pro Gln Pro Phe Leu Ser Asp Tyr Ile Gln Tyr
1 5 10 15
Ala His Cys Thr Ser Ser Ala Thr Ile Ser Ile Arg Ala His Cys Leu
20 25 30
Ala Val Arg Gly Thr Gly His Pro Leu Arg Ala Gln Asn Leu Pro Ala
35 40 45
Arg Cys Lys Asn Pro Phe Ser Thr Ala Arg Ile Ala Ala Val Val Arg
50 55 60
Val Ser Arg Asn Gln Pro Ile Glu Val Lys Arg Leu Ile Arg Val Arg
65 70 75 80
His Pro Thr Gln Ala Ala Pro Val Ile Gln Asp Gly Thr Thr Thr Leu
85 90 95
Ala Glu Ser Gly Ala Ile Val Glu Tyr Ile Leu Thr Lys Tyr Gly Lys
100 105 110
Gly Lys Leu Thr Val Pro Pro Thr Ala Asp Asn Tyr Ala Asp Tyr Leu
115 120 125
Tyr Phe Leu His Phe Ala Asn Gly Tyr Phe Gln Pro Ala Leu Val Gly
130 135 140
Tyr Ser Thr Val Pro Pro Ile Gly Asp Leu Pro Val Phe Thr Pro Arg
145 150 155 160
Leu Glu Gly Thr Arg
165

<210> 29543
<211> 535
<212> PRT
<213> A.fumigatus

<400> 29543
Lys Val Ala Phe Ser Leu Thr Ser Ser Trp Asn Asn Ser Leu Leu Asn
1 5 10 15
Gly Ala Tyr His Ala Arg Phe Glu Asp His Arg Gly Gly Glu Ser Tyr
20 25 30

```
Arg Pro Pro Ala Pro Arg Gly Tyr Ser Arg His Ala Ser Pro Thr Arg
        35                  40                  45
Thr Arg Ser Pro Arg Leu Val Ala Asp Thr Trp Val Pro Ser Pro Ser
    50                  55                  60
Arg His Tyr Gly Arg Leu Arg Ser Arg Ser Pro Leu Pro Phe Arg Arg
65                  70                  75                  80
His Ser Arg Ser Pro Pro Tyr Arg His Arg Asp Ser Glu Pro Gly Leu
                85                  90                  95
Phe Thr Asn Ser Ala Pro Arg Arg Phe Ser Pro Arg Arg Asp Ala Arg
            100                 105                 110
Leu Arg Ser Pro Gln Ile Gly Trp Arg Pro Arg Ser Pro Tyr Gly Asp
        115                 120                 125
Arg Pro Arg Asp Thr Ser Arg Gly Arg Ser Thr Pro Arg Arg Arg Asp
    130                 135                 140
Gln Ser Pro Leu Arg Gln Asp Phe Thr Tyr Ser Asn Arg Glu Arg Tyr
145                 150                 155                 160
Pro Ser Thr Val Asp Arg Tyr Lys Lys Ser Val Ser Pro Leu Arg Arg
                165                 170                 175
Val Pro Gly Arg Ala Ser Asp Ile Thr Pro Leu Thr Thr Ser His Arg
            180                 185                 190
Arg Arg Ser Ser Ser Gln Glu Phe Arg Glu Arg Arg Pro Asp Asn Asn
        195                 200                 205
Thr Ser Gln Ala Arg Pro Ser Pro Ser Leu Arg Ala Ala Ser Thr Ile
    210                 215                 220
His Asn Ser Thr Ser Ser Ser Arg Thr Asp Ser Arg Arg Ser Ser Pro
225                 230                 235                 240
Leu Leu Asn Asp Arg Thr Ser Ala Thr Val His Glu Ser Arg Ser Arg
                245                 250                 255
Ser Pro Met Thr Arg Asp Phe Pro Gln Arg Arg Leu Ser Val Ser Ser
            260                 265                 270
Asp Tyr Ser Ser Ser Arg Gln Val Glu Thr Ile Ser Ser Asn Glu His
        275                 280                 285
Lys Gly Glu Glu Glu Ala Thr Asp Met Pro Pro Thr Ser Val Gln Ile
    290                 295                 300
Ala Ala Gln Ser Asn Asp Arg Ser Val Pro Asp Ser Lys Leu Gly Arg
305                 310                 315                 320
Pro Glu Asn Asn Pro Glu Pro Ala Asp Ala Ile Ser Ser Thr Thr Pro
                325                 330                 335
Gln Ser Gly Pro Arg Ala Val Cys Ser Ser Tyr Gly Gln Thr Ala Leu
            340                 345                 350
Pro Asn Ile Ser Ala Gly Pro Lys Pro Ser Phe Asn Ala Arg Gly Ser
        355                 360                 365
Met Ile Ser Leu Leu Ser Ala Pro Thr Arg Pro Arg Gly Asn Leu Asn
    370                 375                 380
Pro Lys Asp Phe Ala Arg Ser Thr Arg Arg Gly Gln Val Ser Ile Ser
385                 390                 395                 400
Gln Ala Ala Pro Pro Thr Gly Pro Arg Asn Gly His Ile Pro Thr Gly
                405                 410                 415
Pro Ser Val Asp Ser Asp Arg Gln His Ile Tyr Arg Gln Asn Ser Phe
            420                 425                 430
Ser Gly Thr Ser Tyr Pro Arg Gln Arg Pro Thr Asn Tyr Leu Ala Ser
        435                 440                 445
Leu Asn Ile Ile Val Pro Gly Gly Arg Phe Leu Thr His Asp Leu Asp
    450                 455                 460
Thr Ala Val Glu Lys Arg Leu Ala Gln Leu Glu Met Asp Lys Glu Arg
465                 470                 475                 480
```

```
Leu Tyr Glu Gln Ile Ala Asp Ser Gln Arg Leu Lys His Val Val Ile
                485                 490                 495
Arg Asp Trp Glu Arg Leu Asp Arg Glu Ser Ser Ile Cys Ala Leu Lys
            500                 505                 510
Ser Glu Leu Ala Glu Gly His Leu Leu Cys Ile Thr Asp Gly Glu Ser
        515                 520                 525
Met His Thr Ser Thr Thr Phe
    530                 535

<210> 29544
<211> 103
<212> PRT
<213> A.fumigatus

<400> 29544
Gly Val Val His Arg Tyr Leu Ser Asp Val Ile Leu Gly Ala Pro Leu
1               5                   10                  15
Thr Gly Thr Glu Thr Leu Ser Leu Asp Tyr Leu Gln Thr Val Pro Arg
            20                  25                  30
Gly Asp Ser Arg Leu Asp Glu Met His Ala Ser Asp Arg Leu Arg Leu
        35                  40                  45
Gly Gly Ala Arg Val His His Thr Ala Thr Ala Leu Ala Ile Pro Leu
    50                  55                  60
Ala Val Gly Leu Pro Leu Asp Glu Glu Ile Lys Ala Leu Leu Gly Arg
65                  70                  75                  80
Thr Leu Pro Thr Arg Ile Glu Ser Ala Thr His Gln Leu Ser Ile Val
                85                  90                  95
Thr Lys Ser Leu Phe Leu Pro
            100

<210> 29545
<211> 234
<212> PRT
<213> A.fumigatus

<400> 29545
His His Leu Ile Trp Tyr Ser Asp Ala Tyr Arg His Thr Leu Asp Ile
1               5                   10                  15
Ile Pro Val Gly Lys Leu Arg Asn His His Thr Ile Pro Phe Tyr Ile
            20                  25                  30
Ile Phe Asp Leu Asn Ile Tyr Ser Pro Ser Thr Pro Phe Asn Ile Gln
        35                  40                  45
Phe Lys Ile Gln Met Ala Val Thr Leu Ser Thr Thr Pro Ser Met Asn
    50                  55                  60
Lys Arg Trp Pro Pro Leu Ala Asp Lys Thr Ser Leu Pro Tyr Arg Leu
65                  70                  75                  80
Thr Thr Leu Ser Lys Gln Lys Leu Ala Arg Glu Ala Thr Ala Pro Asp
                85                  90                  95
Pro Asp Ile Arg Arg Cys Leu Gly His Phe Arg Leu His Cys Thr Ser
            100                 105                 110
Met Glu Trp Ala Gln Arg Asp Met Thr Ser Arg Ile Asn Ser Phe Asp
        115                 120                 125
Leu Asp Ser Asp Ser Glu Asp Glu Glu Glu Thr Gln Asp Asp Glu Val
    130                 135                 140
Gln Glu Val Val Glu Arg Leu Ala Glu Lys Ala Ser Thr Val Thr Ile
145                 150                 155                 160
```

```
Thr Asp Ser Ala Ala Lys Glu Glu Thr Thr Leu His Val Ser Phe Glu
                165                 170                 175
Val Val Ser Ser Ala Pro Ala Thr Thr Pro Thr Pro Ser Thr Pro Pro
            180                 185                 190
Pro Thr Thr Thr Glu Gln Glu Lys Glu Ser Leu Leu Glu Lys Gly Arg
        195                 200                 205
Ser Cys Leu Glu Arg Thr Val Gln Met Lys His Phe Trp Pro Ala Arg
    210                 215                 220
Gly Pro Cys Leu Pro Val Arg Ile Ala Gly
225                 230
```

<210> 29546
<211> 83
<212> PRT
<213> A.fumigatus

<400> 29546

```
Ile Phe Gln Ser Asn Arg Leu Leu Ile Ser Ser Thr Val Gln Thr Val
1               5                   10                  15
Lys Pro Gln Ala Thr Gln Pro Asn Glu Ser Tyr Ser Val Leu His Asn
            20                  25                  30
Pro Ile Arg Ile Pro Gly Val Pro Ser Thr Gln Gly Thr Lys Ser Ser
        35                  40                  45
Ala Pro Thr Phe Gln Thr Asn Asp Ile Asn Leu Met Asn Ser Ile Ile
    50                  55                  60
Ala Gln Lys Ser Pro Asn Asn Ala Ile Ile Gln Leu Asn Ser Thr Asp
65                  70                  75                  80
His Thr Trp
```

<210> 29547
<211> 244
<212> PRT
<213> A.fumigatus

<400> 29547

```
Leu Ser Ala Asp Cys His Pro Arg Gly Glu Asp Pro Ala Ile Ser Pro
1               5                   10                  15
Trp Arg Thr Phe Thr Ala Glu Asp Arg Ala Glu Ala Lys Pro Arg Asp
            20                  25                  30
Phe Ser Lys Ile Lys Phe Asp Ala Ile Leu Val Phe Ala Asp Ser Arg
        35                  40                  45
Asp Tyr Ala Thr Asp Met Gln Leu Ile Ile Asp Leu Leu Leu Ala Glu
    50                  55                  60
Asp Gly Lys Leu Leu Thr Arg Ala Lys Asp Pro Val Ser Ser Arg Ile
65                  70                  75                  80
Pro Ile Tyr Phe Ser Gln Gly Asp Leu Leu Met Pro Thr Asp His Lys
                85                  90                  95
Gly Pro Pro Arg Leu Thr Gln Gly Cys Phe Arg Ile Ala Val Glu Ala
            100                 105                 110
Gln Tyr Lys Ala Leu Thr Gly Val Asp Leu Glu Arg Val Val Tyr Gly
        115                 120                 125
Lys Pro Glu Arg Ala Thr Tyr Thr Tyr Ala Asp Glu Val Leu Lys Ala
    130                 135                 140
Trp Met Glu Gln Ile His Asn Glu Asn Arg Leu Pro Lys Asn Ile Tyr
145                 150                 155                 160
```

```
Met Ile Gly Asp Asn Pro Gln Ser Asp Ile Val Gly Gly Asn Met Tyr
                165                 170                 175
Gly Trp Asn Thr Cys Leu Val Arg Thr Gly Val Phe Gln Gly Gly Glu
            180                 185                 190
Asn Asp Glu His Asn Pro Ala Asn Phe Gly Val Phe Pro Asn Val Leu
        195                 200                 205
Glu Ala Val Lys Ala Ala Val Arg Lys Glu Leu Gly Gln Glu Phe Lys
    210                 215                 220
Phe Lys Trp Asn Pro Lys Val Asn Pro Val Thr His Gly Asp Gly Ser
225                 230                 235                 240
Ser Ala Val Glu
```

<210> 29548
<211> 68
<212> PRT
<213> A.fumigatus

<400> 29548

```
Ala Ala Ile Ser Ala Leu Asn Leu Leu Gln Ser Asn Phe Ala Ala Ile
1               5                   10                  15
Gln Gln Val Asn Lys Asp Arg Lys Asn Met Asn Leu Arg Ser Ile Pro
            20                  25                  30
Glu Thr Ile Glu Trp Leu Arg Arg Ile Gly Tyr Lys Val Arg Ile His
        35                  40                  45
Pro Ile Cys Asp Ile Ser Leu Ala Glu Pro Cys Ser Pro Lys Ile Arg
    50                  55                  60
Met Ala Met Tyr
65
```

<210> 29549
<211> 391
<212> PRT
<213> A.fumigatus

<400> 29549

```
Trp Asn Val Tyr Lys Ile Val Gln Pro Ser Asp Leu Asp Gln Leu Asn
1               5                   10                  15
Leu Val His Ile Ala Gly Thr Lys Gly Lys Gly Ser Thr Ser Ala Phe
            20                  25                  30
Val Ser Ser Ile Leu Ser Gln Tyr Thr Val Ser Gln Ser Pro Glu Leu
        35                  40                  45
Glu Ser Ser Ser Pro Lys Ile Thr Lys Val Gly Leu Tyr Thr Ser Pro
    50                  55                  60
His Leu Arg Phe Ala Arg Glu Arg Ile Lys Ile Asp Asn Ala Pro Leu
65                  70                  75                  80
Ser Glu Glu Lys Phe Ala Gln Tyr Phe Phe Glu Val Trp Asp Arg Leu
                85                  90                  95
Glu Glu Ala Ala Arg Val Ala Gly Glu Asn Pro Ser Asp Pro Gln Thr
            100                 105                 110
Lys Pro Gln Tyr Phe Arg Tyr Leu Thr Leu Met Ala Phe His Thr Tyr
        115                 120                 125
Ile Ser Glu Gly Val Asp Ala Ala Val Ile Glu Cys Gly Ile Gly Gly
    130                 135                 140
Glu Tyr Asp Cys Thr Asn Val Ile Asp Arg Pro Val Ser Thr Ala Ile
145                 150                 155                 160
```

```
Thr Ser Leu Gly Ile Asp His Thr Ala Leu Leu Gly Asn Thr Ile Asp
                165                 170                 175
Glu Ile Ala Trp His Lys Gly Gly Ile Ile Lys Pro Gly Val Lys Val
            180                 185                 190
Phe Ser Ser Pro Gln Pro Pro Ser Ala Glu Glu Val Leu His Lys Arg
        195                 200                 205
Ala Gln Glu Lys Gly Thr Gln Leu Gln Ile Val Ser Gly His Arg Glu
    210                 215                 220
Leu His Gly Gly Ser Glu Leu Lys Leu Gly Leu Ala Gly Asp Phe Gln
225                 230                 235                 240
Tyr Thr Asn Ala Ser Leu Ala Val Ala Thr Ala Ala Glu Phe Leu Ala
                245                 250                 255
Lys Leu Gly Leu Glu Asp Ile Pro Pro Asp Phe Met Glu Arg Pro Leu
            260                 265                 270
Pro Pro Lys Phe Arg Lys Gly Leu Glu Ser Ala Arg Leu Gly Gly Arg
        275                 280                 285
Cys Glu Thr Arg Arg Glu Lys Asp Ile Thr Trp Tyr Ile Asp Gly Gly
    290                 295                 300
His Thr Leu Glu Ser Ile Lys Leu Ala Gly Gln Trp Phe Ala Ser Gln
305                 310                 315                 320
Ile Gln Asn Asn Ser Ser Ser Ser Ala Ala Ala Lys Arg Lys Leu Ser
                325                 330                 335
Leu Leu Ile Phe Asn Gln Gln Thr Arg Asp Ser Asn Ala Leu Ala Gln
            340                 345                 350
Ala Leu His Glu Thr Leu Ser Ser Ala Leu Gly Ser Glu Ser Pro Phe
        355                 360                 365
Thr His Ala Ile Phe Cys Thr Asn Val Thr Tyr Lys Asp Ala Gly Tyr
    370                 375                 380
Ile Leu Arg Pro Arg Ala Gly
385                 390
```

<210> 29550
<211> 338
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (47)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29550

```
Asn Pro Ser His His Pro Ser Phe Asn Cys Ser Leu Ser Arg Phe Asn
1               5                   10                  15
Thr Ala Arg Cys Arg Ala Arg Ser Arg Arg His Pro Asp Cys Glu Tyr
            20                  25                  30
Val Thr Ala Ser Leu Arg Arg Val Ser Thr Thr Ala Asn Ile Xaa Arg
        35                  40                  45
Phe Leu Val Glu Gln Ile Val Ala Leu Asn Cys Phe Gly Cys Pro Leu
    50                  55                  60
Leu Ser Arg Glu Ser His Arg Arg Thr Met Thr Gly Gln Ala Gln Leu
65                  70                  75                  80
Asp His Asp Glu Gln Lys Phe His Ser Cys Gly Val Trp Leu Leu Ala
                85                  90                  95
Ser Tyr Ile Asn His Ser Cys Cys Ser Asn Ala Arg Arg Ser Phe Ile
            100                 105                 110
```

```
Gly Asp Met Met Ile Val Arg Ala Ala Gln Asp Leu Ala Ala Gly Thr
        115                 120                 125
Glu Ile Thr Phe Trp Tyr Gln Ser Pro Leu Asn Ser Asp Phe Pro Glu
    130                 135                 140
Lys Arg Met Asn Leu Gln His Trp Gly Phe Lys Cys Ala Cys Ala Ile
145                 150                 155                 160
Cys Gln Asp Ala Gln Gln Thr Glu Lys Ser Ile Val Met Thr Arg Lys
                165                 170                 175
Lys Leu Thr Ala Asp Leu Lys Lys Glu Ile Gln Cys Arg Lys Lys Pro
            180                 185                 190
Asn Thr Thr Thr Ile Thr Ala Leu Leu Ser Arg Leu Glu Glu Thr Tyr
        195                 200                 205
Arg Gln Pro Ala Ser Glu Val Pro Arg Leu Gly Leu Trp Arg Pro Tyr
    210                 215                 220
Trp Asn Leu Ala Met Leu Tyr Ala Met His Gly Gln Pro Gln Lys Thr
225                 230                 235                 240
Ile Glu Phe Ala Leu Lys Thr Leu Glu Ser Leu Gly Tyr Val Val Glu
                245                 250                 255
Gly Gly His Leu Pro Arg Ile Ser Gly Thr Pro Leu Arg Val Lys Gln
            260                 265                 270
Trp Gly Leu Met Thr Asp Ser Leu Val Gly Cys Trp Met Ser Leu Ser
        275                 280                 285
His Ala Tyr Gln Gln Val Ala Pro Asp Leu Ala Pro Gln Ala His Glu
    290                 295                 300
Tyr Ala Arg Ile Thr Tyr Arg Ile Cys Leu Gly Glu Asp Glu Thr Phe
305                 310                 315                 320
Asp Glu Thr Tyr Ala Gln Val Ser Glu Arg Ser Tyr Gly Phe Leu Ala
                325                 330                 335
Gly Glu
```

<210> 29551
<211> 83
<212> PRT
<213> A.fumigatus

```
<400> 29551
Arg Val Thr Leu Ser Met Asp Ala Ala Thr Ala Thr Ser Met Gln His
1               5                   10                  15
Val Leu Glu Ala Glu Cys Arg Asp Cys Thr Val Leu Ala Val Met His
            20                  25                  30
Gln Leu Gln His Val Glu Arg Tyr His Leu Val Ala Leu Met Asp Ala
        35                  40                  45
Gly Arg Ile Val Glu Leu Asp Ser Pro Ala Ala Leu Leu Ala Arg Asp
    50                  55                  60
Ser Glu Phe Ser Arg Leu Ser Arg Ala Gln Ala Ala Thr Gly Thr Arg
65                  70                  75                  80
Gln Leu Thr
```

<210> 29552
<211> 142
<212> PRT
<213> A.fumigatus

<220>

<221> UNSURE
<222> (118)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29552
His Pro Gln Glu Arg Trp Pro Pro Gly Ser Glu Leu Arg Phe Pro Ala
1 5 10 15
Asp Ser Ser Arg His Gln Ala Arg Ile Cys Gly Ala Pro Gln Arg Gln
20 25 30
Val Leu Ala His Pro Leu Leu Pro Ala Thr Leu Arg His Pro Ala Arg
35 40 45
His His His Arg Arg Arg Asp Pro Pro Arg Asp Pro Gly Pro Gly Glu
50 55 60
Ser Pro Asp Pro Leu Arg His Arg Pro Pro Asn Thr Leu Leu His Ala
65 70 75 80
Gly Ile His Pro Pro Gln Ser Arg Ser Ala Gln His Arg Leu Arg Arg
85 90 95
Arg Tyr Tyr Pro His Pro Ala Ser Tyr Gly Pro Leu Gly Ala Gly Pro
100 105 110
Arg Ala Gly Arg Pro Xaa Arg Arg Thr Gln Gly His Gly Leu Val Cys
115 120 125
Gly Arg Ala Ala Val Thr Leu Pro Gly Ala Cys Ala Ala Pro
130 135 140

<210> 29553
<211> 178
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (125)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29553
Met Asn Ile Ser Gly Arg Asn Asn Thr Pro Arg Asn Asp Gly Pro Pro
1 5 10 15
Ala Leu Asn Ser Val Ser Leu Gln Ile Pro Pro Gly Thr Lys Leu Ala
20 25 30
Ser Ala Ala Leu Arg Ser Gly Lys Ser Ser Leu Ile Leu Cys Phe Leu
35 40 45
Arg Leu Leu Asp Ile Gln Gln Gly Thr Ile Thr Val Asp Gly Ile His
50 55 60
Leu Ala Thr Leu Asp Pro Ala Ser Leu Arg Thr Arg Phe Gly Thr Val
65 70 75 80
Pro Gln Thr Pro Tyr Phe Met Pro Gly Ser Ile Arg Arg Asn Leu Asp
85 90 95
Pro His Asn Thr Ala Ser Asp Ala Asp Ile Ile Arg Ile Leu Gln Ala
100 105 110
Met Ala Leu Trp Glu Arg Val His Ala Leu Gly Gly Xaa Thr Ala Glu
115 120 125
Leu Arg Asp Thr Asp Trp Ser Ala Gly Glu Gln Gln Leu Leu Cys Leu
130 135 140
Gly Arg Ala Leu Leu Arg Arg Ser Arg Ile Leu Leu Leu Asp Glu Ala
145 150 155 160
Thr Ser Arg Phe Val Ser Gly Pro Leu Pro Ser Ser Val Val Val Met

165 170 175

Val Met

<210> 29554
<211> 69
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (33),(57),(59)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29554
Arg Ile Phe Phe Val Leu Leu Cys His Gly Leu Ser Thr Phe Phe Thr
1 5 10 15
Gly Asn Asn Cys Leu Pro Lys Leu Phe Ser Ser Val Glu Gly Phe Ser
20 25 30
Xaa Pro Lys Thr Thr Trp Lys Asn Thr Ser Asn Leu Gln Asn Pro His
35 40 45
Ser Arg Val Pro Tyr Lys Lys Ala Xaa Pro Xaa Phe Gly Gly Ala Ile
50 55 60
Ile Phe Leu Asn Gln
65

<210> 29555
<211> 369
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (335),(336),(360),(361)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29555
Thr Met Ala Ser Thr Ser Ala Thr Asn Gly His Glu Pro Glu Lys Arg
1 5 10 15
Ser Lys Leu Glu Asn Gln Ser Pro Pro Arg Phe Thr Ala Val Asn Gly
20 25 30
Arg Glu Ile Thr Ala Pro Thr Ser Val Gly Pro Thr Ala Ala Asp Ser
35 40 45
Ser Ser Asn Glu Asp Ile Pro Asn Asn Gln Gly Arg Val Glu Leu Asp
50 55 60
Ala Pro Ser Arg Thr Glu Glu Arg Pro Arg Asp Asn Gly Asn Thr Glu
65 70 75 80
Ile Asp Pro Asp Glu Arg Ser Thr Gln Cys Ser Thr Ser His Ser Asp
85 90 95
Ser Leu Ser Gly Gly Gln Gly Ala Asn Lys Arg Lys Arg Ser Glu Ile
100 105 110
Asp Glu Arg Gln Glu Leu Leu Ser Ser Ser Ser Lys Gly Ser Arg Ser
115 120 125
Pro Ala Ile Arg Ser Asp Ala Ala Val Glu Ser His Thr Gln Gln Leu
130 135 140
Ala Val Asn Phe Ala Ile Thr Pro Pro Gly Ser His Asp Leu Lys His

```
145                 150                 155                 160
Pro Ser Pro Ser Ile Ala Gln Ser Asp Arg Asn Glu Asp Ser Arg Ser
                165                 170                 175
Ala Ser Ala Asn Ala Ser Leu Asn Asp Tyr Asp Ser His Leu Val Gln
            180                 185                 190
Gln Ala Gln Arg Ala Gln Gln Ile Asp Pro Ser Asp Ala Gln Leu Val
        195                 200                 205
Glu Val Leu Gln Arg Glu Ser Gln Asp His Asp Gly Gln Ser Leu Gln
    210                 215                 220
Gln Lys Asn Trp Ser Ala Thr Asn Arg Ser Thr Glu Gly Ser Ala Gln
225                 230                 235                 240
Thr Lys Glu Pro Gln His Ala Phe Ser Gln Glu Gln Pro Gln Ala Ala
                245                 250                 255
Ile Gln Val Ala Pro Lys Arg Lys Arg Val Phe Ser Asn Arg Thr Lys
            260                 265                 270
Thr Gly Cys Met Thr Cys Arg Arg Arg Lys Lys Lys Cys Asp Glu Gln
        275                 280                 285
His Pro Ala Cys Lys Leu Ile Leu Ala Thr Ser Leu Ile Asp Asp Gly
    290                 295                 300
Phe Phe Ser Phe Phe Phe Ala Met Val Ser Gln His Phe Ser Gln Ala
305                 310                 315                 320
Thr Ile Val Ser Gln Ser Cys Phe Pro Leu Leu Lys Gly Phe Xaa Xaa
                325                 330                 335
Gln Lys Pro Leu Gly Lys Thr Pro Pro Ile Cys Lys Thr Pro Ile Pro
            340                 345                 350
Val Cys His Thr Arg Lys Leu Xaa Xaa Asn Leu Gly Ala Gln Leu Phe
        355                 360                 365
Ser
```

<210> 29556
<211> 73
<212> PRT
<213> A.fumigatus

<400> 29556

```
Pro Ile Thr Leu Ser Phe Phe Ile Leu Ala Ile Ile His Cys Ala Leu
1               5                   10                  15
Leu Leu Lys Glu Ser Lys Gln Ser Gln Pro Ser Ser Ser Ile Ala Ser
            20                  25                  30
His His Ser Thr Thr His Pro Ile Ser Tyr Leu Ile His Cys Leu Thr
        35                  40                  45
Tyr Tyr Asp His Ser Thr Ser Ile Phe Asn Thr Ala Ser Asp Leu Leu
    50                  55                  60
Val Gln Arg Gln Gly Ile Glu Ser Glu
65                  70
```

<210> 29557
<211> 491
<212> PRT
<213> A.fumigatus

<400> 29557

```
Arg His Ala Leu Asp Gly Ala Leu Gly Glu Asp His Ala Ala Phe Gly
1               5                   10                  15
Ala Ala Val Ala Val Glu Pro Ala Lys Asp Asp Gly His Leu Leu Asp
```

```
            20                  25                  30
Gly Arg Val Glu Gly Glu Leu Gly Leu Leu Val Pro Asp Gly Thr Leu
        35                  40                  45
Ala Leu Gly Pro Pro Val Ala Val Pro Val Glu Pro Arg Arg Glu Asp
    50                  55                  60
Leu Asp Gly Asp Leu Gly Gly Leu Ala Ala Gly Val Pro Leu Ala Val
65                  70                  75                  80
Val Gly Ala Val Asp Val Arg Gln Val Gly His Gly Arg Asp Val Glu
                85                  90                  95
Glu Leu Leu Glu Pro Gly Phe Leu Gly Cys Gln Phe Val Gln Phe Ala
            100                 105                 110
Asp His His Gly Ala Leu Val Arg Leu Val Glu Ala His Arg Trp His
        115                 120                 125
Arg Gly Glu His His Leu Pro Asp Gly Arg Val Glu Arg Leu Ile Val
    130                 135                 140
Thr Ala Asn Arg Val Arg Pro Leu Gly Gly Asp Pro Arg Leu Leu Asp
145                 150                 155                 160
His His Leu Ala Leu Arg Gln Gly Ala Arg Leu Val Arg Ala Asp Val
                165                 170                 175
Gly His Gly Ala Gln Arg Leu Gln Gly Ile Lys Leu Ala His Asp His
            180                 185                 190
Val Pro Leu Asp His Ala Leu Arg Pro His Arg His Gly Asp Gly Gln
        195                 200                 205
His Asp Asp Gln Thr Arg Gly Asp His Thr Gln Pro Gly Pro Asp Arg
    210                 215                 220
Ile Gln Asn Asp Leu Val Ala Thr His Glu Phe Val Arg Gly His His
225                 230                 235                 240
Asp Asn Arg Lys Gln His Arg Asp Pro Lys Gln Gln Asp Arg Gln Leu
                245                 250                 255
Gly Gln Leu Ala Leu Gln Arg Arg Pro Asp Ile Asn Ala Gln Glu Pro
            260                 265                 270
Ala Asp Gly Val Arg Pro Arg Gln Arg Pro Arg Leu Gln Ile Pro Pro
        275                 280                 285
Phe Leu Gly Leu Ala Val Gly Ala Pro Leu Asp Gly Ser Ala Ala Ala
    290                 295                 300
Val Ala Arg Ala Gln Gly Arg Ser Asp Arg Ala Asn Leu Arg Gly His
305                 310                 315                 320
Ala Gly Gly Asn Asp His Ala Ala Gly Ser Ala Ala Arg Asp Gly Ala
                325                 330                 335
Gly Ala Val Gly Gln Val Glu Pro Val Ala Gly Ala Gly Val Phe Leu
            340                 345                 350
Glu His Gly Val Ala Val Phe Leu Asp Arg Glu Gly Phe Thr Gly Gln
        355                 360                 365
Lys Gly Phe Val Gly Leu Glu Val Asp Cys Phe His Gln Thr Val Leu
    370                 375                 380
Val Ser Ser Pro Val Glu Gly Thr Gly Gln Val Val Ser Gly Trp Gly
385                 390                 395                 400
Ala Tyr Arg Ile Ser Ala Gly Thr Val Ser Pro Val Arg Asn Ser Thr
                405                 410                 415
Ile Ser Pro Gly Thr Ile Ser Ala Leu Gly Thr Glu Lys Val Cys Pro
            420                 425                 430
Pro Arg Glu Thr Val Pro Val Gly Glu Leu Arg Glu Cys Asn Asp Ser
        435                 440                 445
Met Val Phe Ser Ala Ala Tyr Ser Trp Lys Asn Pro Thr Thr Met Phe
    450                 455                 460
Ser Thr Met Thr Ala Gln Met Thr Pro Pro Ser Ile His Asp Trp Met
```

```
465                 470                 475                 480
Pro Lys Leu Thr Ala Met Ala Asn Ile Arg Thr
                485                 490
```

<210> 29558
<211> 254
<212> PRT
<213> A.fumigatus

<400> 29558

```
Thr Cys Asp Arg Leu Ala Met Ala Ala Thr Leu Arg Asn Ser Ser Ser
1               5                  10                  15
Arg Gly Ser Trp Ala Ala Asn Ser Ser Ser Leu Pro Ile Thr Thr Gly
            20                  25                  30
Pro Ser Phe Ala Ser Ser Lys Arg Thr Gly Gly Thr Gly Ala Asn Ile
        35                  40                  45
Thr Ser Pro Thr Val Gly Leu Asn Gly Ser Leu Leu Leu Pro Thr Glu
    50                  55                  60
Tyr Val Pro Leu Ala Gly Ile His Ala Phe Leu Thr Thr Ile Leu Pro
65                  70                  75                  80
Cys Val Arg Val Pro Val Leu Ser Glu Gln Met Ser Val Thr Ala Pro
                85                  90                  95
Ser Ala Ser Arg Glu Ser Ser Leu Arg Thr Ile Thr Phe Arg Ser Thr
            100                 105                 110
Met Arg Phe Val Pro Thr Ala Met Val Met Val Asn Thr Thr Thr Arg
        115                 120                 125
His Ala Gly Ile Ile Leu Ser Pro Val Pro Thr Ala Tyr Arg Met Thr
    130                 135                 140
Ser Leu Leu Leu Thr Asn Leu Phe Glu Ala Ile Thr Ile Ile Ala Asn
145                 150                 155                 160
Ser Thr Ala Thr Pro Asn Ser Arg Ile Ala Ser Leu Asp Ser Leu Arg
                165                 170                 175
Cys Ser Gly Val Pro Thr Leu Thr Pro Arg Asn Arg Pro Thr Ala Ser
            180                 185                 190
Val Pro Val Ser Val His Ala Cys Arg Tyr His Arg Phe Leu Val Ser
        195                 200                 205
Pro Leu Gly Pro Leu Leu Thr Gly Arg Arg Arg Arg Ser Pro Ala Arg
    210                 215                 220
Arg Ala Ala Ala Ile Glu Pro Ile Ser Val Ala Met Pro Val Ala Met
225                 230                 235                 240
Thr Thr Pro Arg Ala Arg Pro Arg Val Thr Val Leu Glu Leu
                245                 250
```

<210> 29559
<211> 127
<212> PRT
<213> A.fumigatus

<400> 29559

```
Ala Arg Leu Ser Arg Ser Pro Gly Pro Val Ser Ser Leu Asn Thr Ala
1               5                  10                  15
Ser Gln Ser Phe Trp Thr Gly Arg Asp Ser Pro Val Arg Arg Ala Ser
            20                  25                  30
Ser Val Ser Lys Leu Thr Ala Ser Thr Arg Leu Phe Trp Ser Ala Leu
        35                  40                  45
Pro Ser Arg Ala Leu Asp Arg Leu Phe Arg Gly Gly Gly His Thr Glu
```

```
    50                  55                  60
Tyr Gln Gln Glu Gln Tyr Pro Pro Cys Ala Thr Arg Pro Tyr Pro Pro
65                  70                  75                  80
Gly Arg Ser Arg His Trp Ala Pro Lys Arg Ser Val His His Gly Arg
                85                  90                  95
Pro Ser Pro Trp Ala Ser Ser Gly Asn Ala Thr Thr Pro Trp Ser Ser
            100                 105                 110
Arg Pro His Thr Pro Gly Arg Ile Pro Pro Arg Cys Ser Ala Arg
        115                 120                 125

<210> 29560
<211> 407
<212> PRT
<213> A.fumigatus

<400> 29560
Tyr Ser Val Cys Pro Pro Pro Arg Asn Asn Leu Ser Ser Ala Leu Asp
1               5                   10                  15
Gly Arg Ala Asp Gln Asn Ser Leu Val Glu Ala Val Asn Phe Glu Thr
            20                  25                  30
Asp Glu Ala Leu Leu Thr Gly Glu Ser Leu Pro Val Gln Lys Asp Cys
        35                  40                  45
Asp Ala Val Phe Lys Glu Asp Thr Gly Pro Gly Asp Arg Leu Asn Leu
    50                  55                  60
Ala Tyr Ser Ser Ser Thr Val Thr Arg Gly Arg Ala Arg Gly Val Val
65                  70                  75                  80
Ile Ala Thr Gly Met Ala Thr Glu Ile Gly Ser Ile Ala Ala Ala Leu
                85                  90                  95
Arg Ala Gly Asp Arg Arg Arg Arg Pro Val Lys Arg Gly Pro Asn Gly
            100                 105                 110
Glu Thr Lys Lys Arg Trp Tyr Leu Gln Ala Trp Thr Leu Thr Gly Thr
        115                 120                 125
Asp Ala Val Gly Arg Phe Leu Gly Val Asn Val Gly Thr Pro Leu Gln
    130                 135                 140
Arg Lys Leu Ser Lys Leu Ala Ile Leu Leu Phe Gly Val Ala Val Leu
145                 150                 155                 160
Phe Ala Ile Ile Val Met Ala Ser Asn Lys Phe Val Ser Ser Asn Glu
                165                 170                 175
Val Ile Leu Tyr Ala Val Gly Thr Gly Leu Ser Met Ile Pro Ala Cys
            180                 185                 190
Leu Val Val Val Leu Thr Ile Thr Met Ala Val Gly Thr Lys Arg Met
        195                 200                 205
Val Glu Arg Asn Val Ile Val Arg Lys Leu Asp Ser Leu Glu Ala Leu
    210                 215                 220
Gly Ala Val Thr Asp Ile Cys Ser Asp Lys Thr Gly Thr Leu Thr Gln
225                 230                 235                 240
Gly Lys Met Val Val Lys Lys Ala Trp Ile Pro Ala Lys Gly Thr Tyr
                245                 250                 255
Ser Val Gly Ser Asn Asn Glu Pro Phe Asn Pro Thr Val Gly Glu Val
            260                 265                 270
Met Phe Ala Pro Val Pro Pro Val Arg Phe Asp Glu Ala Asn Glu Gly
        275                 280                 285
Pro Val Val Ile Gly Lys Leu Asp Glu Leu Ala Ala Gln Glu Pro Arg
    290                 295                 300
Leu Glu Glu Phe Leu Asn Val Ala Ala Met Ala Asn Leu Ser His Val
305                 310                 315                 320
```

```
Tyr Arg Ser Asp Asp Gly Glu Trp His Ala Arg Gly Glu Pro Thr Glu
                325                 330                 335
Ile Ala Ile Gln Val Phe Ala Ala Arg Phe Asn Trp Asn Arg Asp Arg
            340                 345                 350
Trp Thr Lys Gly Glu Arg Pro Val Trp His Gln Lys Ala Glu Phe Pro
        355                 360                 365
Phe Asp Ser Thr Val Lys Lys Met Ser Val Ile Phe Ser Arg Phe Asp
    370                 375                 380
Gly Asp Gly Gly Thr Glu Arg Ser Met Val Phe Thr Lys Gly Ala Val
385                 390                 395                 400
Glu Arg Met Ser Ser Thr Thr
                405
```

<210> 29561
<211> 123
<212> PRT
<213> A.fumigatus

<400> 29561

```
Val Leu Ile Leu Ala Met Ala Val Ser Phe Gly Ile Gln Ser Trp Ile
1               5                   10                  15
Glu Gly Gly Val Ile Cys Ala Val Ile Val Leu Asn Ile Val Val Gly
            20                  25                  30
Phe Phe Gln Glu Tyr Ala Ala Glu Lys Thr Met Glu Ser Leu His Ser
        35                  40                  45
Leu Ser Ser Pro Thr Gly Thr Val Ser Arg Gly Gly Gln Thr Phe Ser
    50                  55                  60
Val Pro Ser Ala Glu Ile Val Pro Gly Asp Met Val Glu Leu Arg Thr
65                  70                  75                  80
Gly Asp Thr Val Pro Ala Asp Ile Arg Tyr Ala Pro His Pro Glu Thr
                85                  90                  95
Thr Cys Pro Val Pro Ser Thr Gly Glu Leu Thr Arg Thr Val Trp Trp
            100                 105                 110
Lys Gln Ser Thr Ser Arg Pro Thr Lys Pro Phe
        115                 120
```

<210> 29562
<211> 333
<212> PRT
<213> A.fumigatus

<400> 29562

```
Gln Arg Val Pro Gly Ala Asp Arg Tyr Val Pro Phe Arg Glu Phe Ile
1               5                   10                  15
Asn His His Leu Ser Ser Thr Pro Pro Val Glu Phe Leu Val Pro Lys
            20                  25                  30
Leu Arg Val Thr Lys Arg Lys Ser Arg Cys Asp Pro Gly Ile Pro Arg
        35                  40                  45
Cys Ser Pro Cys Glu Arg Ser Asn Ala Lys Cys Val Tyr Tyr Asp Ser
    50                  55                  60
Ala Arg Lys Cys Thr Ile Pro Arg Thr Tyr Ile Ile Ser Leu Arg Glu
65                  70                  75                  80
Lys Ala Arg Met Leu Glu Lys Glu Leu Ala Asp Leu Glu Lys Asp Ile
                85                  90                  95
Gln His Ala Ala Asp Ala Glu Leu Met Val Arg Gly Ala Gly Arg Ile
            100                 105                 110
```

```
Arg Phe Lys Glu Asn Asp Glu Ser Arg Tyr Leu Gly Pro Ser Ser Gly
        115                 120                 125
Ile Ala Ile Thr Arg Leu Val Met Glu Met Ala Lys Gln Asn Thr Asp
    130                 135                 140
Ser Lys Ser Ile Lys Asp Val Val Pro Glu Phe Thr Ala Gln Glu Ile
145                 150                 155                 160
Lys Ala Ala Phe Ala Leu Glu Ser Ser Lys Pro Thr Ser Lys Val Tyr
                165                 170                 175
Pro Met Ile Ser Ser Ile Pro Gln Pro Asn Leu Pro Pro Arg Asn Leu
            180                 185                 190
Thr Tyr Arg Leu Ile Asp Val Phe Val Val Lys Gly Glu Phe Cys Leu
        195                 200                 205
Ser Lys Pro Thr Ile Pro Gly Ala Ser Arg Leu Thr Ile Ser Ala Ala
    210                 215                 220
Gln Ala Met Leu Pro Thr Leu His Glu Pro Ser Phe Arg Gln Glu Val
225                 230                 235                 240
Glu Gln Val Phe Asn Gly Ser Asp Asp Pro Cys Leu Asn Phe Gln Leu
                245                 250                 255
Arg Met Val Ile Ala Ile Ser Met Gln Lys Met Ser Thr Glu Tyr Ala
            260                 265                 270
Gly Leu Ala Asp Ser Tyr Tyr Leu Ala Ala Leu Pro Tyr Leu Glu Ala
        275                 280                 285
Ser Leu Arg Arg Met Asp Leu Arg Ala Leu Gln Cys Leu Val Leu Ile
    290                 295                 300
Ala Gln Tyr Ser Leu Leu Thr Pro Pro Lys Thr Leu Pro Tyr Trp Val
305                 310                 315                 320
Val Gly Asn Gly Gly Gln Thr Leu Phe Lys Thr Thr Val
                325                 330
```

<210> 29563
<211> 75
<212> PRT
<213> A.fumigatus

<400> 29563

```
Ser Ser Asp Ala Arg Lys Arg Gly Val Val Val Pro Pro Arg Ser Arg
1               5                   10                  15
Ser His Arg Gly Ala Lys Ser Ser Asp Glu Pro Thr Thr Arg Asp Ser
            20                  25                  30
Ala Gly Ser Tyr Ala Pro Ala Gly Gly Asn Ile Asn His Phe Phe Tyr
        35                  40                  45
Ser Thr His Pro Asp Ala Gln Asp His Tyr Thr Pro Arg Cys Ile Tyr
    50                  55                  60
Val His Leu Leu His His Tyr Phe Asp Ile Gln
65                  70                  75
```

<210> 29564
<211> 85
<212> PRT
<213> A.fumigatus

<400> 29564

```
Ala Arg Ile Leu Pro Ala Pro Val Ser Glu Asp Lys Gln Pro Phe Phe
1               5                   10                  15
Ile Asn Pro Ser Ser Asp Lys Ala Ala Ala Met Lys Val Val Ser Ile
            20                  25                  30
```

```
Gly Ser Thr Leu Tyr Thr Ser Leu Glu Leu Thr Ser Ala Glu Ser Pro
        35                  40                  45
Ile Leu Ile Leu Ala Asn Tyr Pro Val Gly Pro Leu Ile Ile Phe Phe
    50                  55                  60
Ser Glu Tyr His Phe Arg Gln Phe Trp Thr Ser Ile His His Arg Arg
65                  70                  75                  80
Asn Thr Tyr Ala Pro
                85
```

<210> 29565
<211> 69
<212> PRT
<213> A.fumigatus

<400> 29565

```
Phe Leu Val Leu Glu Leu Thr Leu Leu Thr Glu Asn Pro Ser Ala His
1               5                   10                  15
Phe Lys Asn Ser Phe Glu Thr Leu Ser Ala Ser Leu Gly Ile Leu Ala
            20                  25                  30
Glu Pro Leu Asp Ala Ser Leu Leu Tyr Leu Ile Leu Asp Phe Leu Pro
        35                  40                  45
Ala Ala Ala Lys Gly Ser Asp Phe Gly Leu Leu Thr Glu Ile Arg Asp
    50                  55                  60
Gln Leu Trp Phe Arg
65
```

<210> 29566
<211> 145
<212> PRT
<213> A.fumigatus

<400> 29566

```
Pro Glu Arg Pro Ile Gln Leu Arg Thr Glu Arg Leu Ile Thr Cys Asp
1               5                   10                  15
Gln Ser Val Pro Gln Trp Val Leu Ser Leu Phe Gly Gly Ser Ala Thr
            20                  25                  30
Ser His Val Tyr Glu Ile Ser Tyr Val Asp Pro Gly Ala Lys Lys Val
        35                  40                  45
Thr Met Cys Ser Thr Asn Leu Thr Trp Ser Asn Val Leu Asn Val Arg
    50                  55                  60
Glu Thr Val Ile Tyr Gln Pro Ser Ser Ser Lys Pro Glu Leu Val Thr
65                  70                  75                  80
Asp Phe Ser Gln Glu Ala Lys Ile Thr Ala Leu Cys Gly Gly Trp Gln
                85                  90                  95
Lys Ile Lys Asn Lys Val Glu Glu Ala Ser Ile Glu Arg Phe Ser Gln
            100                 105                 110
Asn Ala Lys Arg Gly Arg Glu Gly Phe Glu Thr Val Leu Glu Met Ser
        115                 120                 125
Arg Arg Val Phe Gly Glu Gln Arg Glu Phe Glu Asn Lys Lys Leu Gln
    130                 135                 140
Ser
145
```

<210> 29567
<211> 115
<212> PRT

<213> A.fumigatus

<400> 29567
Val Leu Lys Phe His Ile Ala Gly Asp Ile Leu Leu Phe Arg Met Ser
1 5 10 15
Asp Ser Ile Tyr Thr Asn Tyr Pro Pro Glu Leu Asn Pro Ala Gln Lys
20 25 30
Asp Phe Leu Val Lys Thr Ile Lys Asp Trp Ala Thr Gln Asn Gly Leu
35 40 45
Met Val Arg Pro His Leu Ser Phe Val Ser Lys Glu Ser Asp Pro Tyr
50 55 60
Gly Val Leu Ala Thr Asn Ala Pro Val Thr Leu Phe Pro Ser Leu Phe
65 70 75 80
Pro Arg Ala Cys Phe Glu Glu Ala Lys Ala Leu Gln Thr Val Tyr Asn
85 90 95
Gln Leu Tyr Ala Ala Ile Thr Cys Asn Glu Glu Trp Leu Gly Lys Ile
100 105 110
Met Glu Glu
115

<210> 29568
<211> 844
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (265)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29568
Asp Ser Ile Asn Lys Leu Ala Pro Pro Asp Gly Met Glu Ala Asp Asp
1 5 10 15
Gly Asp Pro Leu Asp Trp Thr Val Asp Glu Val Val Ala Phe Leu Cys
20 25 30
His Asn Pro Glu Thr Pro Trp Ser Gln Ser Ala Ser Gln Ala Pro Arg
35 40 45
Pro Asn Pro Val Gln Phe Glu Ala Ala Leu Arg Glu His Leu Ile Thr
50 55 60
Gly Glu Val Leu Leu His Asp Val Asp Lys Glu Thr Leu Arg Asp Glu
65 70 75 80
Leu Gly Leu Lys Ala Ile Gly His Arg Ser Ser Ile Leu Met Ala Ile
85 90 95
Arg Tyr Leu Gln Arg Arg Ser Gln Lys Tyr Gln Ser Ser Arg Val Glu
100 105 110
Leu Ala Ser Gln Leu Asp Asn Arg Arg Tyr Ser Val Thr Pro Ser His
115 120 125
Leu Thr Ala Val Val Pro Ser Pro Phe Glu Glu Phe Ser Ser Pro Ile
130 135 140
His Arg Asn Ser Ala Leu Pro Thr Val Thr Pro Gln Asn Leu Met Gln
145 150 155 160
Cys Pro Arg Trp Val Thr Pro Ser Ala Phe Thr Val Ser Gln Thr Lys
165 170 175
Arg Thr Phe Pro Arg Asp Ala Ala Thr Ser Gly Glu Leu Arg Gly Asn
180 185 190
Glu Ser Thr Thr Thr Thr Val Thr Thr Thr Gly Ser Glu Ser Ala Thr

```
        195                 200                 205
Thr Thr Ser Glu Arg Arg Pro Ser Ile Ala Pro Pro Ala Glu Gln Arg
    210                 215                 220
Thr Asp Pro Ser Asn Pro Gly Glu Arg Val Arg Ala Tyr Glu His Ile
225                 230                 235                 240
Val Val Asp Ala Glu Gly Lys Lys Arg Arg Arg Leu Asp Leu Ser Ser
                245                 250                 255
Leu Pro Asp Ser Gln Lys Asn Leu Xaa Ala Ser Lys Ser Ser Asn Ala
            260                 265                 270
Pro Gln Asp Lys Asp Trp Tyr Met Asp Pro Asp Arg Ile Leu Leu Ser
        275                 280                 285
Gln Leu Phe Tyr Pro Ser Ile Ser Asp Asp Asp Asp Asp His Ser Phe
    290                 295                 300
Val Met Leu Gly Pro Pro Asn Leu Pro Thr Ala Gln Arg His Phe Val
305                 310                 315                 320
Arg Lys Cys Met Asn Tyr Phe Leu Arg Gln Lys Pro Ile Gln Leu Ser
                325                 330                 335
Ser Asp Asn Glu Ser Ser Arg Met Ala Leu Ile Pro Tyr Asp His Ser
            340                 345                 350
Ser Ala Ser Glu His Asp Lys Lys Phe Phe Thr Leu Tyr Thr Ala Thr
        355                 360                 365
Arg Gly Asn Val Ser Val Thr Gln Glu Asp Ile Lys Lys Trp Pro Gln
    370                 375                 380
Leu Glu Gln Thr Gly Ala Ala Gly Ser Arg Leu Ser Gln Thr Leu Glu
385                 390                 395                 400
Pro Ser Asp Pro Tyr Ser Tyr Leu Leu Gln Lys Tyr Pro Ala Ala Glu
                405                 410                 415
Asp Asn Gln Asp Val Cys Pro Leu Tyr Gly Asp Ser Gly Ser Glu Gly
            420                 425                 430
Glu Phe Asp Glu Glu Thr Trp Gln Glu Ile Asp Asn Glu Arg Asn Asp
        435                 440                 445
Ala Val Gln Ser Lys Pro Ala Lys Leu Thr Ser Ala Glu Val Asp Ser
    450                 455                 460
Val Ile Glu Asp Cys Met Ala Glu Phe Val Asn Arg Trp Arg Gln Asn
465                 470                 475                 480
Gly Leu Pro Arg Glu Glu Tyr Lys Ala Arg Lys Leu Trp Val Thr Ala
                485                 490                 495
Arg Arg Ala Lys Cys Thr Tyr Gln Lys Val Lys Ala Ile Asn Arg Asp
            500                 505                 510
Ile Thr Leu Leu Glu Lys Arg Leu Gly Lys Val Leu Glu Ala Ile Arg
        515                 520                 525
Gly Ser Glu Tyr Ala Ser Lys Ser Glu Leu Gln Thr Gln Cys Gln Ser
    530                 535                 540
Met Glu Gln Thr Val Ile Asp Ile Gln Lys Gln Lys Trp Arg Ile Ser
545                 550                 555                 560
Val Leu Glu Glu Glu Lys Cys Pro Pro Lys Val Ala Pro Ala Pro Arg
                565                 570                 575
Pro Lys Pro Leu Pro Lys Pro Lys Pro Ser Ala Ala Asp Glu Glu Ser
            580                 585                 590
Leu Tyr Ser Glu Ser Asp Val Thr Ser Asp Phe Gln Asp Asp Phe Ile
        595                 600                 605
Asp Glu Ser Glu Ala Gln Glu Glu Val Ser Ser Val Glu Asn Phe Gly
    610                 615                 620
Asn Val Asp Ser Ile Asp Arg Gly Tyr Val Pro Ala Ser Thr Pro Ser
625                 630                 635                 640
Thr Ser Glu Ser Asp Asp Asp Ile Ile Ser Pro Ser Gly Ile Arg Arg
```

```
                645                 650                 655
Lys Ser Arg Ala Lys Arg Ser Pro Phe Met Ala Thr Ser Ser Pro Ser
            660                 665                 670
Pro Ala Pro Ser Gly Asn Ala Gln Gln Ala Glu Ile Ile Asp Leu Thr
        675                 680                 685
Met Asp Ser Pro Pro Ala Ser Ala Asp Glu Phe Arg Ile Glu Thr Pro
    690                 695                 700
Pro Leu Asn Pro Val Arg Pro Pro Arg Leu Ser Glu Ser Asp Asp Val
705                 710                 715                 720
Ser Leu Lys Val Glu Arg Ser Pro Ser Ile Ser Pro Pro Pro Arg Leu
                725                 730                 735
Ser Ser Asn Val Val Val Glu Ile Pro Arg Arg Arg Pro Glu Ile Thr
            740                 745                 750
Asn Gln Lys Pro Glu Val Thr Lys Ser Ser His Lys Pro Asn Thr Pro
        755                 760                 765
Asp Leu Pro Asp His Asn Asp Phe Asp Gly Leu Leu Ser Tyr Pro Trp
    770                 775                 780
Glu Leu Leu Glu Glu Arg Tyr Asp Arg Arg Arg Leu Leu Ala Lys Leu
785                 790                 795                 800
Ile Ala Thr Met Pro Asp Cys Asp Arg Glu Glu Met Ala Ser Leu Ile
                805                 810                 815
Pro Glu Tyr Glu Tyr Asp Glu Leu Asn Asp Leu Val Lys Gln Ala Leu
            820                 825                 830
Arg Val Leu Ser Glu Gly Gln Glu Glu Ile Val Phe
        835                 840

<210> 29569
<211> 250
<212> PRT
<213> A.fumigatus

<400> 29569
Asp Asp Ser Ile Ile Ile Asp Ile Gln His Ile Ser Thr Cys Leu Gly
1               5                   10                  15
Ile Gln Leu Leu Phe Leu Gln Ser Ala Ile Thr Ala His Thr Thr Met
            20                  25                  30
Met Glu Thr Gln Thr Thr Ala Pro Ala Leu Ala Ser Ser Arg Gln Ser
        35                  40                  45
Gly Arg Ser Ser Glu Ser Ser Ser Ser Val Asp Val Ile Ala Gln Glu
    50                  55                  60
Lys Gln Lys Val Ala Ala Ala Ala Ala Ser Ser Lys Thr Ser Thr Ala
65                  70                  75                  80
Ser Lys Asp Arg Pro Asp Leu His Asn Ser Ala Ser Pro Lys Arg Trp
                85                  90                  95
Lys Thr Phe Trp Ala Ala Phe Arg Tyr Leu Gln His Leu Thr Pro Lys
            100                 105                 110
Gln Val Asp Asp Phe Met Ala Ser Tyr Val Ile Tyr Asn Leu Asp Trp
        115                 120                 125
Ser Asp Glu Lys Gln Met Ile Glu Thr Leu Gly Pro Asn Tyr Gln Glu
    130                 135                 140
Lys Val Gly Asp Cys Leu Lys Ala Tyr Tyr Gly Val Leu Asn His Leu
145                 150                 155                 160
Cys Ala Leu Gly Asp Val Glu Lys Met Tyr Ile Pro Pro Phe Met Ser
                165                 170                 175
Lys Lys Ala Thr Val Leu Glu Asn Gln Leu Leu Tyr Glu Glu Ser Ile
            180                 185                 190
```

```
Ala Arg Asp Ile Gly Leu Gly Pro Gly Asp Lys Val Leu Asp Leu Gly
        195                 200                 205
Cys Gly Arg Gly Arg Val Ala Ala His Met Thr Gln Phe Ser Gly Gly
    210                 215                 220
Ala Gln Val Thr Gly Ile Asn Ile Asp Pro His Gln Val Ala His Val
225                 230                 235                 240
Leu Ala Pro Pro Met Glu Asp Val Leu Leu
                245                 250
```

<210> 29570
<211> 70
<212> PRT
<213> A.fumigatus

<400> 29570

```
Pro Ile Asp Val Ala Leu Pro Glu Asn Leu Thr Val Val Thr Glu Ile
1               5                   10                  15
Leu Asn Glu Phe Arg Val Tyr Val Ser Gly Ser Ser His Thr Gly Ala
            20                  25                  30
Ile Asp Met Arg Tyr Leu Asn Ser Val Glu Ser Gln Pro Val Thr Tyr
        35                  40                  45
Leu Ser Asp His Ser Thr Leu Ala Gly Thr Trp Gly Pro Ala Asp Ile
    50                  55                  60
Gln Thr Thr Ala Leu Ser
65                  70
```

<210> 29571
<211> 181
<212> PRT
<213> A.fumigatus

<400> 29571

```
Ala Gly Phe Tyr Lys Leu Val Leu Thr Thr Ala Asp Glu Asn Thr Lys
1               5                   10                  15
Pro Ile Glu Phe Lys Thr Pro Ser Lys Ser Arg Tyr Arg Asp Ala Leu
            20                  25                  30
Glu Ser Pro Pro Val Thr Pro Lys His Arg Val Gln Val Gly Gly Lys
        35                  40                  45
Ser Met Thr Pro Arg Thr Pro Arg Gln Ile Ser Ser Pro Ser Ser Ser
    50                  55                  60
Gln Thr Ile Tyr Thr Ala Ala Arg Gln Leu Phe Ala Arg Gly Ala Thr
65                  70                  75                  80
Ser Gly Arg Leu Val Gly Arg Asp Ala Glu Arg Glu Lys Leu Thr Ser
                85                  90                  95
Phe Ile Gln Glu Arg Val Thr Ser Arg Lys Gly Gly Cys Leu Tyr Val
            100                 105                 110
Ser Gly Pro Pro Gly Thr Gly Lys Ser Ala Met Val Arg Glu Val Cys
        115                 120                 125
Asn Gly Leu Gly Leu Asp Thr Val Gln Val Ala His Ile Asn Cys Ala
    130                 135                 140
Ser Met Arg Gly Pro Arg Asp Val Tyr Ser Lys Leu Ile Glu Asp Leu
145                 150                 155                 160
Gly Asp Asp Gly Gln Ile Phe Arg Lys Ser Asp Val Asp Arg Leu Lys
                165                 170                 175
Ala Leu Val Ser Ser
            180
```

<210> 29572
<211> 359
<212> PRT
<213> A.fumigatus

<400> 29572
Lys Pro Leu Phe Leu Pro Asp Lys Lys His Asp Gly Leu Phe Leu Val
1 5 10 15
Thr Leu Asp Glu Ile Asp His Leu Leu Thr Ala Asp Ala Gly Val Leu
20 25 30
Gln Ser Leu Phe Glu Trp Ser Leu Asn Asn Lys Ser Arg Leu Ile Leu
35 40 45
Ile Gly Ile Ala Asn Ala Leu Asp Leu Thr Asp Arg Ser Leu Pro Gln
50 55 60
Leu Lys Ala Lys Asn Leu Lys Pro Cys Leu Leu Pro Phe Leu Pro Tyr
65 70 75 80
Asn Ala Thr Gln Ile Ala Asn Ile Ile Thr Asn Arg Leu Arg Ser Leu
85 90 95
Leu Pro Ser Asp Gln Asp Val Glu Pro Asn Phe Val Pro Phe Val Gln
100 105 110
Pro Ala Ala Ile Gln Leu Cys Ala Lys Lys Val Ala Ser Gln Thr Gly
115 120 125
Asp Leu Arg Lys Ala Phe Glu Leu Val Lys Cys Ala Ile Asp Leu Ile
130 135 140
Glu Gln Glu Thr Leu Gln Lys Leu Glu Lys Gln Ser Ser Ser Val Asp
145 150 155 160
Gly Ala Ser Lys Thr Ile Leu Val Glu Asn Asn Asn Leu Ser Ser Pro
165 170 175
Ala Arg Thr Ser Ile Ser Lys Gln Asn Pro Thr Ala Thr Tyr Asp Ile
180 185 190
Leu Thr Ala Pro Arg Ala Ser Ile Gly His Ile Ala Arg Ile Thr Ser
195 200 205
Ser Ala Phe Gly Gln Gly Thr Val Gln Arg Leu Gln Ala Leu Asn Leu
210 215 220
Gln Gln Lys Ala Ala Leu Cys Ser Leu Leu Ala Leu Asp Arg Lys Arg
225 230 235 240
Arg Glu Ser Asp Leu Ser Ser Thr Pro Ser Lys Thr Lys Met Ser Ala
245 250 255
Pro Thr Ile Lys Gln Ile Phe Asp Thr Tyr Cys Thr Leu Cys Arg Lys
260 265 270
Asp Asn Ile Leu His Pro Leu Thr Ala Thr Glu Phe Lys Asp Val Ile
275 280 285
Ser Asn Leu Glu Thr Leu Gly Leu Val Gly Glu Phe Gln Gly Arg Gly
290 295 300
Arg Gly Gly Thr Val Ser Gly Gly Ser Asp Ile Arg Arg Thr Pro Ser
305 310 315 320
Lys Ser Gly Cys Gly Pro Met Thr Pro Arg Lys Gly Met Asp Glu Gln
325 330 335
Gly Leu Ile Cys Phe Val Ser Gln Lys Glu Ile Glu Gly Gln Ile Ala
340 345 350
Gly Leu Gly Asp Gly Pro Ser
355

<210> 29573
<211> 60

<212> PRT
<213> A.fumigatus

<400> 29573
Gln Gln Pro Leu Asp Pro Ser Thr Ala Ser Leu Pro Pro Gln Gly Asn
1 5 10 15
Gln Arg Thr Gly Arg Leu Ala Ile Asp Ser Thr Ser Ser Val Tyr Val
20 25 30
Ser Asn Val Leu Trp Ala Ser Leu Asp Asp Glu Val Phe Leu Tyr Pro
35 40 45
Gln Val Ser Ile Ser Ile Arg Pro Val Gln Glu Leu
50 55 60

<210> 29574
<211> 206
<212> PRT
<213> A.fumigatus

<400> 29574
Ile Glu Tyr Leu Arg Asp Leu Leu His Glu Phe Ser Ser Lys Asn Asn
1 5 10 15
Asp Asp Asp Glu Glu Gly Val Trp His Glu Glu Thr Asp Glu Lys Glu
20 25 30
Gly Pro Val Ser Ala Ile Gly Leu Asn Ala Ala Ile Met Gly Phe Arg
35 40 45
Ser Leu Ala His Ser Leu Arg Asp Tyr His Pro Ser Ile Ser Gln Ser
50 55 60
Val Ala Leu Phe Glu Ile Phe Gln Thr Asn Val Ala Pro Val Val Lys
65 70 75 80
Ile Phe His Met Pro Thr Leu Thr Thr Leu Phe Trp Asn Ala Val Ala
85 90 95
Ser Leu Asp Thr Leu Asp Cys Asn Thr Glu Ala Leu Leu Phe Ala Ile
100 105 110
Tyr Tyr Ala Ala Ile Thr Ser Thr Ile Asp Gln Thr Gln Cys Pro Leu
115 120 125
Gly Leu Thr Arg Pro Gln Ala Leu Cys Thr Cys Arg Ser Ala Val Glu
130 135 140
Gln Ala Leu Ala Cys Ala Asp Leu Leu Asn Thr Gln Asn Met Val Leu
145 150 155 160
Leu Gln Ala Ala Ala Leu Phe Leu Cys Ala Leu Arg His Glu Lys His
165 170 175
Ser Arg Thr Leu Cys Ser Leu Thr Ala Phe Asp Cys Thr Tyr Leu His
180 185 190
Arg Arg Met Gly Leu Leu Ser Glu Arg Arg Gly Leu Trp Ala
195 200 205

<210> 29575
<211> 68
<212> PRT
<213> A.fumigatus

<400> 29575
Ile Arg Ile Ala Ser Asn Ile Lys Ile Ser Lys Ile Ser Gly Tyr Gly
1 5 10 15
Ala Ile Gly Gly Tyr Gly Ala Ala His Pro Gln Arg Gly Ser Gly Glu
20 25 30

```
Gly Ala Tyr Gly Thr Asp Thr Val Leu Tyr Lys Ala Ser Leu Arg Cys
        35                  40                  45
Arg Val Met Pro Leu Gln Leu Ile Glu Leu Ile Leu Leu Tyr Ile His
    50                  55                  60
Val Pro Ser Val
65
```

<210> 29576
<211> 286
<212> PRT
<213> A.fumigatus

<400> 29576

```
Arg Gln Glu Ile Gly Ser Ala Trp Pro Leu Tyr Arg Ser Leu Asn Thr
1               5                   10                  15
Ala Ile Glu Lys Leu Tyr Arg Leu Gly Asn Val Pro Gly Pro Ser Leu
            20                  25                  30
Ser Phe Gln Pro Ser Cys Glu Asp Ser Phe Ser Arg Asn Arg His Ala
        35                  40                  45
Leu Ser Asp Thr Val Ser Lys Ile Ala Thr Thr Met Gly Ala Ala Pro
    50                  55                  60
Gly Thr Arg Asn Pro Pro Asp Gly Ser Arg Thr His Ser Asp Ile Arg
65                  70                  75                  80
Gly Phe Gln Pro Gly Ala Gly Asp Ser Asp Ser Thr Ser Thr Ile Leu
                85                  90                  95
Gly Ile Ser Ile Pro Val Asp Thr Gln Tyr Met Thr Pro Lys Asp Thr
            100                 105                 110
Thr Met Asp Thr Asp Asp Leu Ser Met Leu Asp Ile Ser Phe Gln Gln
        115                 120                 125
Gln Thr Gly Gly Asp Ser Ser Asn Phe Gly Lys Ser Asn Ser Thr Asn
    130                 135                 140
Glu Leu Gly Ala Ala Leu Leu Pro Ser Ala Gln Thr His Pro His Pro
145                 150                 155                 160
Pro Thr Pro Asp Ser Ser Ser Ser Asn Pro Ile Ile His Gly Lys Ser
                165                 170                 175
Asn Val His Asp Arg Ser Gln Gln Pro Gly Pro Asn Ser Ser Arg Asp
            180                 185                 190
Leu Gly Ile Ser Ile Thr Asp Gly Gln Thr Thr Pro Gly Asp Ile Asp
        195                 200                 205
Ala Ile Phe Lys Asp Leu Ala Tyr Leu Asp Thr Thr Asp Trp Ala Thr
    210                 215                 220
Ser Arg Glu Ala Gly Leu Lys Asp Phe Gly Phe Leu Asp Asp Ser Thr
225                 230                 235                 240
Phe His Ala Phe Cys His Asp Pro Asp Arg Leu Val Gly Ser Gln Pro
                245                 250                 255
Leu Leu His Pro Pro Ser Ile Ala Asp Ile Trp Pro Pro Pro Gly Phe
            260                 265                 270
Phe Pro Glu Thr Phe Gln Glu Ser Thr Asp Asp Val Glu Ser
        275                 280                 285
```

<210> 29577
<211> 256
<212> PRT
<213> A.fumigatus

<400> 29577

```
His Lys Phe Leu His Pro Gln Ala Met Asn Thr Arg Ser His Leu Ile
1               5                  10                  15
Pro Ser Ile Ala Lys Ser Leu Ala Ser Val Leu Lys Thr Thr Arg Asn
            20                  25                  30
Ser Ser Leu Gln Ser Arg Ile Asn Asp Leu Gln Ala Leu His Asn Pro
        35                  40                  45
Arg Thr Asp Ala Ser His Ala Pro Gly Ser Thr Asp Ser Arg Ala Ala
    50                  55                  60
Ile Gln Thr Ala Leu Trp Lys Ile Ala His Lys Gln Leu Tyr Asp Ser
65                  70                  75                  80
Arg Ala Ser Arg Lys Leu Ser Ala Ser Asp Ala Val Thr Thr Ser Ala
                85                  90                  95
Asp Asp Tyr Arg Gly Ala Glu Glu Asp Ile Leu Ser Glu Ala Gly Ile
            100                 105                 110
Asp Asp Phe His Asp Ile Leu Asn Ser Glu Asn His Glu Val Cys Asp
        115                 120                 125
Ser Asp Ser Tyr Val Gly Ser Asn Ser Glu Tyr Leu Glu Phe Met Asn
    130                 135                 140
Glu Asp Glu Met Asn Ser Ile Leu Ser Phe Asp Gly Asn Tyr Ser His
145                 150                 155                 160
His Ser Ile Asp Met Leu Gly His Asp Asp Thr Glu Leu Asp Gln Ile
                165                 170                 175
Arg Glu Asp Gln Ala Ile Val Asp Asp Thr Gln Gly Arg Thr Thr Ile
            180                 185                 190
Pro Val Leu Asn Leu Ser Glu Gln Leu Ser Cys His Phe Ser Leu Ser
        195                 200                 205
Asp Gly Glu Met Leu Ala Ser Asp Cys Phe Glu Asp Glu Pro Thr Ser
    210                 215                 220
Pro His Leu Leu Pro Tyr Ser Ser Ser Phe Ser Gly Ala Cys Glu Ser
225                 230                 235                 240
Ser Asp Glu Asp Cys Asp Leu Met Leu Cys Asp His Asn Trp Val Leu
                245                 250                 255
```

<210> 29578
<211> 171
<212> PRT
<213> A.fumigatus

```
<400> 29578
Arg Leu Arg Phe Phe Gln Ala Arg Arg Gln Asp Leu Ala Arg Ala Lys
1               5                  10                  15
Asn Gly Thr Gly Lys Thr Ala Ala Phe Val Ile Pro Thr Leu Glu Arg
            20                  25                  30
Ile Asn Pro Lys Ser Thr Lys Thr Gln Ala Leu Ile Leu Val Pro Thr
        35                  40                  45
Arg Glu Leu Ala Leu Gln Thr Ser Gln Val Cys Lys Thr Leu Gly Lys
    50                  55                  60
His Leu Gly Ile Asn Val Met Val Thr Thr Gly Gly Thr Gly Leu Met
65                  70                  75                  80
Asp Asp Ile Ile Arg Leu Asn Asp Ala Val His Ile Leu Val Gly Thr
                85                  90                  95
Pro Gly Arg Val Leu Asp Leu Ala Ser Lys Gly Val Ala Asp Leu Ser
            100                 105                 110
Glu Cys Pro Thr Phe Val Met Asp Glu Ala Asp Lys Leu Leu Ser Pro
        115                 120                 125
Glu Phe Thr Pro Val Ile Glu Gln Leu Leu Ser Phe His Pro Lys Asp
```

```
    130                 135                 140
Arg Gln Val Met Leu Phe Ser Ala Thr Phe Pro Leu Ile Val Lys Ser
145                 150                 155                 160
Phe Lys Val Arg Arg Asp Phe Tyr Cys Ser Phe
                165                 170
```

<210> 29579
<211> 315
<212> PRT
<213> A.fumigatus

<400> 29579

```
Ala Ala Leu Val Ile Ser Pro Lys Gly Gln Thr Gly Asp Ala Leu Gln
1               5                   10                  15
Arg His Leu Ser Val Asn Cys Gln Ile Ile Gln Gly Lys Ala Arg Leu
            20                  25                  30
Leu Leu Phe Val Leu Ser Cys Pro Leu Ile Ser Phe Ile Lys Asp Lys
        35                  40                  45
His Met Arg Asn Pro Tyr Glu Ile Asn Leu Met Asp Glu Leu Thr Leu
    50                  55                  60
Arg Gly Ile Thr Gln Tyr Tyr Ala Phe Val Glu Glu Lys Gln Lys Val
65                  70                  75                  80
His Cys Leu Asn Thr Leu Phe Ser Lys Leu Gln Ile Asn Gln Ser Ile
                85                  90                  95
Ile Phe Cys Asn Ser Thr Asn Arg Val Glu Leu Leu Ala Lys Lys Ile
            100                 105                 110
Thr Glu Leu Gly Tyr Ser Cys Phe Tyr Ser His Ala Arg Met Leu Gln
        115                 120                 125
Gln His Arg Asn Arg Val Phe His Asp Phe Arg Asn Gly Val Cys Arg
    130                 135                 140
Asn Leu Val Cys Ser Asp Leu Leu Thr Arg Gly Ile Asp Ile Gln Ala
145                 150                 155                 160
Val Asn Val Val Ile Asn Phe Asp Phe Pro Lys Asn Ala Glu Thr Tyr
                165                 170                 175
Leu His Arg Ile Gly Arg Ser Gly Arg Phe Gly His Leu Gly Leu Ala
            180                 185                 190
Ile Asn Leu Ile Asn Trp Asp Asp Arg Phe Asn Leu Tyr Lys Ile Glu
        195                 200                 205
Gln Glu Leu Gly Thr Glu Ile Gln Pro Ile Pro Gln Asn Ile Asp Lys
    210                 215                 220
Lys Leu Tyr Val Tyr Asp Ser Pro Glu Thr Ile Pro Arg Pro Ile Ser
225                 230                 235                 240
Asn Pro Ser Gln Gln Arg Gln Ile Thr Asn Thr Ala Ala Asn Thr Ser
                245                 250                 255
Thr Thr Asp Arg Arg His His Asn Pro Pro Asn Ser Gly Gln Tyr Gln
            260                 265                 270
Phe Asn Arg Gly Arg Gly Ser Tyr Arg Gly Arg Gly Gln Gly Gln Arg
        275                 280                 285
Arg Ser Ala Gln Ile Glu Ser Asn Lys Phe Gly His Pro Gln Gly Gln
    290                 295                 300
His Ser Gly Lys Thr Ser Thr Ala Pro Val Ser
305                 310                 315
```

<210> 29580
<211> 137
<212> PRT

<213> A.fumigatus

<400> 29580
Leu Leu Val Asn Ile Leu Gly Asn Gly Leu Tyr Phe Arg Ser Gln Phe
1 5 10 15
Leu Leu Asn Leu Val Gln Ile Glu Ala Val Ile Pro Val Tyr Glu Ile
20 25 30
Asp Gly Lys Thr Gln Val Ser Glu Thr Thr Arg Ser Thr Asp Pro Val
35 40 45
Lys Val Cys Phe Arg Ile Leu Trp Lys Val Glu Ile Asp Asp Asn Ile
50 55 60
Asn Cys Leu Asp Ile Asp Thr Ser Ser Glu Gln Val Gly Ala Asp Glu
65 70 75 80
Val Ala Thr His Thr Ile Ala Glu Val Val Glu Asn Ser Ile Ser Val
85 90 95
Leu Leu Glu His Ser Ser Val Arg Val Glu Ala Arg Val Ala Gln Leu
100 105 110
Cys Asn Phe Leu Arg Lys Lys Phe Asn Ser Val Gly Gly Val Ala Glu
115 120 125
Asn Asp Arg Leu Val Tyr Leu Lys Leu
130 135

<210> 29581
<211> 122
<212> PRT
<213> A.fumigatus

<400> 29581
Arg Gly Arg Tyr Gln Lys Ser Tyr Ala Arg His Gln Asn Ser Ser Asp
1 5 10 15
Glu Asn Ile Gln Leu Ser Phe Asp Lys Lys Asp Val Pro Met Ser Ala
20 25 30
Ile Phe Asp Tyr Ile His Gln Leu Val Asp Gln Ala Phe Ala Phe Thr
35 40 45
Lys Leu Ile Gln Asn Arg Glu Val Gly Trp Leu Thr Val Asp Arg Lys
50 55 60
Thr Gly Glu Cys Lys Arg Glu Lys Gln Ala Leu Trp Lys Lys Phe Lys
65 70 75 80
Leu Leu Leu Leu Phe Asn Pro Leu Thr Glu Trp Ile Asp Gln Thr His
85 90 95
Leu Ile Arg Met Tyr Thr His Glu Lys Asn Leu Ala Ala Gly Ser Leu
100 105 110
Ser Ser Leu Arg Asn Lys Val Tyr Asp His
115 120

<210> 29582
<211> 119
<212> PRT
<213> A.fumigatus

<400> 29582
Gln Asn Gly Ser Ile Arg Leu Ile Ser Tyr Glu Cys Ile Arg Met Arg
1 5 10 15
Arg Thr Ser Leu Gln Val Arg Tyr His Pro Leu Gly Ile Arg Ser Thr
20 25 30
Thr Thr Asp Cys Ile Gln Gly Arg Lys Glu Gly Lys Pro Gln Ser His

```
        35                  40                  45
Lys Gln Ile Lys Thr Phe Val Asp Phe Tyr Gln Ile Asp Met Ser Lys
    50                  55                  60
Phe Asp Pro Ser Asp Met Glu Lys Tyr Glu Thr Phe Glu Asp Phe Phe
65                  70                  75                  80
Val Arg Lys His Ala Pro Gly Ala Arg Pro Ile His Ala Pro Asn Asp
                85                  90                  95
Pro Thr Lys Ala Ile Val Val Ala Asp Ser Arg Val Val Val Tyr Pro
            100                 105                 110
Thr Val Glu Ala Ser Pro Arg
        115
```

<210> 29583
<211> 100
<212> PRT
<213> A.fumigatus

<400> 29583

```
Pro Val Ser Ile Glu Thr Ile Gln Phe Gln Leu His Glu Thr Tyr Leu
1               5                   10                  15
Ser Thr Ile Gly Pro Leu Ile Cys Arg Phe Leu Glu Phe Tyr Asn Pro
            20                  25                  30
Gly Thr Leu Val Tyr Glu Val Gly Leu Lys Tyr Phe Ala Thr Asp Leu
        35                  40                  45
Asp Leu Trp Tyr Gly Glu Ser Glu Ser Ala Pro Ser Leu Lys Arg Ser
    50                  55                  60
Lys Lys Leu Thr Lys Trp Lys Pro Thr Ser Asp Ile Ser Val Cys Leu
65                  70                  75                  80
Ser Gln Val Ser Arg Gln Ser Asp Trp His Asn Trp Glu Leu Arg Gln
                85                  90                  95
Glu Ser Thr Pro
            100
```

<210> 29584
<211> 72
<212> PRT
<213> A.fumigatus

<400> 29584

```
Thr Gly Glu Tyr Ser Arg Arg Arg Asp Leu Pro Lys Tyr Asp Val Gln
1               5                   10                  15
Ser Glu Gly Asp His Pro Ser Asp Val Met Thr Thr Ala Cys Leu Ser
            20                  25                  30
Phe Tyr Leu Tyr Val Phe Trp Cys Ser Ile Ser Ile Met Trp Ala Lys
        35                  40                  45
Leu Ala Lys Gly Leu Cys Phe Ser Leu Leu Val Gln Cys Ile Phe Val
    50                  55                  60
Arg Ile Leu Asp Lys Ala Glu Gly
65                  70
```

<210> 29585
<211> 428
<212> PRT
<213> A.fumigatus

<400> 29585

```
Ala Ser Pro Arg Val Thr Pro Arg Glu Val Thr Gln Glu Thr His Glu
1               5                  10                  15
Ala Thr Ala Glu Ala Ala Asp Ala His Ala Pro Ser Ser Thr Val Ser
            20                  25                  30
Pro Val Lys Pro Val Leu Lys Lys Lys Ala Ala Asp Glu Gln Ala Glu
        35                  40                  45
Pro Ala Ala Ala Ala Asn Gly Val Glu Lys Pro Glu Lys Lys Lys Lys
    50                  55                  60
Lys Lys Ala Ala Ala Thr Ala Pro Val Thr Gly Glu Ser Pro Ala Lys
65                  70                  75                  80
Ala Lys Glu Ala Thr Phe Thr Ala Asp Arg Gly Leu Ser Gly Glu Ser
                85                  90                  95
Gly Ile Val Pro Gln Pro Ser Glu Gln Thr Thr Gln Val Ala Pro Ser
            100                 105                 110
Thr Thr Gln Pro Ser Thr Met Asp Ala Pro Phe Pro Ala Ala Thr Ala
        115                 120                 125
Ala Ala Pro Leu Ser Pro Glu Ala Gly Ala Lys Lys Ala Gly Glu Ile
    130                 135                 140
Trp Ala Arg His Leu Glu Ala Leu Gln Thr Gly Val Thr Thr Glu Phe
145                 150                 155                 160
Asn Lys Ser Leu Gly Arg Glu Leu Glu Gly Leu Tyr Ser Arg Phe Asp
                165                 170                 175
Glu Glu Arg Arg Asn Trp Asp Ala Ala Ser Ala Ala Lys Gln Asp Gln
            180                 185                 190
Val Leu Arg Leu Val Ser Ser Thr Leu Ser Asp Asn Val Glu Lys Asn
        195                 200                 205
Leu Ala Arg Ile Val Ser Ser Ser Ile Gln Ser Asp Val Val Pro Ala
    210                 215                 220
Leu Thr Glu Leu Thr Ser Ala Ala Val Gly Lys Gln Leu Asp Gln Val
225                 230                 235                 240
Ile Ser Gln His Leu Gly Ser Val Val Pro Arg Glu Val Arg Gln Ala
                245                 250                 255
Leu Pro Asp Ala Val Ala Arg Ser Val Lys Gln Pro Glu Val Met Lys
            260                 265                 270
Ala Ile Ser Asp Ala Val Gly Gln Lys Ile Ala Ser His Leu Glu Ser
        275                 280                 285
Asp Met Ser Arg Ala Leu His Asn Ser Ile Thr Pro Ala Phe Lys Ser
    290                 295                 300
Leu Ala Leu Gln Ala Ala Glu Gln Ile Gly Ser Asp Met Gln Lys Gln
305                 310                 315                 320
Leu Gln Val Gln Met Lys Gln Tyr Glu Ile Gln Arg His Asn Asp Ala
                325                 330                 335
Ala Lys Ile Asp Gln Leu Thr Ser Phe Val Arg Gly Leu Ser Asp Thr
            340                 345                 350
Val Ala Ser Met Ala Ala Ala Gln Thr Asn Phe Gln Asn Glu Ile Leu
        355                 360                 365
Arg Leu Asn Arg Val Leu Ser Ala Lys Gln Gln Asp Glu Glu Ser Arg
    370                 375                 380
Ser Ser Gln Gln Ala Ser Ser Ala Gly Arg Ala Ala Ala Pro Ser Glu
385                 390                 395                 400
Ala Arg Thr Ala Glu Asp Leu Glu Leu Ala Glu Ile Ala Gln Leu Met
                405                 410                 415
Ser Glu Gly Arg Tyr Glu Glu Gly Ser Val Lys Val
            420                 425
```

<210> 29586

<211> 327
<212> PRT
<213> A.fumigatus

<400> 29586
Ile Pro Asp Thr Ile Gln Trp Ser Arg Ser Lys Lys Val Gln Ser Gln
1 5 10 15
Leu Leu Leu Gly Phe Asp Leu Leu Leu Ser His Leu Leu His Leu Thr
20 25 30
Ser Glu Asn Asn Leu Gly Phe Gly Arg Ala Val Asp Thr Val Gly Leu
35 40 45
Asp Gly Asp Asn Asp Thr Thr Leu Val Leu Gln Glu His Val Gly Ile
50 55 60
Gln Ala Asp Asn Thr Gly Leu Ile Gly Leu Gly Asn Ile Gly Glu Asp
65 70 75 80
Asn Val Asn His Gly Asn Glu His Thr Val Ala Glu Arg Val Ser Gly
85 90 95
Val Leu Asp Asp Gly Asn Asn Val Gly Ala Val Gly Gly His Ala Asn
100 105 110
Gln Ile Thr Ala Arg Thr Val Gly Glu Leu Asn Ser Val Asp Val Ser
115 120 125
Gly Arg Pro Asp Asn Ile Ser Asp Val Thr Asp Gly Gly Thr Thr Gly
130 135 140
Arg Ser Lys Val Glu Asn Phe Gly Thr Arg Leu His Val Asp Ile Ile
145 150 155 160
Glu Thr Ala Gln Asp Thr Gly Gly Lys Leu Gly Thr Glu Gly Val Pro
165 170 175
His Thr Val Leu Asp Leu Ser Asp Gly Ala Ile Phe Thr Gly Arg Gly
180 185 190
Leu Asp Ser Asn Ala Leu Leu Ala Ile Asp Arg Leu Ser Arg Ser Gln
195 200 205
Val Leu Arg Asp Lys Gln Ile Leu Leu Thr Thr Thr Gly Asn Glu Asp
210 215 220
Thr Gly Val Thr Val Arg Leu Leu His Thr Pro Val Leu Val Ser Lys
225 230 235 240
Pro Ile Asp Arg Ser Gln Pro Gln Lys Thr His Thr Met Met Thr Leu
245 250 255
Ala Pro Pro Leu Ala Pro Leu Ala Pro Pro Arg Pro Pro Pro Arg Pro
260 265 270
Pro Arg Pro Arg Ala Gly Pro Pro Arg Pro Pro Pro Arg Ala Pro Pro
275 280 285
Arg Pro Arg Pro Pro Leu Pro Ser Pro Pro Glu Asn Glu His Lys Trp
290 295 300
Cys Trp Leu Ala Val Leu Pro Gly Asp Leu Leu Lys Gly Glu Arg Leu
305 310 315 320
Thr Ser Gln Phe Gly Pro Leu
325

<210> 29587
<211> 208
<212> PRT
<213> A.fumigatus

<400> 29587
Glu Pro His Arg His Ala Gly Val Phe Val Ala Arg Gly Gly Lys Glu
1 5 10 15

```
Asp Leu Leu Val Thr Lys Asn Leu Thr Pro Gly Glu Ser Val Tyr Gly
            20                  25                  30
Glu Lys Arg Ile Ala Val Glu Ser Pro Ala Gly Glu Asp Gly Ala Val
        35                  40                  45
Thr Lys Ile Glu Tyr Arg Val Trp Asn Pro Phe Arg Ser Lys Leu Ala
    50                  55                  60
Ala Gly Ile Leu Gly Gly Leu Asp Asp Ile Tyr Met Lys Pro Gly Ser
65                  70                  75                  80
Lys Val Leu Tyr Leu Gly Ser Ala Ser Gly Thr Ser Val Ser His Val
                85                  90                  95
Ala Asp Ile Val Gly Pro Thr Gly Asn Val Tyr Ala Val Glu Phe Ser
            100                 105                 110
His Arg Ser Gly Arg Asp Leu Ile Gly Met Ala Thr His Arg Thr Asn
        115                 120                 125
Val Ile Pro Ile Val Glu Asp Ala Arg His Pro Leu Arg Tyr Arg Met
    130                 135                 140
Leu Val Pro Met Val Asp Val Ile Phe Ala Asp Val Ala Gln Pro Asp
145                 150                 155                 160
Gln Ala Arg Ile Val Gly Leu Asn Ala His Met Phe Leu Lys Asn Glu
                165                 170                 175
Gly Gly Val Ile Val Ser Val Lys Ala Asn Cys Ile Asp Ser Thr Ala
            180                 185                 190
Lys Pro Glu Val Val Phe Ala Arg Glu Val Gln Lys Met Arg Glu Glu
        195                 200                 205

<210> 29588
<211> 337
<212> PRT
<213> A.fumigatus

<400> 29588
Leu Phe Val Pro Val Trp Cys Leu Gln Ala Val Cys Val Arg Thr Arg
1               5                   10                  15
His Ser Thr Val Pro Ser Gly Ala Val Gln Val Arg Leu Pro Glu Arg
            20                  25                  30
Met Ala Gln Lys Gln His Leu Pro Pro Val Pro Glu Leu Leu Ser Asp
        35                  40                  45
Arg Leu Val Cys Lys Ile Ile Phe Asp Pro Ile Leu Ser Lys Ser Trp
    50                  55                  60
Phe Ala Asn Asp Ala Ile Phe Phe Gln Asn Arg Ile Phe Gly Ile Ile
65                  70                  75                  80
Val Tyr Phe Ile Ser Ala Thr Leu Ser Tyr Ile Phe Ile Trp Asp Lys
                85                  90                  95
Thr Thr Val Lys His Pro Lys Phe Leu Lys Asn Gln Ile Pro Met Glu
            100                 105                 110
Ile Ala Gln Thr Met Arg Ser Met Pro Val Met Ser Leu Leu Thr Ala
        115                 120                 125
Pro Phe Leu Val Ala Glu Val Arg Gly Tyr Ala Lys Leu Tyr Asp Ser
    130                 135                 140
Val Asp Glu Glu Pro Phe Pro Tyr Tyr Ser Ile Leu Gln Phe Pro Leu
145                 150                 155                 160
Phe Ile Ala Phe Thr Asp Phe Cys Ile Tyr Trp Ile His Arg Gly Leu
                165                 170                 175
His His Pro Leu Ile Tyr Lys Ser Leu His Lys Pro His His Lys Trp
            180                 185                 190
Ile Met Pro Ser Pro Phe Ala Ser His Ala Phe His Pro Leu Asp Gly
```

```
        195                 200                 205
Trp Ser Gln Ser Val Pro Tyr His Val Phe Pro Phe Ile Phe Pro Leu
    210                 215                 220
Gln Lys Leu Ala Tyr Val Phe Leu Phe Gly Phe Ile Asn Leu Trp Thr
225                 230                 235                 240
Val Met Ile His Asp Gly Glu Tyr Val Ala Asn Ser Pro Ile Ile Asn
                245                 250                 255
Gly Ala Ala Cys His Thr Met His His Leu Tyr Phe Asn Tyr Asn Tyr
            260                 265                 270
Gly Gln Phe Thr Thr Leu Trp Asp Arg Leu Gly Gly Ser Tyr Arg Lys
        275                 280                 285
Pro Asn Glu Glu Leu Phe Arg Arg Glu Thr Lys Met Asp Glu Ala Glu
    290                 295                 300
Trp Lys Arg Gln Thr Lys Glu Met Glu Thr Ile Leu Lys Thr Val Glu
305                 310                 315                 320
Gly Glu Asp Asp Arg Lys Tyr Leu Ser Gln Glu Glu Ala Lys Lys Asp
                325                 330                 335
Leu
```

<210> 29589
<211> 190
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (14)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29589

```
Thr Val Cys Gln Ala Leu Gln Pro Arg Ala Lys Phe Arg Xaa Cys Val
1               5                   10                  15
Lys Asn Ala Phe Ser Phe Pro Gly Ile Met Asp Ile Val Leu Glu Ile
            20                  25                  30
Trp Asp Thr Phe Ile Gly Asp Cys Val Tyr Ser Ala Met Leu Pro Leu
        35                  40                  45
Ser Leu Ser Ser Thr Val Ser Leu Pro Gly Leu Thr Asn Ala Ala Asn
    50                  55                  60
Ser Ser Leu Ser Leu Phe Gly Ala Ser Lys Pro Phe Val Tyr Glu Pro
65                  70                  75                  80
Ala Thr Gln Leu Phe Arg Leu Glu Pro Ser Lys Tyr Ala Tyr Leu Ser
                85                  90                  95
Ala Trp Pro Arg Asn Asn Ile Tyr Arg Gln Phe Leu Ser Phe Phe Leu
            100                 105                 110
Ile Val Trp Tyr Ala Lys Ser Ser Leu Thr Pro Ser Cys Pro Lys Ala
        115                 120                 125
Gly Leu Leu Met Thr Arg Phe Ser Phe Lys Ile Gly Ser Ser Ala Leu
    130                 135                 140
Ser Phe Thr Leu Phe Pro Gln Pro Ser Pro Thr Ser Ser Ser Gly Thr
145                 150                 155                 160
Arg Arg Gln Ser Ser Ile Gln Ser Ser Ser Lys Ile Arg Ser Pro Trp
                165                 170                 175
Arg Leu Arg Arg Pro Cys Asp Arg Cys Leu Ser Cys Leu Phe
            180                 185                 190
```

<210> 29590
<211> 158
<212> PRT
<213> A.fumigatus

<400> 29590
Val Thr Leu Phe Tyr Phe Ser Ser Arg Thr Asp Leu Cys Ile Phe Phe
1 5 10 15
Val Cys Phe His Leu His Asp Gln Ser Val Tyr Ser Gln Arg Asn Thr
20 25 30
Ile Leu Met Phe Leu Ser Ala Asp Ala Ile Cys His Tyr Trp Arg Thr
35 40 45
Leu Ala Tyr Phe Met Ala Arg Gly Ser Arg Ser Lys Val Leu Phe Ser
50 55 60
Leu Phe Leu Arg Glu Val Leu Ala Val Val Phe Ala Phe His Cys Phe
65 70 75 80
Glu Asn Cys Leu His Phe Leu Gly Leu Ser Leu Pro Phe Gly Phe Ile
85 90 95
His Leu Arg Leu Ala Pro Glu Glu Phe Leu Val Gly Leu Pro Val Ala
100 105 110
Ala Thr Glu Thr Val Pro Gln Cys Gly Glu Leu Ser Ile Ile Val Val
115 120 125
Glu Val Glu Val Val His Arg Val Ala Ser Ser Pro Val Asp Asp Arg
130 135 140
Ala Val Gly Asn Ile Phe Ser Val Val Asn His Tyr Arg Pro
145 150 155

<210> 29591
<211> 66
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (16)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29591
Cys Thr Gly Cys Glu Val Leu Ser Phe Cys Val Ile Asp Gly Leu Xaa
1 5 10 15
Ile Lys Ser Val Gln Arg Arg Ser Ser Gln Leu His Glu Tyr Asp Thr
20 25 30
Cys Glu Leu Leu His Met Phe Ala Ser Gln Thr Leu Leu Thr Pro Lys
35 40 45
Trp Lys Asp Thr Gln Ser Lys Pro Arg Trp Asn Gly Val Pro Pro Tyr
50 55 60
Phe Asp
65

<210> 29592
<211> 127
<212> PRT
<213> A.fumigatus

<400> 29592
Ala Ile Tyr Gly Arg Asn His Asn Pro Gln Asp Leu Pro Val Glu Arg

```
1               5                   10                  15
Leu Thr His Val Leu Tyr Ala Phe Ala Asn Val Arg Pro Glu Thr Gly
            20                  25                  30
Glu Val Tyr Met Thr Asp Ser Trp Ala Asp Ile Glu Lys His Tyr Pro
        35                  40                  45
Gly Asp Ser Trp Ser Asp Thr Gly Asn Asn Val Tyr Gly Cys Ile Lys
    50                  55                  60
Gln Leu Tyr Leu Leu Lys Lys Gln Asn Arg Asn Leu Lys Val Leu Leu
65                  70                  75                  80
Ser Ile Gly Gly Trp Thr Tyr Ser Pro Asn Phe Ala Pro Ala Ala Ser
                85                  90                  95
Thr Asp Ala Gly Arg Lys Asn Phe Ala Lys Thr Ala Val Lys Leu Leu
            100                 105                 110
Gln Asp Leu Gly Phe Asp Gly Leu Asp Ile Asp Trp Glu Val Ser
        115                 120                 125
```

<210> 29593
<211> 70
<212> PRT
<213> A.fumigatus

<400> 29593

```
Leu Val Trp Phe Gln Cys Leu Arg Ser Thr Pro Tyr Tyr Leu Gly Lys
1               5                   10                  15
Ser Ser Glu Leu Asp Tyr Phe Ser Ser Cys Gln Ile Phe Pro Val Leu
            20                  25                  30
Ser Lys Glu Ile Met Ile Arg Gly Pro Ser Met Ser Lys Val Leu Leu
        35                  40                  45
Lys Ile Leu Leu Glu Thr Phe Pro Ser Asn Cys Gln Ala Trp Phe Ile
    50                  55                  60
Thr Asp Gly Leu Leu Leu
65                  70
```

<210> 29594
<211> 243
<212> PRT
<213> A.fumigatus

<400> 29594

```
Asn Ser Glu Lys Asn His Ala Gly Leu Thr Glu Asn Pro Ala Ala Ser
1               5                   10                  15
Ala Thr Ala Thr His Pro Thr Val Pro His Leu Tyr Thr Lys Ser Pro
            20                  25                  30
Thr Ser Ala Ser Glu Phe Glu Asn Asp Leu Arg Leu Asp Lys Ile Ser
        35                  40                  45
Ile Glu Cys Val Asp Met Ile Pro Trp Glu His Glu Ser Ala Ala Ala
    50                  55                  60
Trp Lys Arg Val Gly Lys Arg Asp Val Lys Asp Asn Pro Val Ala Thr
65                  70                  75                  80
Gly Ile Gly Thr Asp Ile Leu Gly Gly Leu Arg Thr Lys Gly Lys Tyr
                85                  90                  95
Ile Pro Leu Asp Gln Gln Thr Ser Glu Ser Ile Trp Gly Ile Val His
            100                 105                 110
Leu Tyr Arg Asp Ala Glu Glu Thr Pro Phe Leu Val Ser Glu Asp Tyr
        115                 120                 125
Pro Leu Glu Leu Lys Gly Ser Ala Ala Ala Ala Arg Gln Pro Tyr Asp
```

```
    130                 135                 140
Gln Leu Gly Gly Arg Gln Asp Ala Pro Ala Lys Gly His Ser Pro Ser
145                 150                 155                 160
Leu Arg Gln Asp Glu Asp Cys Thr Thr Leu Cys Ile Leu Ala Val Pro
                165                 170                 175
Ser Tyr Met Ser Pro Ser Asp Phe Leu Gly Phe Val Gly Glu Thr Thr
            180                 185                 190
Met Asp Glu Val Ser His Phe Arg Met Ile Arg Thr Ala Arg Ala Asn
        195                 200                 205
Arg Tyr Met Val Leu Met Lys Phe Arg Ser Gly Lys Lys Ala Lys Glu
    210                 215                 220
Trp Gln Lys Glu Trp Asn Gly Lys Val Phe Asn Ser Met Glu Val Ser
225                 230                 235                 240
Leu Leu Gly
```

<210> 29595
<211> 124
<212> PRT
<213> A.fumigatus

<400> 29595

```
Arg Arg Leu Arg Tyr Lys Leu Leu Ile Pro Thr Leu Thr Ser Pro His
1               5                   10                  15
Pro Ser Arg Val Leu Leu Leu Leu Arg Met Leu Arg Leu Ala Pro Ser
            20                  25                  30
Gly Arg Pro Cys Leu Pro Leu Phe Ser Arg Ala Pro Tyr Pro Leu Pro
        35                  40                  45
Pro Ser Arg Val Asn Pro Leu Arg Leu Pro His Pro Arg Ser Leu Ser
    50                  55                  60
Tyr Pro Pro Ala Leu Cys Ala Trp Asn Ala Trp Met Lys Arg Arg Gly
65                  70                  75                  80
Leu Leu Thr Ile Leu Cys Gln His Val Phe His Cys Thr Cys Leu Gln
                85                  90                  95
Lys Trp Lys Gly Ser Gly Cys Pro Val Cys Arg Tyr Thr Gln Asp Asp
            100                 105                 110
Phe Arg Arg Gly Gln Ser Arg Ser Gly Leu Arg Arg
        115                 120
```

<210> 29596
<211> 124
<212> PRT
<213> A.fumigatus

<400> 29596

```
Phe Arg Pro Gln Pro Glu Thr Cys His Val Val Phe Val Lys Thr Val
1               5                   10                  15
Glu Ile Gln Ala Val Asn Ser Asp Ser Asp Val Ser Thr Ser Gln Gln
            20                  25                  30
Ser Thr Pro Ser Ala Ser His Ala Ala Thr Ser Pro Gln Arg Thr Thr
        35                  40                  45
Met Ser Thr Ser Val Gln Pro Ser Ser Ile Pro Thr Ala Thr Leu Ser
    50                  55                  60
Ser Lys Pro Leu Ala Pro Pro Ser Pro Ala Leu Ile Glu Leu Pro Thr
65                  70                  75                  80
Cys Pro Val Cys Leu Glu Arg Met Asp Glu Thr Thr Gly Ala Val Asp
```

```
                85                  90                  95
Asp Ile Val Ser Thr Cys Leu Ser Leu His Leu Ser Ala Glu Met Glu
            100                 105                 110
Arg Lys Arg Met Pro Gly Val Ser Ile Tyr Pro Arg
        115                 120
```

<210> 29597
<211> 269
<212> PRT
<213> A.fumigatus

<400> 29597

```
Phe Pro Gln Gly Ala Val Lys Glu Arg Pro Thr Glu Met Ser Pro Ala
1               5                   10                  15
Glu Cys Ser Val Cys Arg Ser Glu Val Asn Leu Trp Ile Cys Leu Ile
            20                  25                  30
Cys Gly Asn Val Gly Cys Gly Arg Tyr Asp Gly Ala His Ala Phe Ala
        35                  40                  45
His Tyr Lys Glu Thr Ser His Ala Phe Ala Met Asp Leu Ala Ser Gln
    50                  55                  60
Arg Val Trp Ser Tyr Val Gly Asp Ala Tyr Val His Arg Ile Ile Gln
65                  70                  75                  80
Ser Lys Thr Asp Gly Lys Leu Val Glu Leu Pro Ala Ala Asp Asn Ser
                85                  90                  95
Ala Leu Asp Pro Pro Asp Trp Ser Asp Ala Val Pro Arg Glu Lys Leu
            100                 105                 110
Glu Asn Met Ser Val Glu Tyr Thr His Leu Leu Thr Ser Gln Leu Glu
        115                 120                 125
Ser Gln Arg Ala Tyr Phe Glu Glu Ile Val Glu Arg Ala Ala Asp Lys
    130                 135                 140
Ala Ser Gln Ala Thr Ala Ala Ala Ser Arg Ala Gln Glu Thr Ala Glu
145                 150                 155                 160
Lys Ala Thr Ala Ser Leu Arg Val Leu Gln Ala Gln Tyr Asp Lys Leu
                165                 170                 175
Thr Ala Glu Thr Leu Pro Gly Leu Glu Arg Asp Lys Ala Arg Ala Glu
            180                 185                 190
Lys Arg Ala Glu Lys Phe Glu Ala Met Thr Arg Lys Met Glu Lys Glu
        195                 200                 205
Trp Arg Glu Glu Lys Thr Met Asn Glu Ser Phe Met Lys Arg Ile Ala
    210                 215                 220
His Leu Thr Ser Glu Val Thr Glu Leu Lys Ala Ala Asn Ala Asp Leu
225                 230                 235                 240
Thr Glu Gln Asn Arg Asp Leu Thr Phe Phe Ile Ser Gly Ser Glu Arg
                245                 250                 255
Leu Lys Val Leu Thr Ala Ala Ser Lys Asp Thr Ser Gln
            260                 265
```

<210> 29598
<211> 150
<212> PRT
<213> A.fumigatus

<400> 29598

```
Ala Ala Thr Arg Ser Arg Leu Gly Ser Ala Ala Arg Arg Arg Cys Ser
1               5                   10                  15
Cys Ser Ser Cys Ser Leu Arg Asn Phe Ala Arg Arg Ser Leu Ser Cys
```

```
            20                  25                  30
Ala Ser Leu Phe Cys Ser Ser Ser Ser Ala Cys Leu Ile Arg Leu Cys
        35                  40                  45
Ser Ala Ser Phe Arg Leu Arg Ser Ser Ser Ser Ala Leu Ser Arg Ala
    50                  55                  60
Thr Arg Ala Ala Arg Ser Ser Ser Ser Phe Ala Lys Arg Ala Phe Ser
65                  70                  75                  80
Ala Ser Ala Ala Arg Arg Ser Ser Ser Ala Ile Arg Ser Phe Ser Ala
                85                  90                  95
Leu Phe Ala Ser Ser Arg Arg Arg Ser Ser Asp Ser Asp Leu Leu Ala
            100                 105                 110
Thr Val Phe Ala Ser Ser Met Gly Ile Ser Ala Arg Trp Pro Thr Ser
        115                 120                 125
Cys Leu Ser Pro Ser Phe Phe Thr Ala Leu Glu Ser Val Ala Val Cys
    130                 135                 140
Gly Val Leu Ser Thr Cys
145                 150
```

<210> 29599
<211> 553
<212> PRT
<213> A.fumigatus

<400> 29599

```
Glu Arg Pro Met Ile Ile Thr Leu Glu Pro Ser Ala Cys Ala Ser Arg
1               5                   10                  15
Arg Leu Leu His Arg Asn Asp Arg Ala Thr Gly Arg Arg Lys Thr Ser
            20                  25                  30
Gly Arg Ala Ala Asp Thr Pro Arg Arg Pro Arg Phe Leu Pro Gly Arg
        35                  40                  45
Pro Tyr Gln Val Gln Ala Pro Val Thr Thr Glu Ser Ser Leu Pro Lys
    50                  55                  60
Met Leu Leu His Arg Lys Glu Lys Lys Arg Glu Gly Val Thr His Leu
65                  70                  75                  80
Lys Glu Arg Ser Gly Ser Ser Thr Asn Arg Pro Arg Ile Ala His Lys
                85                  90                  95
Gly Ser Asp Asn Ala Ala Asp Ala Asp Gly Phe Arg Val Glu Ser Ala
            100                 105                 110
Gln Ser Thr Ser Leu Ala Thr Leu Thr Arg Asp Glu Glu Ala Pro Arg
        115                 120                 125
Arg Arg Arg Leu Ile Ala Gly Arg Pro Pro Gln Asp Arg Asp Arg Arg
    130                 135                 140
Arg Pro Ser Ile Pro Ser Ser Asp Ser Leu Ser Gly Leu Glu Asp Ser
145                 150                 155                 160
Ala Lys Ser Arg Ile Asp Pro Ser Thr Glu Ala Thr Thr Val Pro Thr
                165                 170                 175
Gly Pro Val Val Leu Lys Arg Gly Arg Ser Ser Ala Ser Pro Glu Arg
            180                 185                 190
Pro Arg Ser Arg Gly Ala Asp Ser Asp His His Ser Arg Glu Gly Gln
        195                 200                 205
Lys Lys Lys Arg Arg Val Leu Ser Glu Asp Arg Thr Pro Ser Ile Ser
    210                 215                 220
Asn Gly Gly Leu Lys Lys Ser His Ser Asn Gly Ile Ala Glu Asp Ser
225                 230                 235                 240
Lys Ala Asp Val Arg Leu Lys Lys Thr Glu Val Gln Ser Leu Glu Cys
                245                 250                 255
```

```
Glu Arg Asp Gln Gln Val Asp Ser Thr Pro His Thr Ala Thr Asp Ser
            260                 265                 270
Arg Ala Val Lys Lys Glu Gly Glu Arg Gln Asp Val Gly His Leu Ala
        275                 280                 285
Asp Ile Pro Met Glu Asp Ala Lys Thr Val Ala Lys Arg Ser Glu Ser
    290                 295                 300
Glu Glu Arg Arg Arg Glu Glu Ala Lys Arg Ala Glu Lys Glu Arg Ile
305                 310                 315                 320
Ala Glu Glu Glu Arg Leu Ala Ala Glu Ala Glu Lys Ala Arg Leu Ala
                325                 330                 335
Lys Glu Glu Glu Glu Arg Ala Ala Arg Val Ala Arg Glu Arg Ala Glu
            340                 345                 350
Glu Glu Glu Arg Lys Arg Lys Glu Ala Glu Gln Arg Arg Ile Lys Gln
        355                 360                 365
Ala Glu Asp Glu Leu Gln Lys Arg Leu Ala Gln Glu Arg Leu Arg Leu
    370                 375                 380
Ala Lys Leu Arg Arg Glu Gln Glu Glu Gln Glu Gln Arg Arg Arg Ala
385                 390                 395                 400
Ala Leu Pro Ser Arg Leu Arg Val Ala Ala His Leu Ile Gly Ser Asn
                405                 410                 415
Asp Pro Arg Ala Arg Ser His Ala Trp Leu Lys Arg Phe Met Pro Val
            420                 425                 430
Val Thr Ala Phe Thr Lys Gln Leu Asp Pro Ser Cys Asp Thr Ser Val
        435                 440                 445
Ala Asp Glu Arg Trp Val Pro Asn Tyr Leu Val Ala Pro Leu Leu Ala
    450                 455                 460
Thr Asn Asp Leu Gln Leu Ser Gln Tyr Thr Ser Trp Glu Lys Arg Asn
465                 470                 475                 480
Ala Thr Pro Thr Gln Arg Glu Asn Leu Trp Arg Val Thr Arg Arg Met
                485                 490                 495
Leu Val Gln Gly Asp Asp Met Asp Phe Met Asn Ser Ser Phe Gly Gln
            500                 505                 510
Ile Met Gln Lys Asp Cys Glu Thr Arg Pro Lys Tyr Phe Asp Met Glu
        515                 520                 525
His Val Phe Trp Val Lys Val Ser His Phe Pro Leu Arg Pro Ser Phe
    530                 535                 540
Ile Val Pro Gln Asn Gln Phe Asn His
545                 550
```

<210> 29600
<211> 371
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (2),(3),(8)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29600

```
Asn Xaa Xaa Leu Asn Thr Arg Xaa Ser Phe Gln Pro Arg Gly Glu Asp
1               5                   10                  15
Thr Lys Asn Ile Asp Lys Asp Thr Pro Leu Ile Asp Ala Val Glu Asn
            20                  25                  30
Gly His Leu Glu Val Val Lys Leu Leu Leu Glu Ala Gly Ala Asn Pro
        35                  40                  45
```

```
Arg Thr Val Asn Ala Glu Gly Asp Glu Pro Tyr Asp Leu Val Pro Ser
    50                  55                  60
Asp Ser Glu Asp Tyr Ala Glu Ile Arg Arg Val Leu Ala Glu Ala Lys
65                  70                  75                  80
Ala Asn Pro Arg Pro Gly Arg Arg Ser Glu Glu Arg Ser Gly Ser Ala
                85                  90                  95
Asn Lys Glu Ile Ser Ser Lys Arg Val Ala Ala Ser Ser Pro Arg Asn
            100                 105                 110
Ser Pro Pro Val Asn Val Pro Arg Ser Pro Pro Leu Phe Gly Ala Thr
        115                 120                 125
Thr Arg Arg Lys Thr Val Arg Ser Glu Ala Thr Arg Asn Asp Leu Leu
    130                 135                 140
Trp Thr Lys Ala Thr Pro Glu Asn Leu Gln Ala Phe Ala Ala Lys Gly
145                 150                 155                 160
Asp Ile Ala Gly Val Ala Asn Ile Leu Asn Val Gly Gln Lys Ala Asp
                165                 170                 175
Thr Glu Ser Met Ile Ala Ala Ala Lys Gly Gly His Asp Glu Val Leu
            180                 185                 190
Ser Leu Leu Leu Gly Met Gly Asp Ala Asp Pro Asp Pro Glu Pro Leu
        195                 200                 205
His Gly Gly Asn Gln Lys Pro Gly Tyr Asn Thr Pro Met Leu Ala Ala
    210                 215                 220
Ile Gly Arg Gly Asn Leu Ala Val Ile Arg Leu Leu Leu Asp Gln Pro
225                 230                 235                 240
Lys Phe Asn Pro Thr Arg Arg Leu Tyr Arg Asp Arg Thr Tyr Phe Glu
                245                 250                 255
Leu Ser Arg Glu Arg Arg Ala Asp Asn Trp Glu Glu Glu Tyr Asp Leu
            260                 265                 270
Leu Arg Glu Ala Tyr Asp Asn Tyr Ile Arg Ala Lys Arg Leu Arg Lys
        275                 280                 285
Gln Glu Ala Ser Ser Pro Lys Arg Pro Arg Asp Arg Glu Lys Glu Asn
    290                 295                 300
Lys Arg Pro Gly Arg Arg His Ser Pro Ser Pro Ala Val Ser Ser Arg
305                 310                 315                 320
Lys Ala Val Ser Ser Pro Gly Ala Gly His His Arg Glu Leu Ser Ser
                325                 330                 335
Lys Asp Ala Ala Thr Ser Glu Gly Lys Glu Thr Gly Gly Cys Asn Ser
            340                 345                 350
Leu Lys Gly Glu Ile Arg Ile Gln Tyr Gln Ser Pro Gln Asn Ser Pro
        355                 360                 365
Gln Gly Gln
    370
```

<210> 29601
<211> 296
<212> PRT
<213> A.fumigatus

<400> 29601

```
Lys Thr Val Ala Thr Ser Ile Glu Gln Pro Ala Gly Pro Ser Pro Val
1               5                   10                  15
Cys Asn Gly Ser Asp Met Gly Ala Leu Gly Asn Ser Thr Val Glu Ser
            20                  25                  30
Asp Asn Asp Lys Ala Val Asp Pro Ala Leu Pro Ser Pro Pro Ala Asp
        35                  40                  45
Ser Pro Pro Ser Thr Ala Ala Asn Glu Ser Glu Arg Ser Ser Thr Ser
```

```
    50                  55                  60
Thr Thr Ala Thr Ser Val Cys Asp Ala Ala Val Lys Ile Lys Val Glu
65                  70                  75                  80
Glu Thr Ile Glu Gln Ser Ala Glu Lys Val Ser Ala Leu Ser Glu Ala
                85                  90                  95
Asn Val Glu Leu Pro Thr Thr Ser Leu Arg Ser Gly Ser Thr Glu Gly
            100                 105                 110
Asp Thr Lys Leu Glu Leu Ser Asp Gln Pro Ser Thr Leu Lys Gln Gly
        115                 120                 125
Ser Ile Gly Ser Asn Arg Lys Glu Arg Arg Lys Ser Arg Gly Lys Pro
    130                 135                 140
Leu Val Val Glu Ser Val Glu Ala Glu Arg Gln Leu Val Arg Val Pro
145                 150                 155                 160
Gly Asp Tyr Thr Lys Thr Ser Lys Leu Leu Ala Gln Thr Tyr Asp Arg
                165                 170                 175
Trp Val Asp Cys His Thr Cys Asn Ala Trp Phe Val Gln His Asp Ser
            180                 185                 190
Tyr Leu Thr Arg Arg Glu Cys Pro Arg Cys Glu Arg His Ser Met Leu
        195                 200                 205
Tyr Gly Tyr Arg Trp Pro Lys Thr Asp Lys Glu Gly Pro Ser Asp Asp
    210                 215                 220
Glu Glu Arg Val Met Asp His Arg Thr Val His Arg Phe Leu Tyr Pro
225                 230                 235                 240
Glu Glu Glu Ala Leu Ile Ser Arg Lys Asp Arg Gly Val Ser Phe Gly
                245                 250                 255
Val Thr Pro Thr Pro Glu Leu Ser Glu Pro Arg Thr Glu Thr Glu Gly
            260                 265                 270
Ser Glu Gly Cys Glu Asp Arg Arg Thr Thr Arg Ala Ser Arg Arg Arg
        275                 280                 285
Thr Arg Ser Leu Arg Met Thr Met
    290                 295
```

<210> 29602
<211> 72
<212> PRT
<213> A.fumigatus

```
<400> 29602
Pro Trp Leu Gly Val Ala Phe Asn Phe Val Arg Thr Phe Ala Thr Phe
1               5                   10                  15
Phe Thr Thr Ser Glu Arg Ile Asp Ser Ser Lys Lys Gly Val Val Lys
            20                  25                  30
Thr Leu Lys Ile Ser Val Ala Pro Glu Phe Trp Ser Leu Lys Ile Phe
        35                  40                  45
Ser Lys Thr Ser Ser Pro Gly Leu Lys Asn Asn Ala Arg Lys Thr Ile
    50                  55                  60
Ser Arg Ala Ser Gly Ser Leu Arg
65                  70
```

<210> 29603
<211> 585
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE

<222> (38)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29603

```
Ile Gln Ile Val Lys Glu Phe Gly Ala Thr Asp Asp Asp Thr Leu Asn
1               5                  10                  15
Ile Thr Ala Asp Ile Gln Arg Ala Ile Ala Tyr Gln Ala Phe Glu Asp
            20                  25                  30
Glu Ile His Arg Ile Xaa Glu Pro Ser Pro Thr Arg Met Phe Asp Ala
        35                  40                  45
Pro Arg Ile Arg Asp Ile Arg Lys Arg Ile Asp Asn Gly Ser Cys Ser
    50                  55                  60
Ile Gln Glu Ile Glu Glu Thr Ala Val Ala Met Leu Pro Glu Ile Ala
65                  70                  75                  80
Glu Leu Ser Ser Asp Tyr Leu Gly Asn Thr Val Val Gln Lys Leu Phe
                85                  90                  95
Glu Tyr Cys Ser Glu Gln Thr Lys Glu Gln Met Leu Val Pro Ile Ala
            100                 105                 110
Pro His Phe Ala Glu Ile Gly Val His Lys Asn Gly Thr Trp Ala Ala
        115                 120                 125
Gln Lys Ile Ile Asp Val Ala Lys Thr Pro Ala Gln Met Lys Met Ile
    130                 135                 140
Val Asp Ala Leu Arg Pro Tyr Thr Val Pro Leu Phe Leu Asp Gln Tyr
145                 150                 155                 160
Gly Asn Tyr Val Leu Gln Cys Cys Leu Arg Phe Gly Ala Pro Phe Asn
                165                 170                 175
Asp Phe Ile Phe Glu Thr Met Leu Ser Arg Met Trp Glu Ile Ala Gln
            180                 185                 190
Gly Arg Phe Gly Ala Arg Ala Met Arg Ala Cys Leu Glu Ser His His
        195                 200                 205
Ala Ser Lys Glu Gln Gln Arg Met Leu Ala Ala Ala Ile Ala Cys His
    210                 215                 220
Ser Val Gln Leu Ala Thr Asn Ala Asn Gly Ala Leu Leu Leu Thr Trp
225                 230                 235                 240
Phe Leu Asp Thr Cys Thr Phe Pro Arg Arg Arg Thr Val Leu Ala Pro
                245                 250                 255
Arg Leu Val Pro His Leu Val His Leu Cys Thr His Lys Val Ala Tyr
            260                 265                 270
Leu Thr Val Leu Lys Val Ile Asn Gln Arg Asn Glu Pro Glu Ala Arg
        275                 280                 285
Glu Ile Val Leu Arg Ala Leu Phe Phe Ser Pro Gly Asp Glu Val Leu
    290                 295                 300
Glu Lys Ile Leu Ser Asp Gln Asn Ser Gly Ala Thr Leu Ile Phe Lys
305                 310                 315                 320
Val Leu Thr Thr Pro Phe Phe Asp Glu Ser Met Arg Ser Glu Val Val
                325                 330                 335
Lys Asn Val Ala Lys Val Leu Thr Lys Leu Lys Ala Thr Pro Ser Gln
            340                 345                 350
Gly Tyr Lys Arg Leu Met Asp Glu Val Gly Leu Ser Ser Arg Gly Gly
        355                 360                 365
Ala Arg Asp Asn His His Gly Arg Glu Gln Ser Gly His Ser Glu Asn
    370                 375                 380
Lys Gln His Arg Pro Thr Ser Arg Gln Ala Gln Ser Thr Met Asp Arg
385                 390                 395                 400
His Phe Asn Gly Gln Phe Ala Pro Ser Leu Leu Ala Gln Asn Met Asp
                405                 410                 415
```

```
Asn Ser Arg Ser Val Pro Glu Gln Gln Pro Gly Ala Ala Pro Phe Asp
            420                 425                 430
Pro Tyr Ser Ile Ser Ala Val Asn Gly Met Ser Pro Thr Gly Ala Leu
        435                 440                 445
Ser Ser Leu Asn Gly Leu Ala Ala Met Asn Gly Ala Gly Phe Val Gln
    450                 455                 460
Asp Pro Leu Leu Pro Leu Thr Gln Gln Gln Leu Gln Tyr Gln Ala Leu
465                 470                 475                 480
Leu Ala Ala Gln Ser Arg Gly Val Ser Pro Ala Gly Leu Tyr Pro Thr
                485                 490                 495
Leu Gly Asn Pro Ser Phe Gly Tyr Pro Pro Gly Thr Pro Ser Leu Glu
            500                 505                 510
Gln Ser Ser Ala Val Cys Ser Tyr Ala Trp Asn Thr His Ser Ile Ala
        515                 520                 525
Glu Pro Ala Ser Leu Cys Ser Pro Ala Val Gln Pro Cys Tyr Gly His
    530                 535                 540
Ala Pro Asp Leu Ser Val Ser Ser Ser Ile Leu Phe Thr Asn Thr Ser
545                 550                 555                 560
Gly Pro Trp Thr Val Gly Trp Gly Thr Pro Arg Thr Cys Lys Phe Ile
                565                 570                 575
Ser Arg Trp Val Thr Trp Cys Val Thr
            580                 585
```

<210> 29604
<211> 180
<212> PRT
<213> A.fumigatus

<400> 29604

```
Ala Trp Gln Ile Gly Leu Ser Ser Arg Pro Cys Ile Glu His Pro Leu
1               5                   10                  15
Leu Tyr Gln Cys Arg Thr Lys Arg Ala Cys Leu Gly Asp Asp Gly Leu
            20                  25                  30
Val Arg Leu Val Pro Gly Arg Arg Gly Ala Arg Ser Gly Glu Gly Arg
        35                  40                  45
Arg Arg Gly Leu Arg Val Gly Gln Ala Ser Cys Arg Thr Arg Tyr Val
    50                  55                  60
His Thr Arg Thr Gln Leu Val Asn Met Leu Thr Leu Tyr Ile Gly Leu
65                  70                  75                  80
Ala Lys Ala Gln Tyr Ala Val Gly Tyr Phe Thr Glu Met Gly Ile Gly
                85                  90                  95
Cys Arg Arg Asp Pro Leu Glu Ala Asn Val Trp Tyr Val Arg Ala Ala
            100                 105                 110
Asp Gln Gly Asp Glu Arg Ala Lys Gln Arg Ile Ala Thr Ile Arg Ala
        115                 120                 125
Ala Ala Glu Gly Arg Ser Pro Ala Gln Asn Gly Lys Glu Gly Gln Lys
    130                 135                 140
Glu Lys Gln Lys Ser Leu Gly Ala Phe Asn Asp Pro Ser Cys Tyr Leu
145                 150                 155                 160
Lys Leu Ile His Gly Thr Asp Ala Gly Lys Ser Gly Lys Ser Lys Arg
                165                 170                 175
Phe Thr Ile Phe
            180
```

<210> 29605
<211> 65

<212> PRT
<213> A.fumigatus

<400> 29605
Val Thr Ser Tyr Val Leu Ser Ala Met Asn His Leu Val Ser Ala Ser
1 5 10 15
Thr Arg Tyr Asp Val Ile Met Asp Met Leu Gly Leu Met Ile Val Ala
20 25 30
Phe Leu Leu Asp Glu Asp Ala Pro Phe Ile Gln Leu Lys Gln Met Tyr
35 40 45
Lys Glu Ser Gly Ile Arg Asn Ala Ala Phe Ser Gly Leu Ser Met Ile
50 55 60
Phe
65

<210> 29606
<211> 125
<212> PRT
<213> A.fumigatus

<400> 29606
Gln Tyr Asn Ser Ala Pro Tyr Glu Leu Gly Leu Leu His Glu Thr Gly
1 5 10 15
Phe Gly Asp Asp Val Phe Pro Asp Pro Ala Tyr Ala Ala Gln Leu Phe
20 25 30
Thr Lys Ser Ala Asp Leu Gly His Val Glu Ala Ser Tyr Arg Leu Gly
35 40 45
Asp Ala Tyr Glu His Gly Lys Leu Ala Cys Pro Arg Asp Pro Ala Leu
50 55 60
Ser Ile His Phe Tyr Thr Asn Ala Ala Gln Ser Gly His Val Leu Ala
65 70 75 80
Met Met Ala Leu Cys Ala Trp Tyr Leu Val Gly Ala Glu Pro Val Leu
85 90 95
Glu Lys Asp Glu Gly Glu Ala Tyr Glu Trp Ala Lys Arg Ala Ala Glu
100 105 110
Leu Gly Met Cys Thr His Gly Leu Asn Trp Leu Ile Cys
115 120 125

<210> 29607
<211> 160
<212> PRT
<213> A.fumigatus

<400> 29607
Leu Pro Cys Leu Gln Asn Leu Asp Asp Phe Lys Ser Glu Ser Cys Leu
1 5 10 15
Thr Pro Phe Ser Tyr Phe Leu Val Tyr Val Phe Leu Leu Val Ser Ile
20 25 30
Ala Val Tyr Gly Val Asp Thr Phe Thr Ala Val Asn Leu Leu Ala Phe
35 40 45
Ser Arg Trp Ala Gly Ser Ile Glu Pro Ala Ile Pro Phe Thr Val Ser
50 55 60
Arg Trp Ile Phe Ala Val Cys Ile Ile Val Ser Phe Val Leu Leu Phe
65 70 75 80
Leu Arg Trp Leu His Ala Ile Arg Ala Met Arg Ser Gly Ser Ile Ala
85 90 95

```
Arg Ser Tyr Leu Asp Pro Leu Ala Ala Arg Val Gln Ser Ile Arg Met
            100                 105                 110
Gly Arg Arg Gly Arg Gly Trp Arg Arg Phe Leu Val Phe Ala Glu Leu
        115                 120                 125
Thr Lys Ser Lys Lys Gly Ala Glu Tyr Val Ala Leu Phe Ala Tyr Phe
    130                 135                 140
Ser Phe Glu Ser Lys Pro Leu Ala Leu Ser Thr Phe Leu Gly Phe Asn
145                 150                 155                 160
```

<210> 29608
<211> 61
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (55)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29608
```
Thr Gln Ser Phe Ala Asp Gly Pro Arg Gln Val Val Asn Ala Ile Thr
1               5                   10                  15
Leu Tyr Ser Val Met Arg Met Asp Leu Leu Pro Gly Gly Lys Asn Ser
            20                  25                  30
Val Asp Asp Asp Lys Ala Gly Ile Ile Gln Phe Phe Glu Asn Val Lys
        35                  40                  45
Ile Leu Ala Asp Leu Leu Xaa Arg Thr Gly Arg Thr His
    50                  55                  60
```

<210> 29609
<211> 65
<212> PRT
<213> A.fumigatus

<400> 29609
```
Val Tyr Asn Asn Tyr Thr Phe Ser Asn Tyr Phe Ile Tyr Leu Leu Leu
1               5                   10                  15
Tyr Tyr Ile Thr Leu Val Leu Leu Leu Tyr Ser Tyr Ile Leu Tyr Leu
            20                  25                  30
Leu Leu Tyr Leu Ile Leu Leu Glu Cys Leu Ile Leu Leu Asp Tyr Tyr
        35                  40                  45
Ile Leu Phe Tyr Leu Phe Phe Leu Leu Ile Ser Arg Gly Asp Tyr Tyr
    50                  55                  60
Ile
65
```

<210> 29610
<211> 139
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (131)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29610
Pro Asp Ile Pro Ile Ser Leu Phe Leu Pro Ile Leu His Pro Thr Ala
1 5 10 15
Leu Thr Phe Pro Gly Phe Val Cys Ser Phe Asn Leu Phe Gly Leu Phe
20 25 30
Leu Pro Val Ser Ser Ala Val Ala Pro Pro Ser Pro Pro Pro Pro Pro
35 40 45
Pro Arg Pro Pro Pro Pro Pro Pro Pro Leu Ser Lys Ala Trp Phe Pro
50 55 60
His Pro Leu Cys Lys Asn Tyr Pro Pro Pro Pro Leu Gly Asn Phe Trp
65 70 75 80
Ala Pro Pro Pro Gly Phe Pro Lys Lys Asn Asn Thr Tyr Thr Pro Pro
85 90 95
Ala Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro
100 105 110
Pro Pro Pro Pro Arg Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro
115 120 125
Pro Thr Xaa Pro Pro Pro Pro Ala Pro Pro Pro
130 135

<210> 29611
<211> 242
<212> PRT
<213> A.fumigatus

<400> 29611
Glu Arg Ala Asp Gly Tyr His Ser Ser Cys Arg Ile Val Tyr Gly Arg
1 5 10 15
Val Arg Trp Tyr Leu Met Arg Met Ile Ser Ile Ser Lys Ser Ala Leu
20 25 30
Leu Val Ala Ala Ala Leu Ser Gly Leu Ser Gln Ala Ala Asn Tyr Thr
35 40 45
Glu Trp Met Ala Ser Ser Phe Met Thr Lys Asn Ile Ser Leu Ser Arg
50 55 60
Asn Tyr Ala Asn Gly Val Leu Tyr Thr Gly Met Glu Phe Ala Tyr Asn
65 70 75 80
Lys Thr Lys Asp Glu Arg Tyr Phe Thr Tyr Ile Lys Ser Gln Val Asp
85 90 95
Ala Val Val Asp Pro Ser Gly Gly Leu Ile Asp Tyr Pro Gly Ser Thr
100 105 110
Val Ser Leu Asp Asp Ile Arg Ile Gly Leu Asn Leu Leu Trp Leu Trp
115 120 125
Thr Lys Thr Gly Asp Asp Arg Tyr Lys Ile Ala Ala Asp Thr Leu Arg
130 135 140
Glu Gln Leu Asn Phe Thr Pro Arg Asn Lys Ala Gly Gly Phe Trp His
145 150 155 160
Arg Lys Pro Thr Tyr Pro Asn Gln Met Trp Leu Asp Gly Ile Tyr Met
165 170 175
Ala Glu Asn Phe Tyr Ala Gln Tyr Thr Ala Trp Phe Gln Pro Asn Asn
180 185 190
Ala Thr Ala Trp Asp Asp Ile Met Leu Gln Phe Asp Leu Ile Glu Glu
195 200 205
His Cys Arg Leu Lys Thr Gly Leu Leu Val His Gly Tyr Asp Glu Ser
210 215 220
Lys Val Ala Val Trp Ala Gly Met Ser Gln Gln Asn Pro Thr Asp Leu
225 230 235 240

Cys Gly

<210> 29612
<211> 210
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (202),(204),(206)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29612
Lys Arg Asp Asn Arg Leu His Lys Met Thr Lys Pro Leu Thr Glu Ile
1 5 10 15
Lys Pro Ser Ser Pro Ser Ile Thr Arg Ser Thr Thr Thr Lys Ala Thr
20 25 30
Phe Thr Asn Leu Thr Pro Ala Asp Ser Ile Phe Arg Ser Thr Val Glu
35 40 45
Asn Thr Ser Ile Thr Arg Ser Pro Thr Ser Gly Ala Pro Ser Ser Ala
50 55 60
Ser Ile Ser Val Lys Arg Ser Lys Leu Gln Ser Cys Thr Leu Thr Asn
65 70 75 80
Ser Ser Thr Arg Arg Cys Thr Leu Thr Asn Thr Thr Leu Leu Asn Val
85 90 95
Pro Ala Ala Arg Ser Leu Asp Ala Thr Asp Ser Ser Leu Ser Asn Ile
100 105 110
Arg Arg Leu Arg Arg Ser Glu Ile Arg Ala Ser Ala Val Ser Asp Ser
115 120 125
Ala Val Arg Arg Ser Thr Val Val Asp Ser Thr Val Lys Gln Ser Leu
130 135 140
Leu Trp Arg Ser Lys Leu Asn His Val Asp Met Phe Lys Ser Arg Val
145 150 155 160
Lys Arg Ala Val Leu Thr Asp Cys Glu Val Ser Glu Cys Val Val Ile
165 170 175
Gly Thr Glu Phe Lys Gly Met Arg Leu Arg Phe Gly Val Trp Lys His
180 185 190
Gly Arg Leu Val Gly Arg Val Gly Glu Xaa His Xaa Ala Xaa Asn Ala
195 200 205
Leu Arg
210

<210> 29613
<211> 253
<212> PRT
<213> A.fumigatus

<400> 29613
Tyr Cys Gln Glu Arg Leu Lys Arg Cys Tyr Cys Arg Thr Ala Gln Asp
1 5 10 15
Ala Pro Ala Asp Ala Gly Arg Thr Ile Ser Lys Ser Ile Cys Ser Pro
20 25 30
Asn Ser Arg Phe Val Ile Phe Ala Leu Gly Asp His Pro Gln Ser Ala
35 40 45
Asn Ser Ile Thr Thr Glu Gln Ser Thr Ala Ala Leu Ser Ser Leu Ser

```
    50                  55                  60
Glu Ser Tyr Thr Asp Leu Asp Ser Leu Leu Ser Ser Ser Arg Asp Leu
65                  70                  75                  80
Ile Gly Ser Leu Leu Arg Ser Gln Lys Ser Asp Thr Trp Tyr Leu Glu
                85                  90                  95
Thr Ala Phe Tyr Ile Leu Val Gly Thr Ile Ser Trp Leu Ile Phe Arg
            100                 105                 110
Arg Ile Leu Tyr Gly Pro Leu Trp Trp Leu Val Trp Leu Pro Ile Lys
        115                 120                 125
Leu Ile Ala Arg Ser Ala Phe Ala Ile Leu Gly Thr Val Gly Ile Thr
    130                 135                 140
Ser Thr Ala Val Gln Leu Gln Pro Ser Ala Ser Leu Ser Gln Ser Met
145                 150                 155                 160
Pro His Glu Ala Pro Thr Leu Gly Gln Thr Ala Ala Met Pro Ser Ala
                165                 170                 175
Ser Ile Ser Ala Ser Trp Asp Glu Ser Gln Ala Pro Glu Glu Gln Ser
            180                 185                 190
Glu Thr Asp Arg Leu Ile Asp Gln Ile Gly Asp Thr Ile Glu Lys Asn
        195                 200                 205
Ser Lys Leu Gly Asp Glu Thr Asn Ile Asp Asp Val Ser Pro Glu Glu
    210                 215                 220
Arg Gln Arg Gln Glu Glu Ile Pro Arg Asn Pro Lys Lys Arg Met Tyr
225                 230                 235                 240
Glu Ala Thr Glu Ile Glu Gln Asp Leu Arg Asp Glu Leu
                245                 250
```

<210> 29614
<211> 417
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (400),(407)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29614

```
Thr Leu Tyr His Trp Arg Ile Leu Arg Pro Cys Gly Glu Asp Lys Glu
1               5                   10                  15
Met Thr Ala Ala Glu Leu Gln Asp Tyr Ala Gln Leu Met Asp Glu Phe
            20                  25                  30
Ala Lys Gly Phe Asp Pro Asp Ser Leu Ala Arg Glu Ile Met Ala Thr
        35                  40                  45
Leu Pro Leu Leu Glu Glu Asp Leu Phe Pro Ser Ser Phe Ala His Leu
    50                  55                  60
Leu Ile Leu Leu Leu Gln Thr Asp Gly Lys Ile Glu Ile Ala Gln Val
65                  70                  75                  80
Lys Leu Val Arg Trp Leu Arg Ala Arg Tyr Pro Ile Ala Leu Cys Glu
                85                  90                  95
Pro Ser Glu Thr Gln Leu Val Asp Glu Thr Phe Phe Met Ser Glu Ile
            100                 105                 110
Glu Met Leu Arg Arg Leu Leu Ser Thr Leu Arg Gly Asp Asp Asp Lys
        115                 120                 125
Pro Ile Tyr Trp Ile Asn Cys Arg Pro Phe Glu Ile Gly Lys Ser Cys
    130                 135                 140
Glu Gln Leu Glu Ala Ser Ile Lys Val Ile Arg Ala Phe Glu Cys Asp
```

145 150 155 160
Met Arg Ser Ala Thr Glu Glu Ile Asp Glu Glu Ser Lys Ile Ala Arg
165 170 175
His Pro Pro Phe His Leu Pro Met Lys Leu Thr Thr Ile Asn Thr Gly
180 185 190
His Phe Tyr His Asp Leu Pro Val Cys Asn Glu Arg Thr Val Leu Ile
195 200 205
Ser Met Arg Ala Gln Arg Trp Asp Ser Ser Arg Ala Ser Ile Gly Trp
210 215 220
Asn Asn Tyr Leu Ser Ser Glu Ile Glu Leu Thr Arg Phe His Gln Tyr
225 230 235 240
Phe Lys His His Val Met Glu His Asp Pro Asn Lys Ala Arg Gly Tyr
245 250 255
Gly Trp Leu Pro Pro Asp His Ile Arg Val Pro Leu Ser Ser Ser Thr
260 265 270
Asn Val Asp Leu Val Asp Val Ser Asp Trp Pro Leu Asn Asp His Gln
275 280 285
Lys Arg Ile Met Ser Leu Leu Phe Lys Val Ala Gln Trp Ile Gly Leu
290 295 300
Ala Arg Gly Leu Ala Ala Val His Leu Phe Cys Asp Ile Ala Arg Asn
305 310 315 320
Phe Thr Ile His Lys Pro Ser Glu Asn Pro Ser Ala Ser Tyr Val Leu
325 330 335
Phe Met Gln Lys Leu Ala Glu Ala Arg Leu Cys Pro Ser Ser Ile Glu
340 345 350
Ser Gln Ile Pro Thr Pro Phe Pro Tyr Asn Asp Glu Thr Tyr Ala Lys
355 360 365
Arg Asn Pro Ala Phe Phe Ile Asp Val Phe Arg Ser Ala Lys Gly Leu
370 375 380
Val Cys Cys Gln Val Gln Met Asn Ser Phe Leu Lys Lys Lys Ala Xaa
385 390 395 400
Arg Ile Ser Trp Leu Ser Xaa Thr Arg Pro Ser Leu Gly Phe Phe Leu
405 410 415
Gly

<210> 29615
<211> 65
<212> PRT
<213> A.fumigatus

<400> 29615
Asn Leu Pro Leu Leu Ser Pro Pro Leu Leu Ser Asn Gly Trp Thr Arg
1 5 10 15
Ile Lys Thr Arg Asp Lys Ile Leu Pro Val Gln Tyr Tyr Ala Pro Thr
20 25 30
Ser Ile Gln Thr Val Ile Gly Cys Lys Gly Pro Leu Gln Phe Ser Phe
35 40 45
Leu Gln Thr Leu Asp Trp Ala Tyr Val Ser Leu Leu His Gly Leu Ala
50 55 60
Ser
65

<210> 29616
<211> 472
<212> PRT

<213> A.fumigatus

<400> 29616

```
Phe Ile Met Ala Thr Leu Thr Ser Ser Ala Ser Arg Pro Gln Ser Gln
1               5                  10                  15
Val Val Thr Ser Met Thr Asn Leu Ser Val Leu Pro Pro Ile Ile Thr
            20                  25                  30
Asp Ala Ser Gly Lys Thr Gln Ile Gly Gln Arg Thr Ser Leu Tyr Ala
        35                  40                  45
Lys Asp Arg Leu Ser Thr Tyr Ser Asn Val Ser Thr Thr Ser Gln Asn
    50                  55                  60
Arg Ser Arg Pro Gly Ser His Val Phe Pro Ile Phe His Ser Ser Leu
65                  70                  75                  80
Pro Tyr Ala Leu Val Arg Asp Phe Ala Tyr Pro Pro Val His Pro Leu
                85                  90                  95
His Tyr Gly Pro Leu Pro Pro Arg Ala Ser Gly Val Ser Thr Pro Ala
            100                 105                 110
Ser Glu His Arg Arg Leu Ser Asp Pro Pro Ala Pro Trp Asp Asn Ser
        115                 120                 125
Arg Gly Gln Trp Ser Ser Gly Ser Trp Arg Ala Asp Gln Ser His Gly
    130                 135                 140
Gln His Gln Leu Pro Ala Met Ser Phe Gly Asp Gly Pro Pro Tyr Ser
145                 150                 155                 160
Glu Asp Glu Asp Leu His Ser Pro Val Phe Ser Ala Ser Arg His Arg
                165                 170                 175
Lys Asn Lys Ser Thr Gly Met Asn Ala Asn Gly Arg Arg Thr Arg Ser
            180                 185                 190
Pro Gly Arg Gly His Gln Ser Ala Tyr Phe Ser Gly Asp Val Asp Arg
        195                 200                 205
Gly Ile Leu Val Ser Met Asn Ala Asp Gly Ser Glu Thr Tyr Tyr Val
    210                 215                 220
Asn Asp Asp Asp Asp Gly Ser Asp Asp Gly Pro Gly Gly Glu Tyr Val
225                 230                 235                 240
Thr Tyr Pro Pro Ser Glu Ser Gln Tyr Ser His Met Gly Asn Glu Thr
                245                 250                 255
Tyr Gly Asp Tyr Glu Asp Arg Glu His Asp Ala Gly Phe Glu Ser Glu
            260                 265                 270
Asp Asp Tyr Ser Gly Ala Gly Arg Tyr Ser Gly Asp Phe Gln Phe Ala
        275                 280                 285
Val Gly Cys Pro Asp Glu Glu Met His Gly Lys Ala Val Ala Leu Phe
    290                 295                 300
Asp Phe Thr Arg Glu His Glu Asn Glu Leu Pro Leu Thr Glu Gly Gln
305                 310                 315                 320
Val Ile Phe Val Ser Tyr Arg His Gly Gln Gly Trp Leu Val Ala Glu
                325                 330                 335
Asp Pro Lys Thr Gly Glu Ser Gly Leu Val Pro Glu Glu Phe Val Arg
            340                 345                 350
Leu Leu Arg Asp Ile Glu Gly Gly Leu Thr Ser Leu Ser Val Asp Pro
        355                 360                 365
Ser Leu Asp Thr Glu Glu Asp Asp Ser Thr Tyr Leu Ser Pro Asp Ser
    370                 375                 380
Thr Asp Ser Glu Gln Ala Ile Thr Pro Thr Gln Asn Asp Gln Leu Pro
385                 390                 395                 400
Leu Thr Thr Glu Arg Gly Ser Val His Ile Pro Asn Gly Ala Ser Asn
                405                 410                 415
Leu Glu Ser Ser Ala Val Ile Pro Asp Gly Gly Gly Glu Ile Glu Ser
```

```
            420                 425                 430
Asn Gln Ser His Phe Leu His Asn Gly Gln Glu Ile Gly Ser Thr Pro
        435                 440                 445
Pro Ile Glu Gln Gln Met Pro Glu Lys Gln Lys Thr Glu Arg Glu Ser
    450                 455                 460
Gln Met Gly Ile Leu Ala Lys Thr
465                 470
```

<210> 29617
<211> 81
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (6),(39)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29617

```
Gly Leu His Pro Phe Xaa Val Asp Asn Asn Leu Met Asp Cys Ile Asp
1               5                  10                  15
Pro Pro Lys Ile Gln Glu Ala Gln Tyr Met His Ser Lys Phe Tyr Asn
            20                  25                  30
Ile Ile Ser Phe Ala His Xaa Thr Asp Cys Phe His Leu Arg Phe Val
        35                  40                  45
Arg Thr Leu Lys Trp Arg Gly Ser Pro Leu Gln Lys Asn Ser Arg Arg
    50                  55                  60
Thr Thr Ala Arg Pro Ala Arg Leu Thr Arg Pro Glu Ile Leu Pro Ile
65                  70                  75                  80
Asn
```

<210> 29618
<211> 330
<212> PRT
<213> A.fumigatus

<400> 29618

```
Gly Leu His Cys Leu Val Gly Ala Lys Tyr Leu Asn Thr Ile Thr Gly
1               5                  10                  15
His Gly Ala Cys Thr Ile Ile Trp Ser Leu Val Thr Ala Ile Val Ser
            20                  25                  30
Leu Val Phe Ser Leu Pro Arg Thr Phe Ser Gly Leu Ser Lys Ala Ala
        35                  40                  45
Thr Leu Ser Ala Ile Phe Thr Phe Val Ser Val Ile Leu Ala Val Ile
    50                  55                  60
Phe Ser Ala Val Glu Asp His Pro Ala Gly Tyr Ser Ala Ala Gln Gly
65                  70                  75                  80
Glu Pro Ile Val Thr Ala Ile Pro Val Val Gly Thr Thr Phe Val Ser
                85                  90                  95
Gly Val Asn Ala Phe Leu Asn Ile Ser Tyr Thr Phe Ile Gly Gln Ile
            100                 105                 110
Thr Leu Pro Ser Phe Ile Ala Glu Met Lys Glu Pro Lys Asp Phe Trp
        115                 120                 125
Lys Ser Val Thr Ala Val Thr Ile Ala Glu Ile Ile Val Phe Ser Leu
    130                 135                 140
```

```
Val Gly Ala Ile Val Tyr Asp Tyr Thr Gly Asn Gln Tyr Met Thr Ala
145                 150                 155                 160
Pro Ala Phe Gly Ser Ile Gly Asn Glu Val Tyr Lys Lys Val Ser Phe
                165                 170                 175
Ser Phe Met Val Pro Thr Leu Ile Phe Leu Gly Val Leu Tyr Ala Ser
            180                 185                 190
Val Ser Ala Arg Phe Ile Phe Phe Arg Leu Phe Asp Gly Thr Arg His
        195                 200                 205
Lys Gly Asn His Thr Val Val Gly Trp Ala Ser Trp Thr Gly Ile Leu
    210                 215                 220
Ala Val Leu Trp Ile Met Ala Phe Ile Ile Ala Glu Val Ile Pro Phe
225                 230                 235                 240
Phe Ser Asp Leu Leu Ser Ile Met Ser Ser Leu Phe Asp Ser Phe Phe
                245                 250                 255
Gly Phe Ile Phe Trp Gly Val Ala Tyr Leu Arg Met Arg Tyr Ala Asp
            260                 265                 270
His Gly Pro Gly Phe Tyr Lys Lys Arg Gly Ile Arg Gly Trp Val Gly
        275                 280                 285
Phe Ile Val Asn Ile Gly Leu Ile Leu Thr Gly Leu Phe Phe Leu Gly
    290                 295                 300
Pro Gly Thr Tyr Val Ser Leu Pro Leu Lys His Ser His Glu Arg Val
305                 310                 315                 320
Ala Asn Val Thr Leu Cys Arg Leu Pro Leu
                325                 330
```

<210> 29619
<211> 292
<212> PRT
<213> A.fumigatus

<400> 29619

```
Arg Thr Asp Val Phe Lys Arg His Leu Thr Ser Val His Gly Val Glu
1               5                   10                  15
Gln Thr Pro Pro Asn Cys Arg Lys Arg Ser Pro Gly Ala Ala Ser Val
            20                  25                  30
Lys Lys Val Ser Asp Tyr Cys Gln Asp Ala Thr Gly Lys Cys Ser Thr
        35                  40                  45
Cys Ser Ala Thr Phe Ser Asn Ala Gln Asp Phe Tyr Glu His Leu Asp
    50                  55                  60
Asp Cys Val Leu Arg Val Val Gln Gln Val Glu Pro Ser Glu Val Ile
65                  70                  75                  80
Asn Gln Gln Arg Leu Ala Glu Val Asp Cys Asp Glu Glu Val Lys Lys
                85                  90                  95
Thr Met Glu Lys His Lys Leu Leu Asp Ala Ala Gly Asp Val Asp Asp
            100                 105                 110
Glu Pro Glu Glu Asp Asp Asp Asp Tyr Asn Glu Leu Asn Leu Gln Leu
        115                 120                 125
Arg Ser Ser Lys Gly Ala Phe Lys Ser Asn Lys Ala Asn Ser Ser Leu
    130                 135                 140
Gly Ser Arg Pro Ile Met Gly Asn His Asn Ala Val Thr Lys Asn Gly
145                 150                 155                 160
Lys Ala Arg Ala Thr Ile Ser Lys Arg Arg Asn Asn Arg Asp Arg Tyr
                165                 170                 175
Pro Pro Ser Trp Gly Cys Pro Ser Ser Ser Met Lys Thr Lys Lys Arg
            180                 185                 190
Val Leu Cys Val Phe Asp Gly Gln Arg Arg Leu Trp Lys Asp Glu Met
```

```
        195                 200                 205
Met Leu Asp Asn Glu Phe Glu Val Arg Leu Lys Leu Pro Gly Gly Ala
    210                 215                 220
Gly Asp Gly Thr Asn Arg Glu Ala Tyr Ile Thr Asp Leu Asp Val Glu
225                 230                 235                 240
Thr Leu Lys Arg Ala Glu Gly Val Leu Ser Ala Asn Glu Asp Glu Lys
                245                 250                 255
Gly Pro Trp Leu Glu Gly Pro Ala Thr His Leu Met Gly Gln Pro Ala
            260                 265                 270
Lys Met Leu Pro Ala Leu Ser His Thr His Glu Asp Val Asp Ile Asp
        275                 280                 285
Asp Leu Met Ser
    290
```

<210> 29620
<211> 172
<212> PRT
<213> A.fumigatus

```
<400> 29620
Cys Phe Gln Gly Val Leu Asp Glu Asp Glu Arg Cys Ala Glu Glu Leu
1               5                   10                  15
Ser Pro Cys Pro Ala Asp Gly Ala Ser Tyr Leu Gly Arg Glu Gly Val
            20                  25                  30
Arg Tyr Leu Asp Glu Val Leu Glu His Asp Gly Glu Glu Ala Glu Gly
        35                  40                  45
Arg Cys Ala Glu Glu Gly Ala Asp Asp Val Arg Arg Gly Asp Ala Cys
    50                  55                  60
Gly Thr Gly Arg Gly Glu Tyr Glu Gly Asp Val Ala Asp Gly Asp Asp
65                  70                  75                  80
Gly Asp Gln Asp Pro Asp Gly Ala Glu Val Val Leu Glu Ala Val Gly
                85                  90                  95
Asp Gly Arg Asp Asp Gly Arg Thr Asn Glu Ala Asp Asn Asp Glu Asn
            100                 105                 110
Ala Ala Cys Asn Ala Gly Val Cys Leu Gly Glu Thr Val Trp Phe Glu
        115                 120                 125
Asn Leu Val Gln Glu Gly Gly Asp Ala Val Glu Glu Ala Asp Val Asp
    130                 135                 140
Gly Glu Gly Asp Gln Asp Glu Pro Glu Phe Glu Gly Phe Glu Glu Leu
145                 150                 155                 160
Asn Gln Arg Arg Thr Glu Gly Cys Phe Thr Ala Cys
                165                 170
```

<210> 29621
<211> 150
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (145)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 29621
Trp Gly Ala Asn Gly Phe Asp Met Leu Glu Arg Lys Pro Arg Gly Gly
1               5                   10                  15
```

```
Ile Phe Gly Gly Ala Met Leu Gly Gln Ile Phe Ile Gly Leu Ala Gln
            20                  25                  30
Pro Phe Cys Leu Ser Ala Pro Thr Arg Tyr Ser Asp Leu Trp Phe Ser
        35                  40                  45
Asp Gln Gly Arg Ile Ser Ala Thr Ala Val Ala Thr Leu Ala Asn Pro
    50                  55                  60
Leu Gly Ala Ala Leu Gly Gln Leu Leu Asp Ser Phe Trp Ala Thr Thr
65                  70                  75                  80
Pro Lys Gln Val Pro Asp Met Val Leu Tyr Ile Ser Ile Ile Val Gly
                85                  90                  95
Ala Ser Ser Ile Pro Ser Ala Gly Val Phe Cys Arg Lys Ala Thr His
            100                 105                 110
Ile Ser Ser Asn Thr Asp Arg Met His Asn Leu Thr Gly Asn Arg Arg
        115                 120                 125
Val Asn Pro Ile Ile Leu His Ser Ser Arg Thr Pro Asn Ala Pro Lys
    130                 135                 140
Xaa Phe Ile Ser Arg Gln
145                 150
```

<210> 29622
<211> 289
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (22)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29622

```
Gln Ala Thr Val Ala Ser Ile Pro Ser Phe Phe Ile Pro Ala Ala Pro
1               5                   10                  15
Pro Thr Pro Pro Ser Xaa Ser Ser Ala Gly Ser Lys Thr Pro Leu Arg
            20                  25                  30
Pro Ala Leu Ile Gln Leu Leu Lys Thr Leu Glu Phe Trp Leu Ile Leu
        35                  40                  45
Ile Pro Phe Ser Val Tyr Val Gly Phe Phe Asn Ser Val Ser Ser Leu
    50                  55                  60
Leu Asn Gln Ile Leu Glu Pro Tyr Gly Phe Ser Glu Thr Asp Ala Gly
65                  70                  75                  80
Ile Ala Gly Gly Ile Leu Ile Ile Val Gly Leu Ile Ser Ser Ala Ile
                85                  90                  95
Ile Ser Pro Ile Thr Asp Arg Phe Lys His Tyr Leu Gly Thr Ile Arg
            100                 105                 110
Ile Leu Val Pro Ile Val Ala Ile Cys Tyr Ile Ala Leu Ile Phe Ala
        115                 120                 125
Pro Ser Ser Pro Ala Gly Ile Ala Pro Ala Tyr Val Val Cys Ala Leu
    130                 135                 140
Leu Gly Ala Ser Ser Phe Gly Leu Leu Pro Val Val Leu Glu Tyr Leu
145                 150                 155                 160
Val Glu Ile Thr Tyr Pro Phe Ser Pro Glu Ile Gly Ser Thr Ile Cys
                165                 170                 175
Trp Thr Gly Gly Gln Leu Leu Gly Ala Ala Phe Ile Leu Ile Gln Asp
            180                 185                 190
Ala Leu Lys Ala Ser Asp Asn Ala Ser Pro Pro Gln Asn Met Arg Ser
        195                 200                 205
```

```
Ala Leu Ile Phe Ser Ala Val Val Ala Ala Val Ala Ala Pro Phe Ala
    210                 215                 220
Val Cys Ile Gly Leu Phe Gly Arg Asp Val Arg Arg Arg Arg Leu Glu
225                 230                 235                 240
Val Asp Arg Gly Val Pro Leu Glu Asn Ala Val Cys Arg Asp Pro Glu
                245                 250                 255
Ala Ala Ser Ala Gly Val His Val Gly Asp Glu Asn Pro Asn Thr Gly
            260                 265                 270
Leu Asp His Ala Ser Asp Met Pro Lys Leu Ala Pro Lys Tyr Ser Ser
        275                 280                 285
Tyr
```

<210> 29623
<211> 79
<212> PRT
<213> A.fumigatus

<400> 29623

```
Asp Ser Val Ser Pro Leu Gln Asp Pro Val Gln Thr Pro Ala Gln Lys
1               5                   10                  15
Lys Leu Thr Glu Arg Phe Arg Thr Leu Val Lys His Val Met Gln Trp
            20                  25                  30
Arg Lys Ser Cys Glu His Ser Leu His Ile Met Val Thr Glu Val Lys
        35                  40                  45
Ser Arg Gly Phe Leu Gln Pro Phe Met Pro Glu Phe Val Pro Gln Asn
    50                  55                  60
Arg Asp Ser Asn Gln Phe Met Ala Asp Glu Ile Gly Leu Leu Asp
65                  70                  75
```

<210> 29624
<211> 657
<212> PRT
<213> A.fumigatus

<400> 29624

```
Ser Pro Leu Thr Thr Gln Leu Gln Gln Ser Asp Pro Gly Ile Gly Ile
1               5                   10                  15
Ile Gly Lys Ala Gln Ala Tyr Arg Glu Val Glu Leu Thr Glu Thr Trp
            20                  25                  30
Phe Glu Lys Leu Gln Arg Trp Glu Glu Ala Leu Ala Ala Tyr Lys Arg
        35                  40                  45
Arg Glu Arg Ile Asp Pro Asp Ser Phe Gly Val Thr Met Gly Lys Met
    50                  55                  60
Arg Cys Leu His Ala Leu Gly Glu Trp Lys Val Leu Ser Asp Leu Ala
65                  70                  75                  80
Gln Glu Lys Trp Asn Gln Ala Ser Leu Glu His Arg Arg Ala Ile Ala
                85                  90                  95
Pro Leu Ala Ala Ala Ala Ala Trp Gly Arg Gly Gln Trp Glu Leu Met
            100                 105                 110
Asp Ser Tyr Leu Gly Val Met Lys Glu Gln Ser Pro Asp Arg Ser Phe
        115                 120                 125
Phe Gly Ala Ile Leu Ala Ile His Arg Asn Gln Phe Asp Glu Ala Thr
    130                 135                 140
Met Tyr Ile Glu Lys Ala Arg Asn Gly Leu Asp Thr Glu Leu Ser Ala
145                 150                 155                 160
```

```
Leu Leu Gly Glu Ser Tyr Asn Arg Ala Tyr Asn Val Val Val Arg Val
                165                 170                 175
Gln Met Leu Ala Glu Leu Glu Glu Ile Ile Thr Tyr Lys Gln Asn Ile
            180                 185                 190
Gly Asp Pro Glu Lys Gln Glu Ser Met Arg Gln Thr Trp Asn Lys Arg
        195                 200                 205
Leu Leu Gly Cys Gln Gln Asn Val Glu Val Trp Gln Arg Met Leu Lys
    210                 215                 220
Val Arg Ala Leu Val Thr Ser Pro Arg Glu Asn Leu Asp Met Trp Ile
225                 230                 235                 240
Lys Phe Ala Asn Leu Cys Arg Lys Ser Asn Arg Met Gly Leu Ala Glu
                245                 250                 255
Arg Ser Leu Ala Ser Leu Glu Thr Val Val Thr Asp Asn Asn Gly Thr
            260                 265                 270
Arg Thr Ile Ala Pro Pro Glu Val Thr Tyr Ala Arg Leu Lys Phe Asn
        275                 280                 285
Trp Ala Thr Gly Arg Gln Arg Glu Ala Leu Gln Met Leu Lys Glu Phe
    290                 295                 300
Thr Ala Asn Leu Thr Asp Asp Leu Asn Arg Phe Asn Ala Leu Met Ala
305                 310                 315                 320
Ser Gln Ser Asp His Asn Gly Val Asp Gly Val Asn Gly Ile Thr Glu
                325                 330                 335
Ala Asn His Ala Asp Met Met Gly Leu Arg Glu Arg Ile Gly Asp Val
            340                 345                 350
Ala Lys Phe Arg Lys Leu Leu Ser Lys Ser Tyr Leu Arg Gln Gly Glu
        355                 360                 365
Trp Gln Thr Thr Leu Gln Arg Gly Asp Trp Lys Pro Glu His Val Arg
    370                 375                 380
Glu Val Leu Gly Ala Tyr Ser Ala Ala Thr Lys Tyr Asn Arg Asp Ser
385                 390                 395                 400
Tyr Lys Ala Trp His Ser Trp Ala Leu Ala Asn Phe Glu Val Val Thr
                405                 410                 415
Thr Ile Ala Ser Gln Thr Ser Arg Asp Gly Gly Ile Lys Pro Val Val
            420                 425                 430
Pro Gly His Ile Val Thr Glu His Val Ile Pro Ala Ile Gly Gly Phe
        435                 440                 445
Leu Arg Ser Ile Ala Leu Ser Ser Thr Ser Ser Leu Gln Asp Thr Leu
    450                 455                 460
Arg Leu Leu Thr Leu Trp Phe Thr Tyr Gly Gly Asp Gln Glu Val Asn
465                 470                 475                 480
Asn Val Val Thr Glu Gly Phe Asn Ala Val Asn Ile Asp Thr Trp Leu
                485                 490                 495
Ala Val Thr Pro Gln Leu Ile Ala Arg Ile Asn Gln Pro Asn Leu Lys
            500                 505                 510
Val Arg Thr Ala Val His Arg Leu Leu Ala Glu Val Gly Lys Ala His
        515                 520                 525
Pro Gln Ala Leu Val Tyr Pro Leu Thr Val Ala Met Lys Ser His Ile
    530                 535                 540
Thr Arg Arg Ser Gln Ser Ala Ser Thr Ile Met Asp Ser Met Arg Gln
545                 550                 555                 560
His Ser Ala Thr Leu Val Glu Gln Ala Asp Leu Val Ser His Glu Leu
                565                 570                 575
Ile Arg Val Ala Val Leu Trp His Glu Leu Trp His Glu Gly Leu Glu
            580                 585                 590
Glu Ala Ser Arg Leu Tyr Phe Gly Asp His Asp Val Glu Gly Met Phe
        595                 600                 605
```

```
Ala Thr Leu Ala Pro Leu His Asp Met Leu Asp Lys Gly Ala Glu Thr
    610                 615                 620
Leu Arg Glu Phe Leu Leu Arg Arg Arg Leu Asp Gly Ile Leu Gln Arg
625                 630                 635                 640
Arg Asn Thr Ile Leu Cys Val Phe Thr His Arg Gly Trp Lys Val Pro
                645                 650                 655
Arg
```

<210> 29625
<211> 134
<212> PRT
<213> A.fumigatus

<400> 29625

```
Gln Cys Gln Gln Trp Asn Thr Glu Leu Cys Pro Asp Asn Glu Ser Cys
1               5                   10                  15
Ala Gln Asn Cys Ala Leu Asp Gly Ala Asp Tyr Ala Gly Thr Tyr Gly
            20                  25                  30
Val Thr Thr Ser Gly Ser Glu Leu Lys Leu Ser Phe Val Thr Gly Ala
        35                  40                  45
Asn Val Gly Ser Arg Leu Tyr Leu Met Gln Asp Asp Glu Thr Tyr Gln
    50                  55                  60
His Phe Asn Leu Leu Asn His Glu Phe Thr Phe Asp Val Asp Val Ser
65                  70                  75                  80
Asn Leu Pro Cys Gly Leu Asn Gly Ala Leu Tyr Phe Val Ala Met Asp
                85                  90                  95
Ala Asp Gly Gly Met Ser Lys Tyr Pro Ser Asn Lys Ala Gly Ala Lys
            100                 105                 110
Tyr Gly Thr Gly Tyr Cys Asp Ser Gln Cys Pro Arg Asp Leu Lys Phe
        115                 120                 125
Ile Asn Gly Met Val Arg
    130
```

<210> 29626
<211> 258
<212> PRT
<213> A.fumigatus

<400> 29626

```
Ala Leu Thr Ile Thr Gln Ala Asn Val Glu Gly Trp Glu Pro Ser Ser
1               5                   10                  15
Ser Asp Lys Asn Ala Gly Val Gly Gly His Gly Ser Cys Cys Pro Glu
            20                  25                  30
Met Asp Ile Trp Glu Ala Asn Ser Ile Ser Thr Ala Val Thr Pro His
        35                  40                  45
Pro Cys Asp Asp Val Ser Gln Thr Met Cys Ser Gly Asp Ala Cys Gly
    50                  55                  60
Gly Thr Tyr Ser Glu Ser Arg Tyr Ala Gly Thr Cys Asp Pro Asp Gly
65                  70                  75                  80
Cys Asp Phe Asn Pro Phe Arg Met Gly Asn Glu Ser Phe Tyr Gly Pro
                85                  90                  95
Gly Lys Ile Val Asp Thr Lys Ser Lys Met Thr Val Val Thr Gln Phe
            100                 105                 110
Ile Thr Ala Asp Gly Thr Asp Ser Gly Ala Leu Ser Glu Ile Lys Arg
        115                 120                 125
```

```
Leu Tyr Val Gln Asn Gly Lys Val Ile Ala Asn Ser Val Ser Asn Val
    130                 135                 140
Ala Gly Val Ser Gly Asn Ser Ile Thr Ser Asp Phe Cys Thr Ala Gln
145                 150                 155                 160
Lys Lys Ala Phe Gly Asp Glu Asp Ile Phe Ala Lys His Gly Gly Leu
                165                 170                 175
Ser Gly Met Gly Lys Ala Leu Ser Glu Met Val Leu Ile Met Ser Ile
            180                 185                 190
Trp Asp Asp His His Ser Ser Met Met Trp Leu Asp Ser Thr Tyr Pro
        195                 200                 205
Thr Asp Ala Asp Pro Ser Lys Pro Gly Val Ala Arg Gly Thr Cys Glu
    210                 215                 220
His Gly Ala Gly Asp Pro Glu Asn Val Glu Ser Gln His Pro Asp Ala
225                 230                 235                 240
Ser Val Thr Phe Ser Asn Ile Lys Phe Gly Pro Ile Gly Ser Thr Tyr
                245                 250                 255
Glu Gly
```

<210> 29627
<211> 180
<212> PRT
<213> A.fumigatus

<400> 29627

```
Trp Ser Pro Ser Leu Cys Leu Pro Gly Cys Tyr Pro Arg Asp Ala His
1               5                   10                  15
Ala Ser Phe Thr Ile Ala Pro Gln Val Cys His Trp Ile Arg Gln Leu
            20                  25                  30
Thr Arg Ser Leu Asp Leu Asp Val Gln Ser His Pro Leu Gln Val Gly
        35                  40                  45
Gly Ser Asn Leu Ala Lys Gln Gln Glu Gln Leu Gly Thr Gly Ala Thr
    50                  55                  60
Asp Val Thr Ser Leu Phe Asp Phe Cys Phe Pro Glu Asn Gly Leu Met
65                  70                  75                  80
Ala Phe Arg Leu Gly Lys Pro Leu Ala Ser Thr Ser Phe Ile Glu Trp
                85                  90                  95
Ile Gly Glu Glu Lys Tyr Gln Lys Leu Val Asn Phe Ile Leu Arg Tyr
            100                 105                 110
Phe Ala Asp Leu Gln Leu Pro Lys Lys Arg Gly Thr Phe Ile Glu Phe
        115                 120                 125
Arg Asn Gly Met Ile Asn Val Ser Pro Ile Gly Arg Asn Ala Ser Val
    130                 135                 140
Glu Glu Arg Asn Glu Phe Glu Ala Tyr Val Tyr Glu Leu Gly Leu Ser
145                 150                 155                 160
Gln Pro Leu Gln Arg Arg Gln Leu Ile Cys Gly Tyr His Gln Leu Thr
                165                 170                 175
Ile Arg Gln Ile
            180
```

<210> 29628
<211> 87
<212> PRT
<213> A.fumigatus

<400> 29628

```
Gln Ser Ile Cys Ser Tyr Ser Ile Gly Gly Gln Ile Ser Phe Asp Val
1               5                  10                  15
Phe Pro Thr Gly Trp Asp Lys Thr Tyr Cys Leu Arg His Val Glu Ala
            20                  25                  30
Glu Lys Glu Ile Ser Gly Val Glu Tyr Thr Thr Ile His Phe Phe Gly
        35                  40                  45
Asp Lys Cys Phe Pro Gly Gly Asn Asp Tyr Glu Ile Tyr Ser Glu Pro
    50                  55                  60
Arg Thr Ile Gly His Ser Val His Gly Pro Glu Glu Tyr Met Lys Gln
65                  70                  75                  80
Leu Lys Glu Leu Phe Gln Leu
                85
```

<210> 29629
<211> 69
<212> PRT
<213> A.fumigatus

<400> 29629

```
His Ser Phe Leu Asp Pro Phe Phe Leu Phe Tyr Thr Ile Arg His Ser
1               5                  10                  15
Tyr Ser Gln Gln Glu Cys Leu Lys Ser Ser Cys Leu His Pro Gln Arg
            20                  25                  30
Pro Leu Gln Arg Ile Pro Arg Thr Thr Ser Asn Thr Thr His Phe Leu
        35                  40                  45
Ile Thr Thr Pro Thr Ser Gln Thr Pro Pro Phe Pro Ser Gln Pro Leu
    50                  55                  60
Gln Gly Leu Leu Ala
65
```

<210> 29630
<211> 212
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (50),(60)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29630

```
Thr Trp Lys Ile Pro Asp Pro Val Asn Phe Asn Val Gly Val Leu Val
1               5                  10                  15
Leu His Leu Leu Asn Arg Phe Ser Ile Glu Tyr Asn Lys Lys Pro Gly
            20                  25                  30
Lys Leu Ala Thr Val Lys Val Val Lys Asp Pro Ala Val Ala Arg Glu
        35                  40                  45
Asn Xaa Asn Lys Ser Val Leu Ile His Thr Gly Xaa Gly Glu His Ala
    50                  55                  60
Asn Ser Val Ser Lys Pro Thr Pro Arg Pro Lys Gln Val Ser Ala Arg
65                  70                  75                  80
Pro Val Thr Lys Gly Lys Leu Leu Arg Pro Gly Gly Pro Gly Gly Gly
                85                  90                  95
Pro Ser Lys Leu Ala Ala Arg Pro Thr Pro Ala Ala Gln Pro Leu Pro
            100                 105                 110
Arg Ala Thr Pro Gln Pro Ala Glu Pro Gln Pro Ala Ala Arg Ala Val
```

```
        115                 120                 125
Pro Gln Pro Val Ala Ala Val Ala Ala Ser His Thr Arg Thr Gly Ser
    130                 135                 140
Thr Ala Ser Val Arg Ala Pro Pro Pro Pro Pro Pro Ala Ala Ala Pro
145                 150                 155                 160
Ala Pro Lys Lys Pro Thr Ala Lys Val Leu Tyr Asp Phe Asn Ser Gln
                165                 170                 175
Gln Ser Asn Glu Leu Ser Ile Lys Ala Gly Glu Ile Val Gln Ile Val
            180                 185                 190
Ser Lys Glu Gly Asn Gly Lys Pro Gly Ser Ser Ile Ser Ser Gln Gln
        195                 200                 205
Ser Thr Asn Glu
    210
```

<210> 29631
<211> 141
<212> PRT
<213> A.fumigatus

<400> 29631

```
Arg Val Ile Gly Trp Trp Leu Cys Met Asn Met Thr Thr Ser Ala Gln
1               5                   10                  15
Gly Trp Thr Pro Glu Ala Tyr Leu Glu Glu Gln Val Ala Pro Thr Pro
            20                  25                  30
Lys Pro Ala Pro Pro Pro Pro Pro Ala Ala Pro Arg Ser Thr Pro Ala
        35                  40                  45
Pro Ala Thr Asn Gly Ala Ala Ala Ala Ala Lys Ala Lys Pro Ala Pro
    50                  55                  60
Pro Ala Pro Pro Ala Lys Arg Pro Asn Met Ala Ala Arg Lys Ala Val
65                  70                  75                  80
Pro Thr Pro Pro Pro Ala Pro Arg Asp Ser Ala Val Ser Met Asn Ser
                85                  90                  95
His Asp Ser Ser Gly Gly Ser Gly Arg Gly Thr Pro Asn Ser Met Ser
            100                 105                 110
Asn Ala Ser Leu Ala Gly Gly Leu Ala Glu Ala Leu Arg Ala Arg Gln
        115                 120                 125
His Ala Met Gln Gly Lys Gln Asp Asp Asp Asp Asp Trp
    130                 135                 140
```

<210> 29632
<211> 228
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (24)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29632

```
Ser Asn Thr Gly Val Leu Gly Asn Thr Pro His Tyr Phe Leu Ser Leu
1               5                   10                  15
Trp Leu Ser Leu Ser His Cys Xaa Ala Arg Ser Val Pro Ser Ser Tyr
            20                  25                  30
Val Ala Asp Leu Thr Pro His Gln Gln Thr Glu Tyr Thr Arg Gly Pro
        35                  40                  45
```

```
Val Gly Ser Ile Leu Arg Thr His Pro His Pro Ser His Ile Tyr His
    50                  55                  60
Ile Gln Pro Ser Leu Ile Pro Tyr Thr Ser Asp Ile Asn Gln Leu Thr
65                  70                  75                  80
Lys Met Ser Phe Ser Asn Ile Ile Gln Asp Ala Leu Ser Gly His Ser
                85                  90                  95
His Ser Asn Asn Asn Ser Arg His Asp Asn Asp Tyr Asp Glu Phe Asn
            100                 105                 110
Pro Ala Val Arg Tyr Ala Glu Ser His Ala Asn Thr Ser Asp Ser Ser
        115                 120                 125
Leu Phe Thr Ser Ala Leu Ser Phe Leu Asn Glu Asn Lys His Arg Leu
    130                 135                 140
Ser Asn Asp Asn Asp Ile Asn Glu Gln Glu Met Ile His Ala His Gln
145                 150                 155                 160
Ser Leu Tyr Asp Gly Arg Asp Ser Glu Arg Arg His Asp Ser Ser Ser
                165                 170                 175
Val Gly Ala Gly Ala Ala Met Gln Ala Leu Lys Met Phe Thr Ser Ser
            180                 185                 190
Ser Glu Gly Glu Lys Ser Gly Met Asp Lys Asn Ala Phe Ile Gly Leu
        195                 200                 205
Ala Met Ala Gln Ala Lys Lys Met Phe Glu Glu Lys Glu Ala Lys Gly
    210                 215                 220
Glu Val Val Ser
225
```

<210> 29633
<211> 65
<212> PRT
<213> A.fumigatus

```
<400> 29633
Gly Glu Met His Gly Val Arg Pro Gln Gly Thr Pro Ser Pro Leu Leu
1               5                   10                  15
Val Gly Arg Cys Thr Leu Ser Val Glu Ser Leu Gln Leu Ser Val Pro
            20                  25                  30
Ala Asp Phe Thr Ser Ser Gln Thr Ala Ala Tyr Leu Gly Tyr Leu Thr
        35                  40                  45
Val Val His Asn His His Gln Leu Gln Ala Ser Leu Leu Val Val Val
    50                  55                  60
Ala
65
```

<210> 29634
<211> 419
<212> PRT
<213> A.fumigatus

```
<400> 29634
His Thr Ala Lys Phe Arg Val His Glu Thr Gln Thr Leu Leu Ile Ile
1               5                   10                  15
Pro Asn Tyr Thr Val Ser Arg Gly Leu Leu Phe Met Phe Arg Ser Ile
            20                  25                  30
Ile Gly Arg His Gly His Ser Tyr Gly Ser Ser Arg Leu Thr Gly Ser
        35                  40                  45
Ala Pro Arg Pro Thr Leu Cys Gln Thr Arg Pro Asn His Pro Ala Pro
    50                  55                  60
```

```
Phe Val Glu Pro Pro Tyr Pro Ala His Ser Glu Gln His His His Arg
65                  70                  75                  80
Asn His Gln Ser Pro Pro Gly Tyr His Arg Glu Pro Ala Pro Ile Phe
                85                  90                  95
Ser Gln Phe His Ala Val Lys Thr Thr Gln Ser Lys Val Val Ser Pro
            100                 105                 110
Gly Asp Arg Ala Lys Ala Arg Lys Glu Val Gln Asn Gly Leu Glu Ser
        115                 120                 125
Lys Phe Phe Ser Ile Val Arg Glu Gly Gln Pro Asp Leu Val Met Arg
    130                 135                 140
Ala Leu Leu Asp Pro Lys Phe Glu Asn Leu Val Gly Ser Leu Pro Glu
145                 150                 155                 160
Ser Thr Phe Val Glu Ala Phe Arg Ser Leu Ser Pro Ala Tyr Phe Ile
                165                 170                 175
Asp Pro Phe Arg Ala Ile Tyr Arg Pro Leu His Pro Ser Thr Val Ala
            180                 185                 190
Val Lys Gly Tyr Pro Gln Leu Asp Lys Ile Phe Asp Arg Phe Ala Ser
        195                 200                 205
Asn Leu Ala Ser Ile Val Ser Ile Arg Arg Ser Ala Gly His Arg Leu
    210                 215                 220
Gly Leu Ala Glu Tyr Thr His Leu Leu Asp Cys Ala Arg Ser Thr Gly
225                 230                 235                 240
Asp Ala Leu Met Ala Asp His Ile Trp His Ala Met Arg Gln Asp Asp
                245                 250                 255
Val Ile Pro Asp Val Gln Cys Tyr Asn Tyr Tyr Met Glu Ser Lys Val
            260                 265                 270
Trp Asp Gly Ala Tyr Thr Gly Arg Glu Lys Tyr Arg Leu Arg Val Thr
        275                 280                 285
Pro Phe Ala Tyr Arg Lys Arg Ser Phe Gly Lys Arg Asn Leu Gly Trp
    290                 295                 300
Lys Gly Tyr Gly Thr Ala Gly Cys Thr Val Arg Lys Glu Ile Met Pro
305                 310                 315                 320
Ile Leu Ala Asp Met Thr Glu Glu Arg Thr Ala Gly Asp Gln Gly Thr
                325                 330                 335
Tyr Val Asn Val Ile Leu Ala Ser Ser Ser Val Gly Tyr Ile Ser Thr
            340                 345                 350
Met Asn His Val Leu Asn Asn Val Gly Asn Ile Asp Ile Asp Ala Leu
        355                 360                 365
Pro Pro Leu Gly Val Ser Leu Asn Pro Pro Leu Leu Leu Gly Ile Pro
    370                 375                 380
Ser Phe Phe His Pro Leu Tyr Pro Thr Asn Ser Pro Ser Leu Phe Ala
385                 390                 395                 400
Cys Pro His Pro Pro Phe Gly Phe Pro Gln Pro Thr Phe Pro Ala Pro
                405                 410                 415
Leu Ser Gly
```

<210> 29635
<211> 62
<212> PRT
<213> A.fumigatus

<400> 29635

```
Leu Ile Leu Gly Thr Tyr Leu Asn Ile Thr Phe Thr Ile Ser Lys Leu
1               5                   10                  15
Ala Tyr Phe Thr Lys Asn Pro Ser Pro Asn Tyr Phe Ile Ile Val Lys
```

```
            20                  25                  30
Tyr Ile Phe Tyr Tyr Leu Ala Gly Ile Leu Leu Leu Leu Leu Phe Tyr
        35                  40                  45
Pro Ser Thr Leu Ser Asn Leu Asn Ser Phe Ile Asn Thr Asn
    50                  55                  60

<210> 29636
<211> 64
<212> PRT
<213> A.fumigatus

<400> 29636
Glu Ala Asn Arg Thr Lys Phe Ser Asp Met Pro Ile Arg Met Cys Pro
1               5                   10                  15
Ile Met Asn Gln Asp Ser Ala Ala Phe Met Asp Gly Tyr Lys Met Ala
            20                  25                  30
Ala Val Gln Leu Leu Asp Ser Phe Ala Ala Glu Asn Pro Gln Val Leu
        35                  40                  45
Phe Thr Met Cys Ile Pro Asp Ser Ser Lys Arg Leu Cys Leu Pro Ser
    50                  55                  60

<210> 29637
<211> 152
<212> PRT
<213> A.fumigatus

<400> 29637
Phe His Ile Lys Ile Thr His Val Asn Met Gln Leu Ala Thr Phe Leu
1               5                   10                  15
Leu Val Ala Leu Leu Ser Ile Phe His Met Thr Leu Ala Ala Pro Thr
            20                  25                  30
Tyr His His Tyr Thr Val Thr Pro Ala Asn Pro Ala Leu Thr Trp His
        35                  40                  45
Val Ser Asn Phe Tyr Thr Ser Cys Ser Pro Gly Gly Cys Ala Tyr Arg
    50                  55                  60
Phe Asp Ile Leu Gly Ile Ala Thr Arg Asn Thr Pro Gly Phe Asn Thr
65                  70                  75                  80
Thr Cys Asn Gly Thr Asp Met Glu Thr Asp Tyr Thr Phe Cys Arg Asp
                85                  90                  95
Lys His Ile Lys Ala Lys Leu Thr Ala Val Lys Ser Arg Ser Trp Lys
            100                 105                 110
Val Glu Val Met His Ala Trp Phe Lys Pro Gly Ala Glu Phe Tyr Ala
        115                 120                 125
Glu Gly Ser Ala Asn Val Thr Ser Ser Met Arg Asn Phe Thr Ile Pro
    130                 135                 140
Val Asn Asp Thr Tyr Gly Ala Ala
145                 150

<210> 29638
<211> 159
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (25),(26),(29),(33),(42)
```

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29638

```
Asp Arg Val Arg Leu Cys Ser Val Arg Phe Pro Ala Leu Asn Gly Ser
1               5                  10                  15
Asp Asn Gly Arg Gly Arg Gly Trp Xaa Xaa Leu Tyr Xaa Tyr Cys Ser
            20                  25                  30
Xaa Phe Phe Phe Phe Ser Phe Tyr Phe Xaa Phe Phe Phe Phe Phe Phe
        35                  40                  45
Leu Phe Phe Leu Thr Pro Pro Phe Phe Phe Pro Leu Phe Leu Phe Phe
    50                  55                  60
Leu Phe Phe Phe Leu Ser Phe Leu Phe Leu Phe Ser Phe Phe Ser Phe
65                  70                  75                  80
Pro Ser Ser Pro Phe Phe Leu Pro Leu Phe Leu Pro Leu Leu Phe Ser
                85                  90                  95
Ser Leu Leu Leu Ser Pro Phe Phe Pro Leu Ser Leu Leu Leu Leu Phe
            100                 105                 110
Ser Ser Ser Phe Ser Leu Phe Leu Ser Ser Ser Ser Phe Phe Phe Ser
        115                 120                 125
Phe Leu Phe Leu Ser Phe Ser Phe Phe Leu Leu Leu Pro Phe Ser Phe
    130                 135                 140
Leu Leu Leu Phe Leu Pro Ser Phe Leu Phe Pro Phe Leu Pro Leu
145                 150                 155
```

<210> 29639
<211> 145
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (11),(12),(15),(20),(29)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29639

```
Thr Ala Val Ile Met Glu Gly Gly Gly Gly Xaa Xaa Ile Cys Xaa Ile
1               5                  10                  15
Ile Val Leu Xaa Phe Phe Phe Phe Leu Phe Ile Phe Xaa Phe Phe Phe
            20                  25                  30
Phe Phe Phe Phe Phe Phe Leu Pro Leu Pro Phe Ser Phe Leu Phe Phe
        35                  40                  45
Ser Phe Phe Phe Ser Phe Ser Ser Pro Phe Phe Phe Phe Phe Leu Ser
    50                  55                  60
Phe Leu Ser Leu Leu Leu Pro Phe Phe Ser Leu Phe Phe Ser Leu Phe
65                  70                  75                  80
Phe Ser Pro Leu Ser Ser Phe Leu Leu Phe Phe Pro Ser Leu Phe Phe
                85                  90                  95
Ser Phe Phe Leu Leu Leu Phe Pro Phe Phe Phe Pro Leu Pro Leu Ser
            100                 105                 110
Ser Ser Pro Phe Ser Phe Ser Leu Phe Pro Phe Phe Phe Ser Ser Leu
        115                 120                 125
Phe Pro Ser Phe Phe Ser Ser Phe Leu Pro Ser Phe Ser Leu Ser Phe
    130                 135                 140
Pro
145
```

<210> 29640
<211> 141
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (7),(8),(11),(16),(24)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29640
Trp Lys Gly Glu Gly Val Xaa Xaa Phe Val Xaa Leu Leu Phe Phe Xaa
1 5 10 15
Phe Phe Phe Phe Phe Leu Phe Xaa Phe Phe Phe Phe Phe Phe Ser Phe
20 25 30
Phe Ser Tyr Pro Ser Leu Phe Leu Ser Ser Phe Ser Leu Phe Ser Phe
35 40 45
Leu Phe Pro Leu Leu Ser Phe Ser Phe Phe Phe Leu Phe Phe Pro Phe
50 55 60
Phe Ser Leu Phe Ser Pro Ser Phe Ser Pro Ser Ser Phe Leu Leu Ser
65 70 75 80
Pro Pro Phe Ser Phe Phe Ser Pro Leu Ser Ser Ser Pro Phe Phe Phe
85 90 95
Phe Phe Phe Pro Phe Ser Phe Leu Phe Leu Phe Leu Leu Leu Leu Ser
100 105 110
Leu Ser Leu Phe Phe Leu Phe Ser Ser Pro Pro Phe Phe Leu Pro Ser
115 120 125
Ser Leu Pro Ser Phe Leu Pro Phe Pro Phe Pro Ser Pro
130 135 140

<210> 29641
<211> 263
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (118),(127),(131),(134),(135)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29641
Glu Gly Lys Glu Arg Glu Lys Glu Gly Arg Lys Glu Glu Lys Lys Glu
1 5 10 15
Gly Lys Arg Glu Glu Lys Lys Lys Gly Lys Arg Glu Lys Glu Lys Gly
20 25 30
Glu Glu Glu Arg Gly Arg Gly Lys Lys Lys Gly Lys Arg Arg Arg Lys
35 40 45
Lys Glu Lys Lys Arg Glu Gly Lys Lys Arg Arg Lys Glu Glu Arg Gly
50 55 60
Glu Lys Lys Arg Glu Lys Lys Arg Glu Lys Lys Gly Arg Arg Arg Glu
65 70 75 80
Arg Lys Glu Arg Lys Lys Lys Lys Lys Gly Glu Glu Lys Glu Lys Lys
85 90 95
Lys Glu Lys Lys Arg Lys Glu Lys Gly Arg Gly Lys Lys Lys Lys Lys
100 105 110
Lys Lys Lys Lys Lys Xaa Lys Ile Lys Arg Lys Lys Lys Lys Xaa Arg

```
        115                 120                 125
Thr Ile Xaa Ile Gln Xaa Xaa Pro Pro Pro Pro Pro Ser Ile Ile Thr
    130                 135                 140
Ala Val Gln Arg Arg Glu Ser Asp Gly Ala Glu Ser Asp Pro Val Ser
145                 150                 155                 160
Leu Gly Tyr Ala Val Glu Phe Met Pro Leu Gly Val Pro Lys Asp Ala
                165                 170                 175
Pro Met Glu Leu Ser Thr Val Arg Phe Thr Val Leu Asp Leu Asp Gly
            180                 185                 190
His Pro Val Pro Leu Asp Thr Val Ala Ile Thr Ile Ile Asn Asp Phe
        195                 200                 205
Lys Gly Asn Ile Tyr Met Ala Lys Thr Asp Phe Glu Asp Thr Ser Pro
    210                 215                 220
Asn Arg Leu Ser Trp Lys Gln Cys Arg Gly Lys Pro Lys Cys Leu Arg
225                 230                 235                 240
Lys Leu Leu Val Glu Arg Ile Arg Gly Leu Phe Ser Arg Arg Lys Gly
                245                 250                 255
Ala Tyr Ser Trp Asn Glu Ala
            260
```

<210> 29642
<211> 81
<212> PRT
<213> A.fumigatus

<400> 29642

```
Asp Ile Met Leu Leu Cys Asp Ser Arg Ile Lys Val Ser Pro Asn Arg
1               5                   10                  15
Trp Thr Thr Asn Glu Ile Gly Leu Cys Trp Leu Lys Asn Leu Phe Ile
            20                  25                  30
Pro Thr Thr Ser Ser Tyr Ile Thr Gly Lys Tyr Cys Leu Leu Ile Leu
        35                  40                  45
Asn Ser His Ser Ser His Leu Met Pro Gln Phe Asn Gln Leu Tyr Ser
    50                  55                  60
Lys Asn Asn Val Ile Pro Ile Tyr Ile Pro Ala Tyr Ser Ser His Lys
65                  70                  75                  80
Leu
```

<210> 29643
<211> 351
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (8),(314)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29643

```
Thr Gly Ser Ser Ser Leu Leu Xaa Ala Gly Ser Asp Ser Ile Met Ile
1               5                   10                  15
Cys His Thr Tyr Ala Val Gln Val Ala Ser Ile Gln Lys Val Cys Glu
            20                  25                  30
Ala Val Gln Ser Gly Gln Leu Ser Ala Ser Arg Leu Glu Glu Ala Tyr
        35                  40                  45
```

```
Arg Arg Val Val Lys Leu Lys Ser Lys Phe Leu Ser Trp Asp Thr Ala
    50                  55                  60
Leu Leu Thr Arg Ser Leu Asp Asp Leu Val Thr Leu Asn Arg Lys Ala
65                  70                  75                  80
Ala Thr Leu Ala Ser Asn Ala Tyr Ser Leu Ser Val Thr Leu Val Arg
                85                  90                  95
Ser Asp Pro Asp Val Leu Pro Leu Ser Lys Ser Gly His Leu Val Leu
            100                 105                 110
Leu Phe Pro Gly Glu Arg Thr Pro Ala Gly Gly Ala Val Asp Gly Glu
        115                 120                 125
Gly Leu Arg Met Lys Gly Ala Tyr Asp Ala Thr Val Phe Gly Glu Ala
    130                 135                 140
Leu Lys Ala His Asn Gln Ala Thr Val Glu Leu His Tyr Gly Ser Ala
145                 150                 155                 160
Gly Leu Ser Thr Glu Gln Tyr Lys Leu Val Glu Ala Ala Asp Ala Val
                165                 170                 175
Val Leu Val Thr Phe Asn Ala Arg Glu Ser Pro Phe Gln Arg Glu Met
            180                 185                 190
Gly Leu Lys Leu Ala Gln His Thr Arg Lys Leu Val Thr Ile Ala Ala
        195                 200                 205
Cys Ser Pro Tyr Asp Phe Leu Asp Asp Asp Ser Ile Lys Thr Tyr Ile
    210                 215                 220
Thr Thr Tyr Glu Pro Thr Ile Glu Ala Phe Thr Ala Ala Ala Asn Ile
225                 230                 235                 240
Leu Phe Gly Ala Ile Ile Pro Lys Gly Ala Leu Pro Val Gly Ser Lys
                245                 250                 255
Asn Val Ala Leu Ser Ser Val His Val Ser Pro Phe Glu Ala Ala Ser
            260                 265                 270
Asp Leu Ala Glu Leu Ala Glu Val Trp Asn Thr Ala Leu Pro Thr Tyr
        275                 280                 285
Pro Leu Pro Ala Asp Ser Leu His Arg Phe Leu Thr Gln Ala Asn Gly
    290                 295                 300
His His Phe Val Ala Arg Leu Glu Ser Xaa Ile Ile Gly Phe Cys Val
305                 310                 315                 320
Met Tyr Met Thr Thr Asn Arg Gly Thr Thr Cys Cys Gln Leu Ala Val
                325                 330                 335
Leu Ala Ile His Pro Ala Thr Asn Ala Arg Val Trp Ala Gln Pro
            340                 345                 350
```

<210> 29644
<211> 241
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (234)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29644

```
Ser Arg Tyr Gln Ser Leu Thr Leu Ala Leu Gln Glu Glu Ala Arg Leu
1               5                   10                  15
Ala Gly His Glu Tyr Pro Leu Phe Ile Gly Ile Asp Gln Glu Asn Gly
            20                  25                  30
Leu Val Thr Arg Ile Ser Pro Pro Ile Ala Ala Gln Leu Pro Gly Pro
        35                  40                  45
```

```
Met Ala Leu Gly Ala Thr His Ser Pro Glu Leu Ala Tyr Gln Val Gly
    50                  55                  60
Gln Val Thr Gly Glu Thr Leu Arg Phe Phe Gly Ile Asn Met Asn Tyr
65                  70                  75                  80
Ala Pro Val Cys Asp Ile Asn Ser Glu Pro Leu Asn Pro Val Ile Gly
                85                  90                  95
Pro Arg Ser Pro Gly Asp Asp Pro Glu Phe Val Gly Arg Phe Ala Ser
            100                 105                 110
Ala Ala Ala Gln Gly Leu Arg Glu Gln Lys Ile Ile Pro Ser Val Lys
        115                 120                 125
His Phe Pro Gly His Gly Asp Thr Ala Val Asp Ser His Tyr Gly Leu
    130                 135                 140
Pro Val Ile Glu Lys Thr Arg Glu Gln Leu Glu Arg Cys Glu Leu Ile
145                 150                 155                 160
Pro Phe Arg Arg Ala Val Ala Glu Gly Val Glu Ala Val Met Thr Ala
                165                 170                 175
His Ile Ser Leu Pro Ala Ile Gly Asp Gly Lys Leu Pro Ala Thr Leu
            180                 185                 190
Ser Ala Asp Val Leu Ser Ile Leu Arg Asn Glu Met Gln Phe Glu Gly
        195                 200                 205
Met Ile Ile Thr Asp Cys Leu Glu Met Glu Gly Ile Gln Ala Thr Ser
    210                 215                 220
Gly Thr Glu Gln Gly Ala Val Leu Ser Xaa Lys Leu Val Val Thr Val
225                 230                 235                 240
Ser
```

<210> 29645
<211> 61
<212> PRT
<213> A.fumigatus

<400> 29645

```
Arg Ala Gln Asp Leu Val Glu Phe Ser Gly Ala Cys Asp Arg Ala Tyr
1               5                   10                  15
Asp Ser Val Leu Lys Arg Arg Ala Ala Ala Val Leu Tyr Lys Thr Met
            20                  25                  30
Leu Leu Pro Glu His Ala Gln Tyr Val Trp Tyr Val Ser Ile Glu Ser
        35                  40                  45
Gly Leu His Ile Gly Arg Met Ile Tyr Cys Tyr Gly Thr
    50                  55                  60
```

<210> 29646
<211> 98
<212> PRT
<213> A.fumigatus

<400> 29646

```
Leu Thr Gln Leu Leu Gln Cys Leu Glu Lys Val Leu Ile Leu Thr Val
1               5                   10                  15
Asp Gly Arg Thr Leu Leu Gly Thr Leu Leu Ser Thr Asp Gln Leu Thr
            20                  25                  30
Asn Leu Val Leu Leu Asp Thr Ile Glu Arg Ile Ile Arg Thr Pro Asp
        35                  40                  45
Asp Pro Glu Pro Ser Ser Gln Ile Glu His Gly Leu Tyr Leu Ile Arg
    50                  55                  60
```

Gly Asp Asn Val Val Leu Cys Gly Glu Val Asp Glu Ala Ile Asp Asn
65 70 75 80
Asp Ile Asp Trp Ser Lys Val Lys Gly Glu Val Val Lys Gly Thr Lys
85 90 95
Asn Ala

<210> 29647
<211> 125
<212> PRT
<213> A.fumigatus

<400> 29647
Asn Cys Ser Ser Lys Asn Arg Ile Cys Lys Gly Asn Phe Cys Pro Trp
1 5 10 15
Phe Ser Ser Glu Gln Ala Gln Gln Pro Asn Ser Ala Phe Arg Ile Glu
20 25 30
Met Arg Arg Leu Met Tyr His Arg Ser Ala Thr Val Ser Ser His Val
35 40 45
Arg Gly Ala Trp Pro Ser Phe Gly Ser Glu Ile Cys Leu Lys Thr Arg
50 55 60
Leu Leu Lys Gly Glu Ile Glu Ser Gly Tyr Glu Leu Asn Glu Tyr Asn
65 70 75 80
Val Leu Glu Lys Tyr Leu Gln Glu Asp Ile Ser Pro Lys Thr Ile Arg
85 90 95
Leu Gly Tyr His Val Gln Asp Leu Thr Ala Ser Val Tyr Ile Asp Arg
100 105 110
Gly Ser Ser Val Ser His Ile Cys Ser Glu Ala Ala Gln
115 120 125

<210> 29648
<211> 371
<212> PRT
<213> A.fumigatus

<400> 29648
Asn Phe Asp Arg Ser Asn Arg Lys His Arg Leu Pro Val Val Ile Phe
1 5 10 15
Glu Thr Gln Thr Tyr Gln Lys Arg Glu Gly Glu Thr Asp Val Phe Arg
20 25 30
Gln Lys Met Gln Asp Glu Phe Leu Asn Ile Ile Lys Asn Thr Thr Thr
35 40 45
Leu Leu Asn Ser Val Asp Asn Arg Arg Lys Val Val Ile Ser Gln His
50 55 60
Gln Phe Arg Ser Val Phe Gly His Ile Gly Pro Arg Leu Ser His Ser
65 70 75 80
Asn Ser Asn Ile Cys Pro Leu Gln Arg Trp Arg Val Ile Asp Ser Ile
85 90 95
Thr Ser His Cys Arg Lys Pro Thr Pro Thr Met Lys Gly Ile Asn His
100 105 110
Pro Asn Leu Cys Val Gly Ser Ala Pro Ser Asn His Ser Arg Gln Ser
115 120 125
Arg Gln Arg Ile Asp Phe Leu Val Cys Gln Leu Ile Lys Leu Thr Gly
130 135 140
Ser His His His Gly Val Arg Asn Ile Phe Gly Lys Thr Val His Val
145 150 155 160

```
Gly Trp Asn Asp Ala Asn Leu Arg Cys Asn Arg Ser Arg Ser Thr Arg
                165                 170                 175
Val Val Ala Arg Asp His Val Asn Arg Asn Pro Ser Ala Val Ala Leu
            180                 185                 190
Val Asn Ser Ala Gly Arg Leu Arg Ser Gly Arg Val Ile Gln Thr Asp
        195                 200                 205
Glu Ser Thr Glu Ser Glu Ile Phe Leu His Phe Leu Thr Arg Arg Asp
    210                 215                 220
Asn Phe Pro Phe Asp Gly Val Val Ile Leu Pro Thr Gly Glu Ala Glu
225                 230                 235                 240
Asn Ser Gln Ala Leu Leu Cys Glu Ser Phe His Val Leu Gln Asp Phe
                245                 250                 255
Leu Leu Tyr Val Leu Val Gln Gly Asp Arg Val Gly Thr Ser Cys Pro
            260                 265                 270
Gly Asp Gly Gly Ala Ser Leu Asp Asp Thr Phe His Arg Ala Leu Gly
        275                 280                 285
Glu Asp His Leu Pro Ile Ile Ile Gly Val Leu Lys Asp Asp Arg His
    290                 295                 300
Leu Phe His Ser Arg Ile Lys Trp Ile Phe Ser Phe Leu Ala Pro Asn
305                 310                 315                 320
Arg Leu Leu Ala Phe Gly Pro Ala Ile Ala Ser Pro Val Lys Ala Arg
                325                 330                 335
Gly Lys His Leu Asn Arg Asn Val Gly Arg Phe Thr Thr Ser Leu Pro
            340                 345                 350
Phe Ile Val Leu Gly Pro Val His Met Gly Lys Val Cys His Gly Gly
        355                 360                 365
His Val Gln
    370
```

<210> 29649
<211> 414
<212> PRT
<213> A.fumigatus

```
<400> 29649
Leu Asn Val Ala Ala Met Ala Asn Leu Ala His Val His Arg Ser Glu
1               5                   10                  15
His Asn Glu Trp Gln Ala Arg Gly Glu Pro Thr Asp Ile Ala Ile Gln
            20                  25                  30
Val Phe Ala Ser Arg Phe Asn Trp Gly Arg Asp Arg Trp Thr Lys Gly
        35                  40                  45
Glu Lys Pro Val Trp Arg Gln Lys Ala Glu Tyr Pro Phe Asp Ser Thr
    50                  55                  60
Val Lys Lys Met Ser Val Ile Phe Lys Asn Thr Asn Asp Asp Arg Glu
65                  70                  75                  80
Met Ile Phe Thr Lys Gly Ala Val Glu Arg Val Ile Glu Ala Cys Thr
                85                  90                  95
Thr Val Thr Trp Thr Ala Gly Ser Asp Pro Ile Ala Leu Asp Glu Asn
            100                 105                 110
Ile Lys Glu Glu Ile Leu Gln Asn Met Glu Ala Leu Ala Lys Glu Gly
        115                 120                 125
Leu Arg Val Leu Cys Leu Ala Cys Arg Glu Asn His Asn Pro Val Lys
    130                 135                 140
Gly Glu Val Val Pro Ala Arg Glu Glu Val Glu Lys Asp Leu Thr Phe
145                 150                 155                 160
Cys Gly Leu Ile Gly Leu Tyr Asp Pro Pro Arg Pro Glu Thr Ala Gly
```

```
                165                 170                 175
Ala Ile Asp Glu Cys Tyr Arg Ala Gly Ile Ser Val His Met Val Thr
            180                 185                 190
Gly Asp His Pro Gly Thr Ala Arg Ala Ile Ala Ala Gln Val Gly Ile
        195                 200                 205
Ile Pro Ala Asn Met Asp Ser Leu Ala Lys Asp Val Ala Asp Ala Met
    210                 215                 220
Val Met Thr Ala Ser Gln Phe Asp Lys Leu Thr Asp Glu Glu Ile Asp
225                 230                 235                 240
Ala Leu Pro Thr Leu Pro Ala Val Ile Ala Arg Cys Ala Pro Asn Thr
                245                 250                 255
Lys Val Arg Met Ile Asp Ala Leu His Arg Arg Gly Arg Phe Ala Ala
            260                 265                 270
Met Thr Gly Asp Gly Val Asn Asp Ser Pro Ser Leu Lys Arg Ala Asp
        275                 280                 285
Val Gly Ile Ala Met Gly Gln Ser Gly Ser Asp Val Ala Lys Asp Ala
    290                 295                 300
Ser Glu Leu Val Leu Thr Asp Asp Asn Phe Ala Ser Ile Ile Asn Gly
305                 310                 315                 320
Ile Glu Glu Gly Arg Arg Ile Phe Asp Asn Ile Gln Lys Phe Val Leu
                325                 330                 335
His Leu Leu Ala Glu Asn Val Gly Leu Ala Leu Thr Leu Leu Ile Gly
            340                 345                 350
Leu Cys Phe Lys Asp Asp Asn Gly Gln Ser Val Phe Pro Ile Ala Pro
        355                 360                 365
Val Glu Ile Leu Trp Ile Ile Met Ile Thr Ser Gly Leu Pro Asp Met
    370                 375                 380
Gly Leu Gly Met Glu Ile Ala Ala Pro Asp Ile Met Asp Arg Pro Pro
385                 390                 395                 400
Gln Ser Val Ser Thr Ser Val Thr Leu Ser Gly Ile Ile Tyr
                405                 410
```

<210> 29650
<211> 79
<212> PRT
<213> A.fumigatus

<400> 29650

```
Asn Pro Ser Leu Ser Leu Thr Tyr Ala Thr Val Leu Thr Ile Cys Asn
1               5                   10                  15
Phe Gly Pro Leu Pro Cys Cys Ser Thr Met Asn His Ser Gln Thr Pro
            20                  25                  30
Ser Phe Thr Ala Gly Pro Glu Gly Tyr Cys Ala Leu Asn Val Ala Pro
        35                  40                  45
Val Ile Ser Lys Leu Pro Ser Ile Gln Asp Pro Pro Glu Phe Glu Val
    50                  55                  60
Tyr Trp Glu Arg Asn Asp Pro Glu Asn Pro Arg Leu Trp Ser Leu
65                  70                  75
```

<210> 29651
<211> 296
<212> PRT
<213> A.fumigatus

<400> 29651

```
Gln Ala Ile Leu Gly Ser Pro Ile Ile Ala Ser Leu Ile Ala Thr Met
```

```
1               5                   10                  15
Ser Pro Pro Ser Leu Thr Val Thr His Ile Thr Thr Ala Thr Ala Val
            20                  25                  30
Leu Asn Ile Asp Gly Ile Asn Phe Leu Thr Asp Pro Phe Phe Gly Ser
        35                  40                  45
Ile Lys Gly Thr Glu Tyr Asp Thr Thr Pro Ala Trp Glu Lys Met Asp
    50                  55                  60
Leu Lys Ala Phe Gly Phe Asp Ser Ile Pro Pro Pro Pro His Leu Val
65                  70                  75                  80
Asn Lys Gln Gly Pro Ala Leu Gln Leu His Asp Leu Pro Pro Ile Asp
                85                  90                  95
Ala Val Leu Leu Ser His Glu Asp His Leu Asp Asn Leu Asp Pro Glu
            100                 105                 110
Gly Arg Lys Leu Leu Asp Gly Arg Arg Val Phe Thr Thr Met Asp Gly
        115                 120                 125
Ala Ser Asn Leu Arg Pro Arg Pro Gly Val Val Gly Leu Arg Pro Trp
    130                 135                 140
Gln Thr Val Thr Ala Thr Ile Gly Gly Lys Val Phe Arg Ile Thr Gly
145                 150                 155                 160
Thr Pro Cys Lys His Phe Pro Val Gly Glu Val Thr Gly Phe Ile Leu
                165                 170                 175
Glu Thr Asp Ser Phe Gly Val Asp Ala Thr Gly Lys Pro Asn Ala Ile
            180                 185                 190
Tyr Phe Ser Gly Asp Thr Val Tyr Ile Asp Glu Leu Arg Glu Ile Gly
        195                 200                 205
Lys Lys Trp His Ile Ser Ala Ala Ile Leu Asn Leu Gly Asn Ala Thr
    210                 215                 220
Phe Asp Phe Pro Thr Gly Pro Ile Gln Ile Thr Met Asp Gly Lys Gln
225                 230                 235                 240
Ala Val Gln Leu Thr Arg Asp Ile Gly Ala Asp Val Met Ile Pro Ile
                245                 250                 255
His Phe Glu Ser Trp Ala His Phe Thr Glu Asp Arg Glu Asp Leu Val
            260                 265                 270
Lys Val Phe Thr Glu Glu Arg Phe Met Asp Lys Leu Val Trp Thr Val
        275                 280                 285
Pro Val Val Pro Lys Val Val Tyr
    290                 295
```

<210> 29652
<211> 84
<212> PRT
<213> A.fumigatus

<400> 29652

```
Val Ser Ile Gly Glu Asn Arg Gln Tyr Gly Ser Phe Thr Lys Glu Cys
1               5                   10                  15
Tyr Pro Trp Met Leu Tyr Glu Val Cys Ser Ile Gly Ala Cys Phe Lys
            20                  25                  30
His Trp Gln Gly Ile Ile Thr Glu Met Asp Tyr Val Thr Val His Met
        35                  40                  45
Gln Pro Gln Leu Pro Gly Asp Gln Leu Pro Gly Asn Glu Ala Glu Gly
    50                  55                  60
Glu Ala Ala Cys Arg Thr Leu Leu Leu Ile Ser Ser Ile Phe Asn Ile
65                  70                  75                  80
Val Ser Val Asn
```

<210> 29653
<211> 110
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (30),(110)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29653
Lys Gln Thr Cys His Trp Arg Asn Ile Val Thr Val Asn Ala Leu Leu
1 5 10 15
Leu Ser Ser Arg Leu Leu Gly Leu Pro Cys Leu Asn Val Xaa Leu Gly
20 25 30
Gly Asn Met Gln Gly Gln Gly Met Gln Asn Lys Asp Lys Val Pro Asn
35 40 45
Gly His Val Leu Asn Arg Arg Leu Trp Arg Ser Val Leu Pro Ser Asp
50 55 60
Ala Asn Ser Glu Leu His Pro Ile Thr Arg Met Ile Thr Gly Arg Thr
65 70 75 80
Gln Tyr Ala Ser Leu Cys Ser Arg Trp Ser Asn Leu Asn Glu Leu Ala
85 90 95
Thr Ala Phe Gly Trp Arg Arg Leu Tyr Arg Ala Val Gly Xaa
100 105 110

<210> 29654
<211> 86
<212> PRT
<213> A.fumigatus

<400> 29654
Pro Ser Arg Lys Pro Ile Ile Asn Met Pro Leu Met Asp Arg Phe Leu
1 5 10 15
Val Pro Leu Pro Asp Tyr Trp Asn Asn Trp Ala Lys Lys Pro Asp Ala
20 25 30
Gly Tyr Thr Gln Glu Pro Thr Asp Ile Ser Thr Ala Val Leu Lys Asp
35 40 45
Leu Trp Arg Ser Leu Leu Glu Glu Gln Asn Asp Glu Ala Glu Ala Tyr
50 55 60
Gln Ser Leu Pro Gln Arg Phe Gly Cys Glu Lys Ser Asn Arg Thr Leu
65 70 75 80
Arg Ala Asn Gly Cys Arg
85

<210> 29655
<211> 112
<212> PRT
<213> A.fumigatus

<400> 29655
Lys Val Gln Arg Asn Cys Gln Thr Trp Ile Val Glu Ser Ala Asp Glu
1 5 10 15
Trp Leu Ile Ala Thr Lys Ser Ala Lys Ile Gln Ile Ser Gln Leu Leu
20 25 30

```
Ala Lys Arg Arg Cys Ser Pro Glu Gln Phe Lys Glu Ile Phe Ser Leu
        35                  40                  45
Ser Leu Ile Asn Gly Asn Met Met Pro Thr Leu Val Ser Gly Pro Thr
    50                  55                  60
Tyr Asn Pro Gly Ser Ala Ile Leu Gln Ala Gly Gly Leu Leu Lys Ala
65                  70                  75                  80
Ile Gly Asp Gly Leu Ala Leu Lys Asp Ile Pro Leu Gln Ile Glu Glu
                85                  90                  95
Val Ile Asp Asp Pro Val Glu Ala Gln Ser Thr Ala Ser Gly Val Ser
            100                 105                 110
```

<210> 29656
<211> 155
<212> PRT
<213> A.fumigatus

<400> 29656

```
Ala Met Leu Ser Arg Ala Gly Ser Thr Leu Leu Ser Leu Met Ser Pro
1               5                   10                  15
Thr Thr Trp Met Gln Gly Leu Leu Asn Gly Ala Pro Tyr Leu Cys Ser
            20                  25                  30
Ala Val Ile Glu Cys Trp Thr Thr Ala Pro Leu Asn Arg Trp Phe Gly
        35                  40                  45
Arg Arg Gly Cys Ile Phe Ile Ser Cys Phe Ile Ser Phe Ala Ser Ser
    50                  55                  60
Phe Trp Met Ala Ala Ala His Thr Trp Trp Asn Leu Leu Leu Gly Arg
65                  70                  75                  80
Phe Leu Leu Gly Phe Ala Val Gly Ala Lys Ser Thr Thr Thr Pro Val
                85                  90                  95
Tyr Gly Ala Glu Cys Ser Pro Ala Asn Ile Arg Gly Ala Leu Val Met
            100                 105                 110
Met Trp Gln Met Trp Thr Ala Phe Gly Ile Met Leu Gly Tyr Ile Ala
        115                 120                 125
Ser Val Ala Phe Met Asp Val Thr His Pro Thr Ile Pro Gly Phe Asn
    130                 135                 140
Trp Arg Leu Met Leu Gly Ser Thr Ala Ile Pro
145                 150                 155
```

<210> 29657
<211> 78
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (73)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29657

```
Phe Cys Gly Val Asn Ala Ile Met Tyr Tyr Ser Ser Ser Met Phe Arg
1               5                   10                  15
Glu Ala Gly Phe Asp Thr Arg Met Ala Leu Ile Thr Ser Leu Gly Cys
            20                  25                  30
Gly Ile Thr Asn Trp Ile Phe Ala Leu Pro Ala Val Tyr Thr Ile Asp
        35                  40                  45
Thr Phe Gly Arg Arg Asn Leu Leu Leu Thr Thr Phe Pro Pro Thr Cys
```

```
    50                  55                  60
Ile Phe Phe Phe Ile Ser Arg Arg Xaa Ser Thr Ile Asp Gly
65                  70                  75

<210> 29658
<211> 221
<212> PRT
<213> A.fumigatus

<400> 29658
Lys Ala Thr Ser Thr Ser Pro Val Ser Ser Pro Asp Leu Ser Gln Asn
1               5                   10                  15
Ser Ser Gln Leu Ser Ala Phe Phe Phe Val Gly Leu Tyr Ser Ala Arg
            20                  25                  30
His Ile Tyr Phe Leu Leu Asn Phe Tyr Cys Leu Ser Ala Thr Met Val
        35                  40                  45
Glu Lys Ser Ser Asp Pro Glu Val Pro Ser Leu Ser His His Glu Ser
    50                  55                  60
Ser Ile Ser Ile Glu Lys Gln Gly Asp Ala Ala Thr Ala Arg Glu Trp
65                  70                  75                  80
Ala Gln Asp Val Asn Ser Thr Thr Thr Asn Thr Lys Leu Lys Asn Pro
                85                  90                  95
Leu Ala Gly Leu Thr Arg Glu Gln Leu Leu Asn Asp Val Glu Ala Phe
            100                 105                 110
Ala Lys Glu Lys Asp Leu Glu His Ile Leu Asp Asp Leu Arg Lys Gly
        115                 120                 125
Ala Leu Val Ala Gln Asp Pro Arg Glu Phe Glu Gln Met Asp Ala Leu
    130                 135                 140
Thr Glu Ser Glu Lys Glu Leu Leu Arg Arg Glu Lys Thr His Arg Trp
145                 150                 155                 160
Ser Gln Pro Phe Met Met Tyr Phe Met Thr Ser Glu Ser Ser Arg Tyr
                165                 170                 175
Pro Pro Thr Glu Phe Asp Phe Asn Pro Ala Cys Gln Ser Ser Val Leu
            180                 185                 190
Gly Ser Ala Ile Val Gln Glu Met Val Gln Thr Ala Val Thr Val Ala
        195                 200                 205
Gln Glu Tyr Val Leu Tyr His Tyr Ser Ser Glu Leu Cys
    210                 215                 220

<210> 29659
<211> 101
<212> PRT
<213> A.fumigatus

<400> 29659
Gln Ser Trp Ile Ser Pro Phe Phe Val Cys Ile Gln Val Tyr Phe Cys
1               5                   10                  15
Pro Glu Ser Pro Arg Trp Tyr Met Met Arg Asn Arg Tyr His Asp Ala
            20                  25                  30
Tyr Lys Ala Leu Cys Lys Phe Arg Pro Ser Thr Phe Gln Ala Ala Arg
        35                  40                  45
Asp Leu Tyr Tyr Ile His Ala Ala Leu Lys Val Glu Glu Lys Leu Arg
    50                  55                  60
Glu Gly Lys His Leu Phe Arg Glu Met Phe Thr Ile Pro Arg Asn Arg
65                  70                  75                  80
Arg Ala Ala Gln Ser Ser Phe Phe Val Met Phe Met Gln Gln Ala Ser
```

85 90 95
Gln Ser Leu His Ile
100

<210> 29660
<211> 151
<212> PRT
<213> A.fumigatus

<400> 29660
His Ile Gly Thr Ser Asn Ala Arg Asp Tyr Leu Arg Asp Arg Gly Arg
1 5 10 15
Pro Gln His Gln Ser Pro Val Glu Ala Arg Asp Cys Gly Met Arg His
20 25 30
Ile His Lys Arg Asn Arg Gly Asn Ile Ser Gln His Asn Thr Lys Cys
35 40 45
Arg Pro His Leu Pro His His Asp Gln Gly Thr Ala Asp Ile Ser Arg
50 55 60
Arg Ala Leu Arg Thr Ile His Arg Gly Gly Cys Gly Phe Gly Ala His
65 70 75 80
Gly Lys Thr Glu Lys Glu Thr Ala Lys Gln Gln Ile Pro Pro Gly Met
85 90 95
Arg Gly Arg His Pro Glu Arg Arg Gly Lys Gly Asp Lys Ala Gly Asp
100 105 110
Glu Asn Ala Ser Ala Ala Thr Lys Pro Ala Ile Gln Gly Cys Ser Gly
115 120 125
Pro Ala Phe Asp Asp Gly Arg Ala Glu Ile Gly Ser Ala Val Glu Glu
130 135 140
Ala Leu His Pro Ser Gly Arg
145 150

<210> 29661
<211> 430
<212> PRT
<213> A.fumigatus

<400> 29661
Arg Met Arg Gly Ser Ala Val Pro Asp Leu Arg Ala Arg Gly Glu Asp
1 5 10 15
Ile Cys Asp Leu Met Asn His Ile Phe Thr Val Leu Lys Thr His Cys
20 25 30
Asp Lys His Asn Ala Asp Thr Glu Leu Ile Glu Leu Ser Arg Ser Val
35 40 45
Leu Leu Gly Leu Gln Ser Val Glu Pro Arg Ile Leu Ser Ser Ala Leu
50 55 60
Ala Thr Asn Asp Leu Arg Glu Ile Asn Arg Thr Leu Asn Glu Leu Thr
65 70 75 80
Glu Thr Val Phe Glu Lys Pro Ser Pro Ser Gln Cys Glu Gly Ala Asn
85 90 95
Leu Cys Tyr Ala Ser Thr Ser Asn Ser Ala Asn Glu Leu Leu Phe Asp
100 105 110
Leu Ile Val Phe Thr Ser Leu Met Ser Pro Leu Gly Glu Met Gly Ser
115 120 125
Glu Val Ser Asn Pro Thr Arg Thr Ser Ser Leu Thr Asn Phe Leu Leu
130 135 140
Lys Ala Lys Ser Ser Ile Pro Lys Asn Asn Cys Ser Phe Ser Glu Phe

```
145                 150                 155                 160
Lys Pro Trp Asp Ser Arg Val Glu Leu Pro Leu Val Val Leu Pro Lys
                165                 170                 175
Arg Gly Pro Thr Ser Arg His Asp Trp Arg Thr Gly Ile Ala Glu Thr
            180                 185                 190
Leu Thr Leu Ser Leu Arg Met Thr His Asn Asn Leu Ile Gln Lys Met
        195                 200                 205
Glu Glu Val Cys Phe Asp Leu Glu Gln Arg Cys Thr Thr Ile Glu Ala
    210                 215                 220
Pro Leu Arg Ala Val Glu Asp Glu Arg Asp Gln Ile Ala Val Gln Ala
225                 230                 235                 240
Glu Gln Leu Lys Gln Gln Lys Ser Glu Leu Glu Leu Gln Leu Gln Gln
                245                 250                 255
Ala Ser Ser Thr Ile Ser Glu Leu Gln Gln Glu Ile Phe His Leu Glu
            260                 265                 270
Asn His Ala Arg Ser Thr Ser Ala Arg Val Glu Glu Leu Ser Thr Ser
        275                 280                 285
Leu Asp Thr Ala Arg Arg Glu Leu Glu Asp Gln Arg Arg Thr Ser Gln
    290                 295                 300
Glu Thr Thr Asn Ser Glu Arg Glu Lys Ala Arg Thr Arg Glu Leu Asp
305                 310                 315                 320
Leu Leu Ala Ser Ile Thr Glu Lys Asp Asp Gln Ile Glu Glu Leu Gln
                325                 330                 335
Glu Glu Thr Arg Asn Leu Arg Glu Asp Asn Asn Ala Leu Arg Gln Ile
            340                 345                 350
Leu Asp Thr Val Ser Lys Glu Lys Asn Thr Ser Leu Glu His Thr Ala
        355                 360                 365
Ala Leu Lys Gln Asp Val Val Arg Leu Glu Gln Cys Val Glu His Gly
    370                 375                 380
Lys Leu Leu Leu Ala Gln Arg Asp Glu Glu Met Ser Arg Leu Gln Ala
385                 390                 395                 400
Asp Gln Gly His Met Lys Ser Gln Met Glu Ala Leu Gln Lys Lys Val
                405                 410                 415
Gln Lys Phe Leu Thr Ser Pro Ala Val Arg Asn Thr Leu Cys
            420                 425                 430
```

<210> 29662
<211> 87
<212> PRT
<213> A.fumigatus

<400> 29662

```
Gly Phe His Leu Arg Leu His Val Ser Leu Ile Cys Leu Lys Ser Thr
1               5                   10                  15
His Phe Phe Ile Pro Leu Cys Lys Glu Glu Leu Ala Val Phe Asn Thr
            20                  25                  30
Leu Leu Gln Pro Tyr Tyr Val Leu Phe Glu Gly Ser Cys Val Leu Gln
        35                  40                  45
Arg Ser Val Phe Leu Leu Arg Asp Ser Ile Gln Tyr Leu Ala Gln Gly
    50                  55                  60
Val Ile Ile Phe Pro Gln Val Pro Cys Phe Leu Leu Lys Leu Phe Asp
65                  70                  75                  80
Leu Ile Ile Phe Phe Cys Asp
                85
```

<210> 29663

<211> 269
<212> PRT
<213> A.fumigatus

<400> 29663
Arg Arg Thr Ser Pro Gln Ser Pro Pro Pro Ala Pro Pro Leu Pro His
1 5 10 15
Leu His Leu His His Gln Gln Gln Met Thr Leu Pro Pro Ser Pro His
20 25 30
His Pro Gln Leu Ser Pro Gln Leu Ser Pro Gln Phe Pro Ser Pro Pro
35 40 45
His Leu Ala Ser Pro Leu Pro Pro Val Ile Pro Arg Thr Pro Pro Ser
50 55 60
Arg Gly Arg Ser Val Asp Arg Ala Tyr Thr Gln Asp Leu His Ile Arg
65 70 75 80
Ser Arg Ser Pro Lys Thr Phe Pro Pro Arg Pro Glu Glu Arg Ser Tyr
85 90 95
Pro Ser Thr Asp Thr Ser Asp Pro Ala Asn Asn Leu Gly Thr Phe Arg
100 105 110
Ser Asn Pro Arg Thr Ser Arg Ile Gly Asp Gln Glu Leu Pro Trp Lys
115 120 125
Leu Thr Leu Pro Ser Asp Ser Asp Glu Glu Arg Ala Ala Asp Ala Gly
130 135 140
Thr Thr Ala Thr Ala Arg Glu Arg Glu Gly Ser Trp Leu Glu Ser Thr
145 150 155 160
Thr Gln Gln Leu Leu Gln Ser Ser Arg Leu Pro Thr Tyr Glu Glu Asp
165 170 175
Ser Glu Val His Gly Gln Pro Pro Arg Phe Val Val Ala Asp Glu Lys
180 185 190
Ala Ala Gly Asp Glu Pro Gly Asp Gln Arg Arg Gly Gln Gly Gln Gly
195 200 205
Gln Gly Gln Val Gln Ser Gln Arg His Pro His Arg Gly Glu Ala Arg
210 215 220
Ala Ile Asn Pro Asp Asp Ala Pro Val Glu Leu Pro Val Gln Arg Asp
225 230 235 240
Asp Asp Ser Gly Glu Glu Ile Thr Met Ser Ser Thr Ala Tyr Pro Gly
245 250 255
Gln Glu Trp Arg Pro Leu Gly Phe Ser Gly Trp Glu Tyr
260 265

<210> 29664
<211> 245
<212> PRT
<213> A.fumigatus

<400> 29664
His Tyr Pro Gln Ala Pro Ile Ile Pro Asn Phe Leu His Asn Ser Leu
1 5 10 15
Pro Asn Ser Leu His Arg Arg Thr Ser Pro Pro Pro Ser Pro Gln Ser
20 25 30
Ser Pro Ala Pro Arg Pro Pro Ala Ala Ala Ala Ser Thr Ala Pro Ile
35 40 45
Arg Lys Thr Phe Thr Ser Ala Pro Ala Ala Pro Arg Pro Ser Arg His
50 55 60
Ala Arg Lys Asn Ala Ala Thr Pro Ala Pro Thr Pro Leu Thr Gln Pro
65 70 75 80

```
Thr Thr Trp Gly Pro Ser Ala Ala Thr Arg Ala Pro Ala Ala Ser Ala
                85                  90                  95
Thr Arg Asn Cys Arg Gly Asn Ser His Cys Arg Ala Thr Gln Thr Arg
            100                 105                 110
Ser Ala Leu Pro Thr Pro Ala Arg Pro Pro Pro His Ala Ser Val Arg
        115                 120                 125
Glu Val Gly Trp Arg Val Pro Arg Ser Asn Ser Cys Ser Arg Arg Gly
    130                 135                 140
Cys Arg Pro Thr Arg Arg Thr Arg Arg Cys Thr Gly Ser Arg Leu Asp
145                 150                 155                 160
Leu Leu Leu Arg Met Arg Arg Leu Gln Val Met Ser Leu Gly Thr Lys
                165                 170                 175
Gly Ala Gly Lys Gly Lys Asp Lys Asp Lys Cys Arg Ala Ser Ala Ile
            180                 185                 190
Arg Thr Ala Ala Arg Gln Glu Arg Ser Ile Pro Thr Met His Arg Trp
        195                 200                 205
Asn Cys Arg Cys Ser Glu Met Thr Thr Arg Ala Arg Arg Ser Pro Cys
    210                 215                 220
Arg Val Arg Arg Ile Pro Gly Arg Asn Gly Gly Arg Trp Gly Ser Arg
225                 230                 235                 240
Gly Gly Asn Thr Arg
                245
```

<210> 29665
<211> 224
<212> PRT
<213> A.fumigatus

<400> 29665

```
Asp Ser Lys Pro Ser Gly Gln Ala Glu Leu Val Leu Ile Asp His Gly
1               5                   10                  15
Leu Tyr Ile His Met Asp Pro Asn Phe Arg His Gln Tyr Ala Arg Phe
            20                  25                  30
Trp Lys Ala Leu Leu Ala Phe Asp Asn Ser Thr Leu Ser Glu Ile Ala
        35                  40                  45
Glu Gly Trp Gly Ile Arg Asn Ser Asp Met Phe Ala Ser Phe Thr Met
    50                  55                  60
Met Arg Pro Tyr Ser Gly Gly Asp Leu Ser Thr Arg Gln His Leu Glu
65                  70                  75                  80
Gly Leu Ser Lys Val Glu Arg Ala Gln Arg His Tyr Glu Met Gln Gln
                85                  90                  95
Ala Ala Arg Lys Ala Ile Arg Glu Ile Leu Ala Asp Glu His Lys Trp
            100                 105                 110
Pro Gln Glu Leu Ile Phe Ile Gly Arg Asn Leu Arg Ile Val Gln Gly
        115                 120                 125
Asn Asn Gln Phe Leu Gly Ser Pro Val Asn Arg Val Lys Ile Thr Gly
    130                 135                 140
Met Trp Ala Ser Arg Ala Leu Val Glu Ser Pro Asp Leu Pro Trp Ser
145                 150                 155                 160
Glu Lys Leu Ala Asn Leu Gly Arg His Leu Leu Phe Arg Val Val Leu
                165                 170                 175
Phe Ser Ser Asp Leu Phe Phe Tyr Phe Thr Lys Val Arg Gln Leu Leu
            180                 185                 190
His Leu Gly Gly Gly Met Glu Asp Asp Ile Glu Lys Gln Met Lys Asp
        195                 200                 205
Met Ala Lys Asp Met Gly Val Asp Leu Asn Gln Ser Ile Phe Glu Gly
```

210 215 220

<210> 29666
<211> 141
<212> PRT
<213> A.fumigatus

<400> 29666
Cys Gly Pro Thr Ala Ala Ala Thr Ser Pro Arg Ala Ser Ile Trp Arg
1 5 10 15
Gly Ser Ala Arg Ser Ser Ala Pro Ser Ala Thr Thr Arg Cys Asn Arg
20 25 30
Pro Pro Ala Arg Pro Ser Ala Arg Ser Ser Leu Thr Ser Thr Ser Gly
35 40 45
Arg Arg Asn Ser Ser Ser Ser Ala Ala Thr Cys Ala Ser Ser Arg Gly
50 55 60
Thr Thr Ser Ser Ser Ala Arg Arg Ser Thr Val Ser Arg Ser Arg Ala
65 70 75 80
Cys Gly Arg Pro Ala Arg Ser Leu Ser Arg Pro Ile Cys Pro Gly Pro
85 90 95
Arg Asn Leu Arg Thr Ser Ala Gly Ile Ser Ser Ser Ala Ser Cys Ser
100 105 110
Ser Ala Ala Ile Ser Ser Ser Thr Leu Pro Arg Cys Gly Ser Ser Cys
115 120 125
Ile Trp Ala Ala Ala Trp Arg Met Ile Ser Arg Ser Arg
130 135 140

<210> 29667
<211> 339
<212> PRT
<213> A.fumigatus

<400> 29667
Pro Val Val Leu Val Arg Gln Leu Leu Asp Leu Phe Ser Glu Ile Pro
1 5 10 15
Asn Thr Leu Asp Ile Gln Val Ala Val Ile Lys Ser Cys Ile Asp Trp
20 25 30
Ala Val Ser Glu Arg Arg Ser Phe Leu Arg Gln Asn Leu Glu Thr Arg
35 40 45
Leu Val Ala Ile Tyr Met Gln Lys Gln Ser Tyr Tyr Asp Ala Leu Thr
50 55 60
Leu Ile Asn Ser Leu Leu Arg Glu Leu Lys Arg Met Asp Asp Lys Leu
65 70 75 80
Met Leu Val Glu Val Gln Leu Leu Glu Ser Arg Val Tyr His Ala Leu
85 90 95
Gly Asn Gln Ala Lys Ala Arg Ala Ala Leu Thr Ala Ala Arg Thr Ser
100 105 110
Ala Ala Ser Val Tyr Thr Pro Pro His Leu Gln Ala Gly Leu Asp Met
115 120 125
Gln Ser Gly Met Leu His Ala Glu Asp Lys Asp Phe Thr Thr Ala Phe
130 135 140
Ser Tyr Phe Ile Glu Ala Leu Glu Gly Tyr Ser Ser Leu Asp Glu Ser
145 150 155 160
Asp Leu Ala Thr Ala Ala Leu Gln Tyr Met Leu Leu Cys Lys Ile Met
165 170 175
Leu Asn Leu Val Asp Asp Val Thr Asn Leu Leu Gly Ser Lys Gln Ala

```
            180                 185                 190
Gln Lys Tyr Ala Ser Pro Arg Leu Glu Ala Met Lys Ala Val Ala Arg
        195                 200                 205
Ala His Ala Asn Arg Ser Leu Glu Glu Tyr Glu Lys Ala Leu Ser Asp
    210                 215                 220
Tyr Arg Tyr Glu Leu Gly Ser Asp Val Phe Ile Arg Asn His Leu Arg
225                 230                 235                 240
Arg Leu Tyr Asp Ala Met Leu Glu Gln Asn Leu Ile Lys Val Ile Glu
                245                 250                 255
Pro Phe Ser Arg Val Glu Leu Asp His Ile Ala Lys Met Val Gly Leu
            260                 265                 270
Asp Thr Gln Gln Val Glu Arg Lys Leu Ser Gln Met Ile Leu Asp Lys
        275                 280                 285
Val Ile Val Gly Val Leu Asp Gln Gly Ala Gly Cys Leu Ile Val Tyr
    290                 295                 300
Asp Glu Thr Glu Arg Asp Gln Ala Tyr Asp Ala Ala Leu Glu Thr Ile
305                 310                 315                 320
Glu Lys Leu Ser Asn Val Val Glu Gly Leu Tyr Thr Asn Gln Ala Ser
                325                 330                 335
Leu Leu Glu
```

<210> 29668
<211> 112
<212> PRT
<213> A.fumigatus

<400> 29668

```
Arg Leu Arg Gly Leu Arg Leu Gln Tyr Gln Lys Ile Thr Leu Gly Gln
1               5                   10                  15
Ile Leu Ile His Ser Tyr Ser Asp Thr Pro Ser Leu Gln Tyr Asn Gly
            20                  25                  30
Gly Ala Gln Gly Ile Gly Lys Val Thr Tyr Thr Val Tyr Asn Ala Ala
        35                  40                  45
Gly Tyr Ser Ser Thr Lys Gln Leu Ser Gln Leu Lys Thr Thr Thr Leu
    50                  55                  60
Tyr Gly Thr Val Met Met Pro Leu Arg Gly Thr Trp Pro Tyr Pro Ala
65                  70                  75                  80
Asn Thr Leu Cys Val Val Pro Gly Pro Pro Ile Ser Ala Leu Ile Leu
                85                  90                  95
Lys Ile Lys Asn Pro Pro Cys Ala Tyr Arg Ser Asn Thr Asn Leu Tyr
            100                 105                 110
```

<210> 29669
<211> 89
<212> PRT
<213> A.fumigatus

<400> 29669

```
Ser Pro Leu Val Pro Lys Ile Asp Ile Ala Val Ile Asp Phe Thr Phe
1               5                   10                  15
Arg Leu Asn Ser Met Phe Thr His Gly Ile Pro Val Ile Lys Pro Gly
            20                  25                  30
His Asn Ile Phe Pro Gln Trp Arg Cys Val Ser Asp Asp Gly Ile Thr
        35                  40                  45
Ile Phe Ile Asp Phe Ile Ile Ala Ile Arg Arg Val Asn His Leu His
```

```
    50                  55                  60
Leu Val Thr Arg Ile Tyr His Ile Pro Ser Asn Cys Ile Val Arg Arg
65                  70                  75                  80
Ser His Pro Val Met Cys Val Asn Phe
                85
```

<210> 29670
<211> 231
<212> PRT
<213> A.fumigatus

<400> 29670

```
Pro Phe Ser Gly Cys Phe Ile Ala Ser Ser Arg Pro Gly Ile Arg Ala
1               5                   10                  15
Pro Leu Ala Asp Val Leu Gln Ser Ser Gln Ser Ser Asp Leu Ser Asp
            20                  25                  30
Phe Ser Arg Pro Asp Glu Phe Ser Asp His Asp Glu Glu Asn Asp Pro
        35                  40                  45
Ile Ile His Ser Phe Gly Pro Phe Gly Asp Asn Leu Leu Pro Arg Met
    50                  55                  60
Ala Ser Phe Ser Ala Asp Glu Ser Pro Leu Arg Gly Pro Arg Thr Ser
65                  70                  75                  80
Arg Pro Leu Gln Pro Thr His Ser Pro Lys Gln Pro Lys Gln Pro Ser
                85                  90                  95
Glu Glu Asp Ser Ser Glu Arg Lys Ser Gly Leu Thr Asp Glu Thr Tyr
            100                 105                 110
Glu Arg Ile Gln Asn His Ala Ala Asn Gln Leu Ala Phe Ser Arg Leu
        115                 120                 125
Ser Ser Thr Pro Phe Ser Thr Ile Leu Asn Asn Leu Pro Pro Ala Leu
    130                 135                 140
Trp Lys Arg Asp Asp Arg Ser Lys Gln Gly Pro Ser Ser Glu Glu Ile
145                 150                 155                 160
Arg Ala Ile Leu Glu Ser Thr Lys Cys Ile Gly Lys Val Ala Arg Glu
                165                 170                 175
Gly Lys Asp Ala Ala Gly Lys Pro Leu Glu Ser Glu Tyr Tyr Tyr Ile
            180                 185                 190
Pro Asp Phe Asp Asp Asp Asp Met Arg Arg Glu Ala Val Val Asn Asp
        195                 200                 205
Leu Arg Lys Pro Gly Leu Arg Asn Cys Arg Lys Gln His Lys Val Cys
    210                 215                 220
Phe Arg Ser Leu Thr Asp Arg
225                 230
```

<210> 29671
<211> 66
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (4)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29671

```
Tyr Trp Asp Xaa Asn Pro Cys Trp Lys Trp Pro Cys Ser Leu Val Thr
1               5                   10                  15
```

```
Lys Leu Gly Arg Pro Gly Phe Phe Gly Leu Asn Phe Phe Arg Ala Gly
            20                  25                  30
Ile Pro Asp Ile Leu Lys Ser Gln Asn Phe Gln Pro Gln Tyr Gly Ser
        35                  40                  45
Thr Gly Ser Tyr Leu Ser Glu Ala Lys Trp Ser Gly Asn Leu Gln Thr
    50                  55                  60
Val Ala
65
```

<210> 29672
<211> 303
<212> PRT
<213> A.fumigatus

<400> 29672

```
Tyr Met Asp Pro Thr Tyr Lys Tyr Asn Ser Ala Gln Val Leu Ile Trp
1               5                   10                  15
Ala Gly Ser Cys Met Phe Asp Asn Arg Asn Ile Phe Asp Phe Lys Ala
            20                  25                  30
Val His Asn Ile Asp Asp Arg Pro His Leu Ser Phe Ile Leu Gln His
        35                  40                  45
Ala Tyr His Asp Asp Gly Ser Glu Lys Gly Leu Gly Tyr Val Leu Asp
    50                  55                  60
Glu His Tyr Glu Pro Glu Tyr Ala Val Gly Val Thr Asn Asp Leu Ser
65                  70                  75                  80
Ala Phe Asn Met His Glu Phe Asn Ile Leu Asp Gly Gly Lys Thr Ala
                85                  90                  95
Leu Ala Cys Leu Tyr Arg Pro Glu Tyr Met Asp Leu Gly Asp Leu Gly
            100                 105                 110
Arg Pro Asp Glu His Gly Trp Val Met Thr Gly Gly Phe Val Glu Leu
        115                 120                 125
Asp Val Ala Thr Gly Ala Val Leu Tyr Glu Trp Ser Ser Val Gly His
    130                 135                 140
Ile Pro Ile Asn Glu Ser Val Gln Val Asn Pro Trp Asp Ser Pro Ser
145                 150                 155                 160
Ala Gln Pro Gly Trp Asp Tyr Val His Val Asn Ala Val Asp Lys Asn
                165                 170                 175
Ala Ala Gly Asp Tyr Ile Leu Ser Ala Arg Phe Thr Asn Thr Ile Tyr
            180                 185                 190
Leu Ile Ser Gly Gln Asp Gly His Ile Ile Trp Arg Leu Gly Gly Lys
        195                 200                 205
Phe Ser Asp Phe Val Gln Asp Phe Thr Phe Ser Lys Gln His His Val
    210                 215                 220
Arg Phe Val Asp Ser Asn Glu Thr His Thr Thr Ile Ser Phe Leu Asn
225                 230                 235                 240
Asn Ala Ser Asp Glu Gly Gly Gln Asp Glu Asp His Ser Ala Ala Leu
                245                 250                 255
Phe Val Glu Val Asp Thr Ser Ala Ser Pro Met Thr Ala Arg Leu Leu
            260                 265                 270
Asp Arg Tyr Asp Arg Pro Asp Gly Gly Leu Thr Arg Leu Arg Gly Ser
        275                 280                 285
Val Gln Arg Leu Ser Ser Pro Thr Gly Ala Gly Arg Thr Arg Ala
    290                 295                 300
```

<210> 29673
<211> 123

<212> PRT
<213> A.fumigatus

<400> 29673
Phe Leu Thr Pro Tyr Ile Asp Leu Phe Gln Gly Asn Ile Glu Gln Ser
1 5 10 15
Gln Leu Thr Ser His Val Asp Met Tyr Gly Leu Asp Pro Thr Ile Gly
20 25 30
Cys Gln Thr Ser Phe Thr Lys Leu Pro Pro Asn Ala Ala Leu Leu Asp
35 40 45
Thr Pro Lys Trp His Ser Arg Ile Thr Val Leu Ala Thr Ile Asp Pro
50 55 60
Asp His Ser Arg Ile Asn Leu Cys Ser Asn Pro Met Arg Ser Phe Gln
65 70 75 80
Val Ser Cys Lys His Gly Cys Pro Lys Ala Ile Asp Gly Ile Val Gly
85 90 95
Pro Thr Asp Gly Phe Phe Phe Arg Cys Glu Trp Leu Asp Asn His His
100 105 110
Gly Ala Lys Asp Leu Leu Pro His Asp Ser His
115 120

<210> 29674
<211> 118
<212> PRT
<213> A.fumigatus

<400> 29674
Lys Phe Ile Arg Leu Leu Ala Val Asp Phe Tyr Thr Arg His Thr Asn
1 5 10 15
Ile Gly Ser Met Ala Trp Asn Arg Ser Val Ser Ser Trp Ile Ile Phe
20 25 30
Phe Val Phe Leu Val Asp Glu Thr Pro Pro Trp Phe Ala Ala His Asp
35 40 45
Arg Gln Asp Gln Asp Leu Gln Val Leu Arg Trp Leu Tyr Asn Asp Asp
50 55 60
Met His Glu Ser Asp Ile Asp Ile Thr Ala Leu His Glu Asp Ile Pro
65 70 75 80
Arg Thr Asp Ala Cys Ala Ile Pro Leu Leu Asp Ile Gly Gly Lys Asn
85 90 95
Ser Cys Arg Ser Arg Cys Leu Gly Thr Gly Gly Tyr Lys Glu Ala Asp
100 105 110
Leu Leu Leu Phe Leu Gly
115

<210> 29675
<211> 275
<212> PRT
<213> A.fumigatus

<400> 29675
Asp Thr Ser Pro Ser Leu Val Phe Ser Ala Tyr Thr Asn Lys Asn Asn
1 5 10 15
Gln Ile Arg Val Tyr Arg Tyr Phe Phe Gln Tyr Gly Tyr Leu Thr Thr
20 25 30
Pro Ala Val Glu Gln Pro Pro Lys Pro Ser Ser Asp Ile Leu Lys Pro
35 40 45

```
Lys Ser Ile Leu Thr Arg Ala Pro Ile Met Glu Ile Asp Val Asn Met
    50                  55                  60
His Lys Ser Asn Ser Thr Tyr Phe Ser Asp Leu Asp Val Ser Arg Thr
65                  70                  75                  80
Ala Leu Val Asn Ser Leu Leu Met Lys Gly Ser Ala Phe Leu Glu Lys
                85                  90                  95
Arg Leu Gln Lys Gln Gly Lys Arg Gly Leu Leu His Phe Val Leu Gly
            100                 105                 110
Gly Val Tyr Thr Ser Phe Lys Arg Glu Ile Pro Ala Tyr Met Lys Tyr
        115                 120                 125
Glu Val Gln Ser His Ile Ala Ser Tyr Asp Glu Lys Trp Ile Tyr Ile
    130                 135                 140
Val Thr Tyr Phe Leu Gln Pro Arg Thr Gly Lys Lys Ala Ser Ala Glu
145                 150                 155                 160
Thr Asp Glu Asp Arg Arg Lys Arg Leu Leu Ala Val Ser Ile Ser Lys
                165                 170                 175
Tyr Val Leu Lys Lys Gly Arg Tyr Thr Val Pro Pro Asn Asp Ala Phe
            180                 185                 190
Glu Ala Ala Gly Tyr Arg Pro Leu Arg Ala Pro Ala Ala Asn Gly Thr
        195                 200                 205
Ala Asn Gly Ala Ala Asn Glu Asn Gly Ser Leu Thr Gln Arg Lys Glu
    210                 215                 220
Ser Lys Ser Gly His Thr Trp Asp Asp Asn Ser Glu Trp Glu Gln Leu
225                 230                 235                 240
Gln Lys Glu Ile Arg Lys Gly Lys Glu Met Val Gln Pro Phe Val Asp
                245                 250                 255
Gln Glu Glu Lys Leu Leu Asp Asp Tyr Met Glu Lys Met Lys Leu Pro
            260                 265                 270
Ala Phe Ala
        275
```

<210> 29676
<211> 61
<212> PRT
<213> A.fumigatus

```
<400> 29676
Leu Tyr Leu Cys Trp Cys Phe Leu Gln Leu Glu Asn Asn Leu Asn Ala
1               5                   10                  15
Ser Leu Val Lys Gly Ile Asn Ala Ala Gln Ser Ser Ile Leu Phe Phe
            20                  25                  30
Arg His Ser Arg Gly Phe Ile Glu Tyr Gly Gln Asp Lys Tyr Thr Ser
        35                  40                  45
Val Lys Arg Ser Arg Thr Ala Tyr Ser Ala Asn His Cys
    50                  55                  60
```

<210> 29677
<211> 131
<212> PRT
<213> A.fumigatus

```
<400> 29677
Phe Pro Glu Gly Asp Arg Asn Arg Asp Gly Tyr Phe Val Arg Pro Thr
1               5                   10                  15
Val Phe Thr Gly Thr Thr Asp Ser Met Ala Ile Val Arg Glu Glu Val
            20                  25                  30
```

```
Phe Gly Pro Val Val Ile Ile Glu Pro Phe Ala Thr Glu Glu Glu Ala
        35                  40                  45
Ile Arg Arg Ala Asn Asp Thr Ile Tyr Gly Leu Gly Ala Ala Val Phe
    50                  55                  60
Thr Arg Asp Leu Glu Arg Ala His Arg Val Ala Ala Glu Ile Asp Ser
65                  70                  75                  80
Gly Met Val Trp Ile Asn Ser Ser Gln Asp Cys Asp Pro Arg Val Pro
                85                  90                  95
Phe Gly Gly Val Lys Gln Ser Gly Ile Gly Arg Glu Leu Gly Glu Ala
            100                 105                 110
Gly Leu Ala Ala Tyr Ser Arg Ile Lys Ala Val His Val Asn Met Gly
        115                 120                 125
Ser Lys Leu
    130
```

<210> 29678
<211> 416
<212> PRT
<213> A.fumigatus

<400> 29678

```
Ser Trp Ile Arg Ile Asn Met Ala Thr Thr Ser Ser Ser Ala Thr Gly
1               5                   10                  15
Leu Gly Gly Cys Asp Val Leu Gln Trp Gln His Glu Gly Arg Pro Ala
            20                  25                  30
Lys Arg Arg Lys Gly Ile Ser Met Thr Ser Thr Cys Gln Pro Ser Pro
        35                  40                  45
Arg Glu Ile Gly Ile Met Arg Glu Thr Glu Arg Asp Asp Ser Ala Thr
    50                  55                  60
Phe Leu Gly Ser Ser Ser Gly Ile His Phe Ile Arg Thr Val Tyr Ser
65                  70                  75                  80
Ala Phe Ala Lys Arg Ser Ala Val Leu Gln Glu Ala Arg Val Arg Asn
                85                  90                  95
Gln Ser Leu Val Pro Gly Glu Asp Asp Gln Leu Gln Arg Ser Pro Gly
            100                 105                 110
Lys Ser His Gly Leu Asp Glu Leu Cys Leu Lys His Glu Leu Ser Leu
        115                 120                 125
Gln Ala Pro Asp Ser Val Ser Phe Glu Ser Leu Val Gly Trp Ser Arg
    130                 135                 140
Ser Tyr Phe Glu Tyr Trp His Pro Ile Phe Pro Phe Leu His Ala Pro
145                 150                 155                 160
Thr Val Leu Lys Ala Met Glu Arg Val Gly Glu Ser Gly Ile Gly Ser
                165                 170                 175
Leu Asp Arg Ile Asn Leu Ala Ile Leu Arg Ser Ile Leu Ser Ile Ser
            180                 185                 190
Val Val Asp Asn Arg Gln Val Gln Asn Ser Gly Met Thr Ala Asp Pro
        195                 200                 205
Ile Pro Ser Val Leu Val Tyr Arg Thr Val Gln Glu Ala Met Glu Ser
    210                 215                 220
Ile His Ala Leu Leu Leu Glu Pro Ser Thr Leu Pro Leu Leu Gln Ala
225                 230                 235                 240
Val Phe Ser Val Gln Leu Val Leu Thr Ser Val Leu Arg Leu Asn Thr
                245                 250                 255
Ala Ser Arg Val Gly Gly Leu Ile Ser Arg Thr Ala Phe His Leu Gly
            260                 265                 270
Leu His Arg Cys Pro Ala Arg Phe Ser Cys Phe Ser Arg Glu Asp Ala
```

```
        275                 280                 285
Asp Ile Arg Arg Arg Leu Phe Trp Ser Ile Tyr Cys Leu Glu Arg Tyr
    290                 295                 300
Leu Ser Gln Ala Leu Gly Thr Pro Pro Ser Ile Gln Asp Asp Asp Ile
305                 310                 315                 320
Asp Val Cys Tyr Pro Asp Asn Glu Arg His Gly Glu Ile Gly Lys Val
                325                 330                 335
Pro Arg Ala Lys Gly Pro His Ser His Leu Arg Leu Leu Thr His Leu
            340                 345                 350
Ala Lys Phe Ala Arg Leu Arg Gly Leu Ile Leu Glu Leu Arg Asn Lys
        355                 360                 365
Ser Ile Leu His Ser His Asn Asn Thr Leu Ala Ala Thr Tyr Val Tyr
    370                 375                 380
Gly Glu Leu Ala Gln Trp Trp Asn Glu Val Tyr Asp Lys Phe Tyr Pro
385                 390                 395                 400
Met Gly Lys Pro Pro Ser Arg Phe Arg Pro Asn Leu Lys Pro Trp Leu
                405                 410                 415

<210> 29679
<211> 108
<212> PRT
<213> A.fumigatus

<400> 29679
Arg Trp Phe Ser His Gly Ile Lys Phe Val Ile Asp Leu Ile Pro Pro
1               5                   10                  15
Leu Arg Gln Phe Thr Val Asp Ile Arg Gly Arg Glu Gly Val Ile Met
            20                  25                  30
Thr Val Gln Asp Gly Phe Val Ala Lys Leu Gln Tyr Gln Thr Pro Lys
        35                  40                  45
Ser Arg Lys Leu Gly Glu Met Gly Lys Gln Ser Gln Val Ala Val Arg
    50                  55                  60
Ala Leu Arg Pro Arg His Leu Ser Asp Phe Ser Met Pro Phe Ile Val
65                  70                  75                  80
Trp Ile Ala Asp Val Asp Val Val Ile Leu Tyr Thr Arg Arg Cys Ser
                85                  90                  95
Glu Ser Leu Gly Gln Ile Ser Phe Gln Thr Ile Asn
            100                 105

<210> 29680
<211> 268
<212> PRT
<213> A.fumigatus

<400> 29680
Asp Val Thr Pro Asp Ser Phe Ser Asp Gly Gly Lys His Phe Ser Gln
1               5                   10                  15
Asp Leu Ser Ala Leu Thr Glu Thr Val Arg His Leu Ile Ala Ala Gly
            20                  25                  30
Ala Thr Ile Ile Asp Val Gly Gly Glu Ser Thr Arg Pro Gly Ser Ala
        35                  40                  45
Pro Val Gly Glu Ala Glu Glu Leu Ala Arg Val Ile Pro Val Ile Arg
    50                  55                  60
His Ile Arg Thr Ser Ile Pro Glu Ala Asn Asn Ile Ala Ile Ser Ile
65                  70                  75                  80
Asp Thr Tyr Arg Ala Lys Val Ala Glu Glu Ala Cys Ala Ala Gly Ala
```

```
                85                  90                  95
Asp Ile Ile Asn Asp Ile Ser Ala Gly Thr Leu Asp Pro Glu Met Leu
            100                 105                 110
Pro Thr Met Ala Arg Thr Gly Lys Ala Val Ile Leu Met His Met Arg
        115                 120                 125
Gly Thr Pro Ala Thr Met Thr Lys Leu Thr Asp Tyr Pro Asn Gly Ile
    130                 135                 140
Val Gln Asp Val Gly Ala Glu Leu Arg Ala Arg Val Ala Ala Ala Glu
145                 150                 155                 160
Ala Ala Gly Ile Arg Arg Trp Arg Ile Ile Leu Asp Pro Gly Leu Gly
                165                 170                 175
Phe Ala Lys Asn Met Pro His Asp Leu Ala Ile Leu Arg Asp Leu Gln
            180                 185                 190
Gln Phe Arg Thr Gly Ile Glu Gly Leu Glu Tyr Leu Pro Trp Leu Met
        195                 200                 205
Gly Pro Ser Arg Lys Arg Phe Ile Gly Arg Leu Thr Gly Val Glu Lys
    210                 215                 220
Ala Ser Glu Arg Thr Trp Gly Thr Ala Ala Thr Val Thr Ala Ser Ile
225                 230                 235                 240
Ala Gly Gly Ala Asp Ile Val Arg Val His Asp Val Arg Glu Met Trp
                245                 250                 255
Gln Val Ala Lys Val Ala Asp Ala Ile Tyr Arg Val
            260                 265
```

<210> 29681
<211> 121
<212> PRT
<213> A.fumigatus

<400> 29681

```
Ser Thr Glu Glu Glu Leu Glu Arg Thr Arg Ser Arg Phe Gly Asn Gln
1               5                   10                  15
Lys Gly Ile Ser Ser Asp Glu Phe Phe Gly Arg Asp Arg Phe Asp Pro
            20                  25                  30
Asn Ala Gln Ala Glu Ala Lys Glu Arg Leu Arg Gln Phe Asp Gly Gly
        35                  40                  45
Tyr Arg His Phe Arg Val Thr Phe Ile Leu Phe Leu Arg Glu Asp Asp
    50                  55                  60
Phe Ala Thr Gly Asp Asp Thr Tyr Gly Asp Phe Glu Ser Ala Ala Lys
65                  70                  75                  80
Asp Phe Phe Arg Arg Phe Gly Ile Thr Ala Gly Asp Asp Phe Glu Lys
                85                  90                  95
Leu Thr Gln Leu Val Gly Glu Gly Ala Val Lys Leu Gln Gly Thr Tyr
            100                 105                 110
Arg Tyr Ser Val Val Asp His Asn Leu
        115                 120
```

<210> 29682
<211> 199
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (168)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29682
Gln Gly Arg Gln Gly Gln Ile His Leu Gln Arg Cys Cys Gln Val Gln
1 5 10 15
Gly Gly Val Glu Lys Thr Gly Cys Ala Gly Cys Ser Thr Val Arg His
20 25 30
Pro Val Ile Leu Asp Ser Ile Thr His Thr Asn Ala Asp Leu Val Leu
35 40 45
Phe Arg Tyr Pro Glu Glu Val Val Val Thr Asp Ile Pro Ala Gly Thr
50 55 60
Ala Ser Asp Gly Ser Ser Thr Pro Ala Gly Asp Ala Asp Asp Asp Phe
65 70 75 80
Phe Ser Ser Trp Asp Lys Pro Ser Ile Lys Arg Pro Ser Asn Pro Pro
85 90 95
Ser Arg Thr Gly Thr Pro Pro Val Val Ser Arg Thr Ala Ser Pro Phe
100 105 110
Leu Asn Ala Gly Ala Asn Gly Asn Gly Ala Arg Ser Lys Ser Pro Leu
115 120 125
Ser Ala Ser Asp Lys Glu Ala Thr Ser Pro Ala Pro Thr Ala Ile Arg
130 135 140
Ala Ser Ala Ser Val Arg Lys Ala Ser Ser Thr Thr Thr Ala Lys Lys
145 150 155 160
Gly Ser Val Leu Gly Ala Lys Xaa Ala Pro Lys Leu Gly Ala Lys Lys
165 170 175
Ile Gly Arg Gly Gly Ser His Arg Phe Arg Gly Gly Gly Thr Lys Gly
180 185 190
Lys Gly Gly Gly Arg Ala His
195

<210> 29683
<211> 108
<212> PRT
<213> A.fumigatus

<400> 29683
Leu Leu Ser Pro Ser Pro Gln Ser Trp Cys Pro Tyr Leu Leu Cys Ser
1 5 10 15
Phe His Glu Pro Arg Pro Tyr Gly Thr Leu Leu Pro Gln Pro Leu Ser
20 25 30
His Val Leu Lys Thr Asn Tyr Leu Phe Thr Glu Trp Gln Trp Glu Gln
35 40 45
Leu Arg Ile Met Lys Val Gly Gly Asn Glu Ser Ala Thr Lys Tyr Phe
50 55 60
Gln Ser His Gly Gly Ser Ala Ala Leu Ala Ser Lys Asp Val Lys Val
65 70 75 80
Lys Tyr Thr Cys Asn Ala Ala Val Lys Tyr Lys Glu Glu Leu Lys Arg
85 90 95
Arg Ala Ala Gln Asp Ala Gln Gln Phe Val Ile Gln
100 105

<210> 29684
<211> 143
<212> PRT
<213> A.fumigatus

<220>

<221> UNSURE
<222> (4)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29684
Ala Leu Arg Xaa Arg Leu Ser Trp Val Leu Arg Arg Leu Gly Gly Ala
1 5 10 15
Glu Ala Ile Asp Phe Glu Glu Ala Glu Arg Lys Ala Lys Glu Glu Ala
20 25 30
Glu Arg Ile Glu Lys Leu Gly Tyr Asp Pro Glu Ala Glu Gln Ala Glu
35 40 45
Ala Asp Ala Lys Ala Lys Thr Ser Thr Ala Ala Thr Ala Ile Ala Ser
50 55 60
Pro Thr Pro Ile Ser Pro Gly Ala Gly Gly Phe Gly Ser Thr Arg Lys
65 70 75 80
Ser His Glu Arg Ser Ala Ser Glu Val Glu Arg Leu Gly Met Gly Ile
85 90 95
Gly Arg Leu Gly Phe Gly Gln Thr Val Gly Ala Lys Pro Ala Ala Pro
100 105 110
Lys Lys Leu Gly Phe Gly Ser Val Ala Pro Val Arg Ser Ala Glu Asp
115 120 125
Gly Leu Phe His Phe Cys His Leu Trp Ala Ser Phe Ile Gly Phe
130 135 140

<210> 29685
<211> 91
<212> PRT
<213> A.fumigatus

<400> 29685
Asp Ser Gly Ala Glu Phe Asn Ala Arg Gln Lys Glu Phe Arg Glu Asn
1 5 10 15
Leu Glu Ala Ala Arg Lys Lys Arg Glu Gln Gln Glu Ser Gln Ser Val
20 25 30
Asp Ala Ser Gly Ser Thr Pro Ala Ser Pro Ala Ile Arg Asp Arg Phe
35 40 45
Arg Glu Tyr Ala Thr Ala Pro Thr Ala Pro Arg Leu Ser Asn Ala Ser
50 55 60
Ser Glu Leu Ser Pro Val Val Asp Ala Ala Asp Val Leu Asp Ser Lys
65 70 75 80
Ala Leu Gly Leu Leu Ser Thr His Arg Ser Val
85 90

<210> 29686
<211> 125
<212> PRT
<213> A.fumigatus

<400> 29686
Asp Glu Gln Leu Ser Glu Ala Asn Gln Ser Pro Lys Arg Gly Pro Leu
1 5 10 15
Ser Ser Leu Ile Tyr Gly Thr Lys Glu Gly Gln His Phe Asp Lys Asp
20 25 30
Ile Glu Arg Ser Phe Ser Gln Val Leu Ala Arg Gly Lys Tyr Val His
35 40 45
Ser Ile Val Phe His Asp Val Lys Pro Asp Lys Val Asp Glu Tyr Val

```
    50                  55                  60
Ala Leu Val Gly Glu Trp Tyr Pro Arg Met Ala Asn Thr Glu Glu Asn
65                  70                  75                  80
Arg Val Asn Leu Val Gly Ser Trp Arg Thr Gln Val Gly Asp Asn Asp
                85                  90                  95
Thr Phe Gly Ile Ser Leu Tyr Glu Pro Arg Asn Arg Gln Trp Ser Pro
            100                 105                 110
Leu Pro Leu Lys Val Val Ser Ile Glu Phe Phe Arg Cys
        115                 120                 125
```

<210> 29687
<211> 166
<212> PRT
<213> A.fumigatus

<400> 29687

```
Arg Ser Leu Pro Glu Val His Ile Trp Glu Tyr Gln Arg Tyr Glu Gly
1               5                   10                  15
Tyr His Ala Ser Leu His Asn Ile Ser Gln His Pro Glu Phe Pro Ala
            20                  25                  30
Phe Asp Arg Lys Leu Lys Ser Leu Ile Lys Ser Lys Lys Thr Ser Leu
        35                  40                  45
Met Gln Glu Phe Ser Phe Trp Pro Thr Thr Pro Pro Arg Arg Leu Gly
    50                  55                  60
Gly Leu Phe Glu Leu Arg Ser Tyr Thr Leu His Pro Gly Asn Leu Leu
65                  70                  75                  80
Glu Trp Glu Thr His Trp Arg Arg Gly Leu Arg Ala Arg Arg Glu Val
                85                  90                  95
Met Glu Gly Val Gly Ala Trp Phe Val Gln Ile Gly Asp Leu Asn Thr
            100                 105                 110
Val His His Leu Trp Gln Phe Ala Asn Leu Glu Glu Arg Lys Thr Arg
        115                 120                 125
Arg Glu Gln Ser Trp Gly Ile Glu Gly Trp Ala Glu Thr Val His Lys
    130                 135                 140
Thr Val Pro Leu Ile Gln Ser Met Gln Ser Arg Ile Leu Ile Pro Met
145                 150                 155                 160
Pro Trp Ser Pro Val Gly
                165
```

<210> 29688
<211> 145
<212> PRT
<213> A.fumigatus

<400> 29688

```
Arg Thr Thr Pro Ser Ser Gln Pro Thr His Gly Tyr Val Ala Pro Glu
1               5                   10                  15
Ile Leu Arg Gly Gln Leu Thr Gly Tyr Gln Arg Met Thr Ser Thr Glu
            20                  25                  30
Val Ser Asn Gly Leu Val Leu Pro Tyr Ala Ala Met Ala Ile Ala Gly
        35                  40                  45
Lys Gly Gly Ala Ala Ala Ile Leu Leu Ile Thr Phe Met Ala Val Thr
    50                  55                  60
Ser Thr Leu Ser Ala Gln Val Ile Ala Val Ser Ser Ile Leu Ser Phe
65                  70                  75                  80
Asp Val Tyr Arg Glu Tyr Phe Asn Arg His Ala Ser Asp Arg Gln Ile
```

```
                85                  90                  95
Ile Arg Ala Ser His Phe Gly Val Ile Phe Phe Ala Ala Phe Ser Ala
            100                 105                 110
Gly Phe Ser Thr Met Leu His Tyr Val Gly Ile Asp Leu Gly Trp Thr
        115                 120                 125
Leu Tyr Met Leu Gly Lys Tyr Arg Val Val Thr Thr Phe Ser Arg Asp
    130                 135                 140
Asn
145
```

<210> 29689
<211> 112
<212> PRT
<213> A.fumigatus

<400> 29689

```
Asp Trp Cys Ala Tyr Cys Gly Gly His Ile Pro Leu Ala Cys Gly Cys
1               5                   10                  15
Asp Arg Leu Tyr Leu Arg Arg Trp His Gln Gly Asn Val Ser Ala Glu
            20                  25                  30
Leu Ser Arg Gln Glu Trp His Leu Thr Leu Arg Arg Arg Phe Leu Thr
        35                  40                  45
Asp Tyr Phe His Thr Ala Val Ile Leu Thr Ile Ala Cys Tyr Phe Ser
    50                  55                  60
Val Lys Ala Val Thr Val Gly Glu Val Ser Ser Ile Gly His Leu Tyr
65                  70                  75                  80
Glu Leu Val Lys Ser Ala Ser Glu Arg His Pro Val Ser Gly Asn His
                85                  90                  95
Ala Ala Thr Tyr Leu Thr Met Thr Ser Lys Gly Val Arg His Leu Pro
            100                 105                 110
```

<210> 29690
<211> 108
<212> PRT
<213> A.fumigatus

<400> 29690

```
Gly Ile Leu Phe Gly Ile Leu His Ile Cys Ser Asn Phe Gly Leu Val
1               5                   10                  15
Ile Val Ser Ala Arg Pro Asn Ala Met Leu Pro Leu Thr His Gln Met
            20                  25                  30
Asp Thr Ser Phe Phe Ile Lys Ala Phe Ser Ala Ala Pro Ser Ala Val
        35                  40                  45
Val Pro Gly Tyr Thr Ile Gly Gly Ile Ala Tyr Phe Ala Ile Pro Trp
    50                  55                  60
Ala Leu Gly Thr Ile Met Ser Ser Val Ala Leu Gly Leu Glu Asn Asn
65                  70                  75                  80
Pro Ile Phe Pro Thr Tyr Pro Arg Val Cys Ser Pro Arg Asp Pro Gln
                85                  90                  95
Gly Pro Thr Asp Arg Ile Pro Ala His Asp Ile Asp
            100                 105
```

<210> 29691
<211> 61
<212> PRT
<213> A.fumigatus

<400> 29691
Pro Trp Arg Ser Arg His Gly Ser Gln Gly Val Leu Asp Gly Ala Ser
1 5 10 15
Asn Ala Ser Leu Asp Asn Glu Phe Gly Thr His Asn Ile Asp Asp Cys
20 25 30
Ile Val Lys Ile Leu Glu Arg Gly Thr Phe Gln Thr Tyr Thr Val Ser
35 40 45
Leu Leu Ser Lys Ser Ala Gly Ile Ala Tyr Gly Lys Ser
50 55 60

<210> 29692
<211> 78
<212> PRT
<213> A.fumigatus

<400> 29692
Val Asn Ile Val Asn Asn Val Leu His Thr Arg Ser Leu Cys Phe Ser
1 5 10 15
Asp Phe Tyr Asp Arg Gly Thr Phe Tyr Val Ala His Arg Leu Trp Gln
20 25 30
Phe Gln Leu Phe Ser Gln Gln Lys Gly Phe Cys Asn Glu Phe Pro Leu
35 40 45
Leu Glu Ser Phe Val Gly Leu Ile Asp Ala Leu Asp Cys Trp Ala Gln
50 55 60
Thr Ile Gln Leu Ile Ile Lys Thr Glu Leu Glu Lys Glu Gly
65 70 75

<210> 29693
<211> 76
<212> PRT
<213> A.fumigatus

<400> 29693
Thr Gln Phe Phe Val Arg Ser Ala Leu Ser Arg Ser Ile Arg Ser Phe
1 5 10 15
Asp Asn Ile Tyr Ser Ile Asp Ile Ile Gln Pro Leu Asp Asn Met Ala
20 25 30
Tyr His Lys Arg Pro Thr Ser Asn Tyr Gln Pro Cys Asp Ser Tyr Phe
35 40 45
Val Glu Phe Tyr Asp Asp Phe Pro Ala Pro Arg Ile Asp Pro Lys Glu
50 55 60
His Ala Lys Leu Val Gly Arg Gly Thr Thr Val Cys
65 70 75

<210> 29694
<211> 381
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (359)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29694

```
Glu Glu Val Gln Ser Asn Glu Ile Phe Pro Phe His Ser Phe His Arg
1               5                  10                  15
Pro Arg Leu Ser Ser Lys Val Asn His Pro Ser Gln Ile Thr Ala Ala
            20                  25                  30
Asn Arg Leu Thr His Pro Thr Met Lys Glu Asn Thr Cys Ile Gln Asp
        35                  40                  45
Ala Met Gly Pro Lys Leu Val Leu Thr Asn Ala Ile Ser Glu Tyr Asn
    50                  55                  60
Pro Leu Pro Cys Ser Lys Tyr Ser Thr Pro Lys Thr Gly Val Phe Ser
65                  70                  75                  80
Ile Met Pro Arg Arg Trp Ile Pro Tyr Ala Glu Leu Met Arg Leu Asp
                85                  90                  95
Arg Pro Ala Gly Tyr Trp Ala Phe Tyr Trp His Phe Val Ile Gly Leu
            100                 105                 110
Thr Leu Ala Ala Asn Met Ser Ser Pro Ile Pro Ser Pro Leu Thr Leu
        115                 120                 125
Val Ser Leu Phe Leu Phe Phe Ala Val Trp Val Ile Ile Leu Arg Gly
    130                 135                 140
Ala Val Cys Thr Trp Asn Asp Thr Leu Asp Gln Asp Phe Asp Arg Lys
145                 150                 155                 160
Val Ser Arg Thr Arg Asn Arg Pro Ile Pro Arg Gly Ala Val Thr Thr
                165                 170                 175
Ile Gln Gly His Leu Phe Thr Leu Ala Gln Ile Ala Leu Gly Thr Ala
            180                 185                 190
Met Leu Leu Pro Leu Pro Leu Gly Cys Met Tyr Arg Ala Ala Leu Met
        195                 200                 205
Thr Ala Ile Leu Leu Val Tyr Pro Leu Gly Lys Arg Val Thr Asp Phe
    210                 215                 220
Pro Gln Val Ile Leu Gly Ile Ala Phe Gly Met Ser Ile Phe Val Cys
225                 230                 235                 240
Ser Ala Ala Leu Asp Ala Asp Pro His Pro Leu Ser Gly Leu Tyr Ser
                245                 250                 255
Leu Gly Thr Glu Thr Asp Asp Leu Arg Leu Val Thr Ala Leu Cys Phe
            260                 265                 270
Tyr Ile Ala Ser Ile Leu Trp Thr Ala Ile Phe Asp Thr Ile Tyr Ala
        275                 280                 285
His Gln Asp Ala Lys Glu His Ala Lys Val Gly Val Arg Ser Leu Ala
    290                 295                 300
Val Arg Leu Gly Glu Arg Thr Lys His Thr Leu Ser Val Leu Ala Ala
305                 310                 315                 320
Thr Gln Val Met Leu Leu Ser Ala Ala Gly Ile Ala Cys Asn Phe Ser
                325                 330                 335
Ala Ile Tyr Phe Ala Gly Ser Cys Leu Gly Thr Ala Ile Ser Leu Ala
            340                 345                 350
Ala Leu Leu Trp Val Cys Xaa Ser Cys Gly Ile Arg Arg Thr Ala Arg
        355                 360                 365
Gly Gly Phe Gly Arg Gly Ser Pro Pro Val Gly Cys Gln
    370                 375                 380
```

<210> 29695
<211> 66
<212> PRT
<213> A.fumigatus

<400> 29695
Thr Phe Leu Gln Ala Tyr His Tyr His Lys Val Arg Leu Thr Ala Lys

```
1               5                   10                  15
Ala Ile Phe Thr Val Ser Val Arg Asp Ser Gly Pro Ser Ser Pro Val
            20                  25                  30
Phe Glu Leu Ser Lys Thr Asn Gln Tyr Ile Trp Gln Phe Asp Gln Leu
        35                  40                  45
Ser Ala Val Asp Leu Arg Cys Ile Lys Pro Tyr Tyr Ser Asn Thr Ile
    50                  55                  60
Ala Phe
65
```

<210> 29696
<211> 66
<212> PRT
<213> A.fumigatus

<400> 29696

```
Thr Phe Ile Phe Cys Phe Arg Ala Leu Gly Arg Ala Leu Leu Ser Arg
1               5                   10                  15
Val Leu Gly Arg Arg Thr Phe Cys Cys Leu Pro Val Phe Arg Asp Asn
            20                  25                  30
Asp Ile Trp Leu Gln Met Gln Met Lys Asn Val Asn Lys Gly Ile Ser
        35                  40                  45
Gln Ile Arg Leu Glu Asn Met Ile Glu Thr Ser Lys Thr Ala Ala Leu
    50                  55                  60
Asp Ala
65
```

<210> 29697
<211> 99
<212> PRT
<213> A.fumigatus

<400> 29697

```
Leu Pro Gln Pro Cys Arg Phe His Pro Ser Cys Thr Asp Val Tyr Glu
1               5                   10                  15
Val Ser Ser Leu Phe Gly Asn Ile Phe Leu Leu Arg Ser Pro Arg Lys
            20                  25                  30
Trp His Thr Gln Arg Leu Asn Met Leu Thr Thr Arg Thr Ala Leu His
        35                  40                  45
Glu Thr Gly Lys Leu Arg Arg Val Thr His Thr Phe Thr Pro Asn Pro
    50                  55                  60
Gly Leu Tyr Leu Gly Ile Thr Thr Asp Cys Leu Ile Val Asn Asp Leu
65                  70                  75                  80
Pro Ile Leu Gln Ser Glu Ser Gly Ser Cys Pro Val Leu Gly His Val
                85                  90                  95
Ser His Leu
```

<210> 29698
<211> 74
<212> PRT
<213> A.fumigatus

<400> 29698

```
Gly Lys Ile Tyr Thr Ala Cys Gly Gln Gly Lys Ile Pro Phe Ile Ser
1               5                   10                  15
```

```
Val Ile Asp Ile Ile Ala Ile Thr Tyr His Ala Leu Ile Asp Pro Asn
            20                  25                  30
Ser His Asn Tyr Asp His Gln Val Leu Gly Pro Glu Leu Leu Thr Tyr
        35                  40                  45
Asn Asn Ile Thr Lys Lys Leu Ser His Val Leu Gly Gln Ile Ile Lys
    50                  55                  60
His Ile Lys Leu Ser Gly Glu Glu Gln Tyr
65                  70
```

<210> 29699
<211> 424
<212> PRT
<213> A.fumigatus

<400> 29699

```
Leu Leu Ile Ser Ala Ala Arg Phe Leu Ala Pro Thr Ile Ile Thr Thr
1               5                   10                  15
Ala Pro Thr Ser Asn Glu Leu Asp Gln Pro Val Lys Lys Lys Pro Lys
            20                  25                  30
Phe Lys Ile Leu Ser Gly Ser Lys Lys Ser Ser Ser Asp Gly Pro Gln
        35                  40                  45
Met Tyr Ala Gln Arg Gln Ser Pro Gly Thr Arg Ser Arg His Gly Thr
    50                  55                  60
Gln Gly Ser Thr Gly Ser Gln Ala Thr Asp Ala Thr Leu Ala Thr Ser
65                  70                  75                  80
Lys Met Ser Gly Glu Glu Pro Gly Arg Leu Ser Thr Thr Ser Ile Arg
                85                  90                  95
Ser Gly Gly Arg Glu Pro Gly Asn Glu Ser Gln Arg Ser Ser Val Thr
            100                 105                 110
Asp Ala Arg Phe Ser Glu Ser Ser Arg Ser Asp Gln Ser Ser Gly Asp
        115                 120                 125
His Gly Leu Tyr His Ser His Ser Pro Asn Asp Gly Thr Leu Ser Gly
    130                 135                 140
Gly Lys Arg Phe Arg Met Pro Arg Leu Lys Arg Asn Arg Gly Pro Leu
145                 150                 155                 160
Phe Pro Leu Pro Pro Arg Pro Ala Gly Ser Gln Pro Met Asn Gly His
                165                 170                 175
Gly Gln Asp Ser Gln Thr Ser Arg Ala Ile Ser Ser Asp Pro Ser Pro
            180                 185                 190
Ser Phe Glu Pro Pro Asp Glu Lys Asp Gln Asp Arg Val Ser Pro Leu
        195                 200                 205
Pro Ser Pro Ser Arg Ser Thr Val Gly Leu Ala Ser Pro Ala Phe Pro
    210                 215                 220
Leu Arg Arg Lys Asp Ser Ala Asn Ser Ala Asn Ser Ala Arg Ser Ala
225                 230                 235                 240
Thr Ser Thr Gly Ser Gly His Arg Ile Arg Leu Arg Pro Arg Ser Ser
                245                 250                 255
Thr Leu Asp Ser Leu Ala Asn Leu Arg Glu Asp Gly Gln Gln Ser Pro
            260                 265                 270
Ala His Leu Ala Ser Ser Gly Arg Thr Ser Thr Ser Thr Ser Gly Arg
        275                 280                 285
Lys Ser Phe Gly Asp Ile Phe Ser Ile Ser His Arg Leu Arg Gln Asn
    290                 295                 300
Ser Glu Pro Pro Val Met Arg Asp Gly Ser Pro Gly Val Arg Arg Ser
305                 310                 315                 320
Asp Thr Pro Val His Lys Leu Ser Tyr Pro Glu Arg Glu Glu Asn Asp
```

```
                325                 330                 335
Thr Pro Ala Thr Tyr Leu Thr Arg Leu Glu Glu Ser Ile Pro Lys Ser
            340                 345                 350
Thr Ile Ala Gly Val Leu Cys Gln Ser Asn Glu Asp Phe Tyr Lys Thr
        355                 360                 365
Ala Leu Arg Lys Tyr Met Arg Arg Phe Ile Phe Phe Gly Asp Pro Ile
    370                 375                 380
Asp Met Ala Ile Arg Lys Leu Leu Met Gly Ala Glu Leu Pro Lys Glu
385                 390                 395                 400
Thr Gln Gln Ile Asp Arg Phe Leu Gln Ser Phe Ala Val Phe Thr Thr
                405                 410                 415
Gly Leu Glu Gly Gln Arg Trp Ser
            420
```

<210> 29700
<211> 140
<212> PRT
<213> A.fumigatus

<400> 29700

```
Phe Pro Leu Tyr Pro Glu Glu Thr Asp Ala Gln Ile Ser Ser Phe Ile
1               5                   10                  15
Ile Ser Phe Pro Gln Gly Ser His Tyr Leu Pro Asn Ile Ile Gln Leu
            20                  25                  30
Leu Ala Pro Pro Phe Ser Tyr Val Pro Thr Asn Leu Ser Val Leu Gly
        35                  40                  45
Phe Pro Phe Ser Pro Val Cys Phe Pro Phe Leu Gly Ile Ser Asn Val
    50                  55                  60
Leu Leu Gly Arg Val Ser Ala Ser Asp Pro Arg Thr Tyr Tyr Tyr Ser
65                  70                  75                  80
Ile Leu Leu Asp Ala Trp Gln Cys Lys Gly Cys Ile Asn Pro Leu Arg
                85                  90                  95
Leu Phe Ile Cys Leu Ser Thr Ile Arg Gly Ser Leu Ala Gln Ser Ser
            100                 105                 110
Ala Pro Leu Phe Pro Leu Phe Ser Leu Phe Glu Leu Ser Ala Thr Ser
        115                 120                 125
Leu Leu Asp Ser Arg Gln Ile Ala Arg Phe Ser Ser
    130                 135                 140
```

<210> 29701
<211> 278
<212> PRT
<213> A.fumigatus

<400> 29701

```
Phe Ile Leu Ala Phe Ala Leu Arg Pro Leu Phe Ser Pro Leu Pro Leu
1               5                   10                  15
Leu Pro Arg Gly Leu His His Leu His Gln Arg Leu Leu Ala Leu Ala
            20                  25                  30
Ala Pro Arg Ser Phe Ile Leu Leu Leu Leu Phe Arg Arg Gln Leu Pro
        35                  40                  45
Leu Ile Leu Leu Leu Val Phe Arg Ala Asp Phe Ala Ala Leu Leu Gly
    50                  55                  60
Glu Leu Gly Leu Glu Gly Pro Lys Leu Gly Ala Phe Gly Val His Pro
65                  70                  75                  80
Asp Glu Gly Leu Glu Glu Gly Asp Phe Ala Gly Pro Asp Arg Arg Val
```

```
                85                  90                  95
Arg Asp Glu Ser Phe Arg Ala Ser Gly Phe Arg Leu Ala Pro Leu Gly
            100                 105                 110
Gly Leu Phe Leu Ala Gly Leu Phe Gly Leu Gly Cys Arg Val Gly Val
        115                 120                 125
Asp Val Gly Leu Asn Val Thr Trp Phe Val Leu Asp Val Gly Gly Gly
    130                 135                 140
Trp Val Gly Gly Ala Val Asp Gly Arg Leu Glu Asp His Gly Glu Ala
145                 150                 155                 160
Phe Glu Ala Arg Val Val His Asp Val Val Glu Gly Ala Glu Thr Gln
                165                 170                 175
Glu Ala Cys Ala Asp Val Gly Val Glu Val Ala Phe Ala Ala Ala Trp
            180                 185                 190
Gly Leu Gly Val Val Glu Val Gln Gly Ala Glu Val Leu Gln Thr Asp
        195                 200                 205
Leu Val Phe Glu Leu Leu His Glu Gly Leu Val Ala Cys Trp Arg Gly
    210                 215                 220
Glu Val Val Ser Cys Cys Glu Ala Val Ala Gly Ile Tyr Ala Asp Ala
225                 230                 235                 240
Asp Ala Gly Val Met Leu Ala Arg Asp Gln Gly Glu Glu Val Pro Glu
                245                 250                 255
Leu Gly Glu Val Ala Ala Asn Cys Gly Ala Met Ala Ala His Arg Leu
            260                 265                 270
Lys Asp Gly Asn Asp Gly
        275
```

<210> 29702
<211> 67
<212> PRT
<213> A.fumigatus

<400> 29702

```
Pro Arg Cys Arg His Ile Leu Pro His Gly Ser Tyr Leu Val Asn Leu
1               5                   10                  15
Ala Gln Glu Asp Lys Val Lys Ala Lys Gln Ala Tyr Asp Ser Phe Leu
            20                  25                  30
Asp Asp Leu Arg Arg Cys Glu Ala Leu Gly Ile Thr Leu Tyr Asn Phe
        35                  40                  45
Gln Leu Gly Ser Asp His His His Gln Asn Gln Pro Gly Arg Ser Leu
    50                  55                  60
Thr Ile Pro
65
```

<210> 29703
<211> 137
<212> PRT
<213> A.fumigatus

<400> 29703

```
Asp Asp Val Arg Pro Trp His His Asn Trp Arg Leu Pro Leu Arg Val
1               5                   10                  15
Pro Gly Pro Pro Arg Leu Asp Pro Ala Arg Ala Ser Pro Pro His Arg
            20                  25                  30
His Leu His Arg Tyr Leu Pro Gln Leu Arg Ser Arg Ile Arg Pro Leu
        35                  40                  45
Leu Ala Ser Arg Leu Pro Val Leu His Glu Gly Val Arg Arg Pro Asn
```

```
    50                  55                  60
Arg Ser Ala Val Pro Pro Arg Pro Ala Pro Gln Arg Leu Gln Gly Pro
65                  70                  75                  80
Thr Arg Gln Gln Thr Arg Pro Pro Arg Gln His Arg His Arg Leu Leu
                85                  90                  95
Gly Ser Pro Arg Leu Pro Gln His His Glu Arg Pro Ala Pro Arg Arg
            100                 105                 110
Pro Pro His Asp Pro Arg Asp Ala His Arg Pro Pro Arg Gln Pro Asn
        115                 120                 125
Pro Arg Gln His Gln Gly Arg Thr Lys
    130                 135
```

<210> 29704
<211> 335
<212> PRT
<213> A.fumigatus

<400> 29704

```
Ala Gln Ile Thr Thr Thr Lys Thr Asn Pro Ala Val His Leu Pro Ser
1               5                   10                  15
His Ser Pro Gly Ser Ala Asn Gln Ser Ser Leu Pro Asp Ala Leu Ser
            20                  25                  30
Arg Leu Ala Lys Ala Leu Thr Asn Ala Leu Glu Ala Thr Ser Thr Val
        35                  40                  45
Val Pro Val Leu Glu Thr Met Cys Gly His Gly Thr Thr Ile Gly Gly
    50                  55                  60
Tyr Leu Ser Glu Phe Arg Asp Leu Leu Ala Leu Ile Pro Arg Glu His
65                  70                  75                  80
His Pro Arg Ile Gly Ile Cys Ile Asp Thr Cys His Ser Phe Ala Ala
                85                  90                  95
Gly Tyr Asp Leu Ser Ser Pro Ala Gly Tyr Gln Ser Phe Met Lys Glu
            100                 105                 110
Phe Glu Asp Gln Ile Gly Leu Gln Tyr Leu Arg Ala Leu His Leu Asn
        115                 120                 125
Asp Ser Lys Ala Pro Arg Gly Ser Lys Arg Asp Leu His Ala Asn Ile
    130                 135                 140
Gly Thr Gly Phe Leu Gly Leu Arg Ala Phe His Asn Ile Met Asn Asp
145                 150                 155                 160
Pro Arg Leu Glu Gly Leu Pro Met Ile Leu Glu Thr Pro Ile Asp Arg
                165                 170                 175
Pro Ala Asn Pro Thr Pro Ala Asn Ile Lys Asp Glu Pro Ser Asp Val
            180                 185                 190
Glu Ala Asp Ile Asp Ala Asp Ser Ala Pro Glu Thr Glu Gln Thr Ser
        195                 200                 205
Lys Lys Lys Thr Ser Lys Arg Ser Lys Ser Lys Ala Gly Gly Ala Lys
    210                 215                 220
Ala Leu Val Pro Asp Pro Ser Val Trp Ala Arg Glu Ile Ala Leu Leu
225                 230                 235                 240
Glu Ser Leu Ile Gly Met Asp Pro Glu Ser Pro Glu Phe Arg Ala Leu
                245                 250                 255
Glu Thr Gln Leu Ala Glu Glu Gly Arg Glu Val Arg Ala Lys His Gln
            260                 265                 270
Glu Gln Tyr Glu Arg Lys Leu Ala Ala Glu Glu Gln Lys Lys Asn Lys
        275                 280                 285
Ala Ala Gly Gly Gly Lys Gly Gln Lys Thr Leu Met Glu Met Val Gln
    290                 295                 300
```

```
Thr Ala Gly Lys Lys Arg Lys Gly Ala Lys Lys Arg Pro Glu Ser Glu
305                 310                 315                 320
Ser Glu Asn Glu Leu Glu Ser Asp Asp Glu Gly Cys Gln Ser His
                325                 330                 335

<210> 29705
<211> 71
<212> PRT
<213> A.fumigatus

<400> 29705
Glu Phe Leu Met Pro Cys Ile Thr Ala Cys Thr Leu Gly Thr Ile Arg
1               5                   10                  15
Arg Leu Trp Pro Ile Glu Trp Ile Leu Ala Asp Val Pro Ser Ser Gly
            20                  25                  30
Asn Ala Phe Ala Leu Phe Leu Lys Ser Gln Arg Lys Trp Glu Asn Pro
        35                  40                  45
Pro Leu Gln Asp Asp His Arg Asp Gln Phe Arg Gln Leu Cys Leu Glu
    50                  55                  60
His Lys Tyr Asp Gly Ala Lys
65                  70

<210> 29706
<211> 136
<212> PRT
<213> A.fumigatus

<400> 29706
Leu Ser Thr Trp Tyr Ala Pro Tyr Cys Gln His Thr Arg Gln Arg Gln
1               5                   10                  15
His Leu Thr Ala Lys Gln Ser Gln Ser Ser Leu Pro Ser Pro Thr Asn
            20                  25                  30
Ser Ala Ala Ala Leu Ser Phe Leu Thr Ser Val Gly Gly Ile Ile Gly
        35                  40                  45
Tyr Thr Arg Thr Gly Ser Ile Pro Ser Ile Ala Ala Gly Leu Ser Val
    50                  55                  60
Gly Ala Leu Tyr Leu Tyr Ser Phe Leu Arg Leu Arg Asp Gly Gln Pro
65                  70                  75                  80
Tyr Gly Glu Glu Ile Gly Leu Leu Ala Ser Ala Val Leu Gly Gly Ser
                85                  90                  95
Ser Val Pro Arg Val Ile Lys Thr Arg Gly Lys Pro Val Pro Leu Ala
            100                 105                 110
Leu Ser Val Leu Ala Thr Tyr Gly Leu Val Val Phe Gly Leu Ala Phe
        115                 120                 125
Arg Glu Lys Arg Ala Ser Arg Ile
    130                 135

<210> 29707
<211> 94
<212> PRT
<213> A.fumigatus

<400> 29707
Gln Gln Asn Ser Arg Asn Pro Pro Ser Leu Val Pro Arg Thr Pro Pro
1               5                   10                  15
Leu Arg Cys Pro Ser Ser Pro Arg Trp Ala Glu Ser Ser Ala Thr Arg
```

```
            20                  25                  30
Val Arg Ala Pro Ser Pro Pro Ser Arg Arg Val Ser Gln Ser Ala Arg
        35                  40                  45
Tyr Ile Cys Thr Val Ser Cys Val Cys Ala Thr Asp Ser Pro Thr Ala
    50                  55                  60
Arg Arg Ser Gly Cys Trp Arg Arg Arg Cys Trp Gly Val Val Leu Cys
65                  70                  75                  80
Pro Ala Leu Ser Lys Arg Gly Gly Ser Pro Cys Leu Trp Arg
                85                  90
```

<210> 29708
<211> 75
<212> PRT
<213> A.fumigatus

```
<400> 29708
Glu Ser Arg Ser Ile Arg His Ala Thr Leu Cys Ile Pro Asn Ser Lys
1               5                   10                  15
Ser Pro Pro Gln Ile Leu Glu Ala Leu Phe Ser Arg Asn Ala Asn Pro
            20                  25                  30
Lys Thr Thr Ser Pro Tyr Val Ala Arg Thr Leu Ser Ala Arg Gly Thr
        35                  40                  45
Gly Phe Pro Leu Val Leu Ile Thr Arg Gly Thr Glu Leu Pro Pro Asn
    50                  55                  60
Thr Ala Asp Ala Asn Asn Pro Ile Ser Ser Pro
65                  70                  75
```

<210> 29709
<211> 70
<212> PRT
<213> A.fumigatus

```
<400> 29709
Ile Asn Asp Thr Met Pro Ile Cys Ile Glu Cys Ser Tyr Pro Val Ser
1               5                   10                  15
His Leu Tyr Ser Thr Tyr Ser Arg Ala Asp Asp Arg Ser Leu Gly Lys
            20                  25                  30
Gly Val Arg Leu Thr Gln Cys Pro Arg Cys Lys Arg Phe Ala Asp Lys
        35                  40                  45
Tyr Val Glu His Asp Phe Val Val Leu Phe Ile Asp Leu Val Leu Ile
    50                  55                  60
Lys Pro Gln Val Phe Gly
65                  70
```

<210> 29710
<211> 412
<212> PRT
<213> A.fumigatus

```
<400> 29710
Ser Ala Val Pro Ser Ser Pro Val Cys Glu Asp Arg Met Gly Arg Leu
1               5                   10                  15
Gln Lys Glu Val Ser Leu Asp Arg Val Ile Leu Leu Asp Pro Leu Gly
            20                  25                  30
Gly Ile Pro Ala Phe Asn Arg Arg Gln Pro Ser His Val Phe Ile Asn
        35                  40                  45
```

```
Met Glu Gln Glu Tyr Asp Asp Ile Glu Asn Glu Leu Leu Gln Ala Arg
    50                  55                  60
Glu Met Val Pro Ala Thr Glu Thr Ser Leu Leu Lys Ala Gly Pro Asn
65                  70                  75                  80
Ser Val Ala Asp Asn Asn Pro Ile Ser Lys Phe Val His Ala Glu Val
                85                  90                  95
Val Pro Val Pro Ser Gly Ser Thr Pro Glu Leu Lys Thr Ala Val Pro
            100                 105                 110
Gln Arg Ser Ala Ile Glu Gly His Leu Glu Asn Leu Arg Val Ala Gln
        115                 120                 125
Lys Ala Leu Ala Met Leu Pro Ala Ala Ser Ser Gly Ile Ile Thr Ser
    130                 135                 140
Pro Phe Glu Val Ala Ser Ser Ala Gln Thr Ser Pro Thr Ser Glu Phe
145                 150                 155                 160
Ser Ala Val Gly Thr Arg Arg Gln Arg Asn Pro Leu Ile His Asn Leu
                165                 170                 175
Leu Thr Asp Lys Pro Leu Leu Ser Ser Ser Leu Pro Met Ser Arg Arg
            180                 185                 190
Gly Pro Thr Asn Asn Gly Gln Gly Ala Val Tyr Pro Val Thr Ser His
        195                 200                 205
Thr Thr Phe Val Lys Arg Gly Met Pro Leu Thr Met Leu Pro Asn Pro
    210                 215                 220
Trp Thr Glu Pro Trp Thr Pro Gln Ser Arg Pro Arg Leu Lys Leu Asp
225                 230                 235                 240
Asp Pro Ser Ile Asp Leu Pro Arg Leu Val His Leu Ile Glu Asp Ser
                245                 250                 255
Phe Asp Arg Lys Leu Asp Val Gln Asp Tyr Leu Asn Arg Val Asn Asp
            260                 265                 270
Arg Leu Ala Gly Leu Ile Ile Ala Gly Glu Tyr Glu Gly Gly Ala Ile
        275                 280                 285
Leu Thr Trp Glu Leu Pro Pro Gly Val Glu Asp Asp Gly Ser Glu Ala
    290                 295                 300
Ser Asn Ala Arg Met Val Pro Tyr Leu Asp Lys Phe Ala Val Leu Lys
305                 310                 315                 320
Arg Ser Gln Gly Ala Gly Gly Val Ala Asp Ile Val Phe Asn Ala Met
                325                 330                 335
Val Arg Ser Cys Phe Pro Asn Gly Val Cys Trp Arg Ser Arg Lys Asn
            340                 345                 350
Asn Pro Val Asn Lys Trp Tyr Phe Glu Arg Ser Leu Gly Thr Trp Lys
        355                 360                 365
Leu Ser Asp Thr Asn Trp Thr Met Phe Trp Thr Thr Pro Gly Leu Val
    370                 375                 380
Glu Asp Ser Gln Lys Phe Arg Asp Tyr Glu Ala Val Cys Arg Ser Ile
385                 390                 395                 400
Gln Pro Ser Trp Ala Asp Asp Thr Gly Val Val Asp
                405                 410
```

<210> 29711
<211> 345
<212> PRT
<213> A.fumigatus

<400> 29711

```
Glu Ser Ala Asp Thr Lys Leu Gln Met Lys Ala Ala Lys Arg Phe Lys
1               5                   10                  15
Arg Leu Leu Gly Pro Ala Lys Ala Glu Pro Val Met Gln Ser Ile Leu
```

```
            20                  25                  30
Gly Gln Glu Tyr Glu Ser Arg Phe Val Glu Pro Pro Leu Ala Met Glu
        35                  40                  45
Pro Glu Glu Ser Val Ser Ser Ser Asp Ile Leu Met Gly Asn Arg Ser
    50                  55                  60
Gln Ser Val Thr Ser Tyr Asn Arg Lys Pro Leu Glu Arg Glu Glu Val
65                  70                  75                  80
Leu Lys Gly Tyr His Gln Lys Tyr Glu Lys Ser Pro Glu Ile Ser Asp
                85                  90                  95
Ser Ala Gly Lys Tyr Thr Thr Gln Gln Asp Leu Leu Leu Ser Ile Ser
            100                 105                 110
Thr Glu Arg Ser Val Gly Ile Thr Pro Glu Arg Gln Asp Ser Ser Ser
        115                 120                 125
Ile Thr Ser Tyr Lys Pro Cys Thr Lys Leu Val Asp Asp Leu Gln Ala
    130                 135                 140
Asn Phe Ser Arg Gln Ser Pro Ser Pro Gln Thr Thr Leu Ser Arg Ala
145                 150                 155                 160
Ser Ser Ala Thr Thr Lys Arg Ser Val Glu Gly Thr Arg Gly His Ala
                165                 170                 175
Arg Asp Pro Leu Glu Glu Ala Phe Pro Tyr Leu Phe Ile Gly Pro Ser
            180                 185                 190
Thr Tyr Thr Gly Ser Asp Pro Glu Asp Ile Asp Met Glu Arg Asn Ala
        195                 200                 205
Asp Gln Ser Glu Thr Phe Arg Ser Asp Glu Pro Leu Glu Thr Ser Leu
    210                 215                 220
Ala Gly Asp Glu Val Ile Pro Ile Val Ser Glu Ser Pro Gly Ala Ala
225                 230                 235                 240
Asp Phe Asp Ile Tyr Glu Thr Ala Tyr Arg Gln Glu Ile Ala Arg Ile
                245                 250                 255
Arg Lys Leu Thr Leu Ala Arg Glu Gly Thr Leu Pro Lys Val Tyr Leu
            260                 265                 270
Thr Arg Arg Val Glu Asp Lys Asp Glu Val Leu Arg Leu Val Glu Asp
        275                 280                 285
Arg Ser Leu Asp Thr Asn Tyr Glu Thr Ala Ala Arg Glu Ala Asp Thr
    290                 295                 300
Val Ile Gly Glu Lys Ile Met Ala Pro Ser Ser Pro Arg Ser Gly Val
305                 310                 315                 320
Ser Met Ile Lys Thr Gln Leu Asp Gly Gln Leu Lys Leu Thr Ala Asn
                325                 330                 335
Glu Ala His Val Gln Gln Arg Leu Glu
            340                 345
```

<210> 29712
<211> 489
<212> PRT
<213> A.fumigatus

<400> 29712

```
Arg Gln Ser Gln Ser Val Lys Asn Gln Ile Lys Asp Leu Gln Gln Gln
1               5                   10                  15
Leu Lys Asp Ala Asp Ser Gln Gln Arg Trp Ser Ala Glu Arg Glu Val
            20                  25                  30
Glu Leu Glu Glu Tyr Arg Arg Val Leu Pro Arg Ile Glu Gln Glu Cys
        35                  40                  45
Ser Glu Ile Gln Asn Leu Lys Lys Gln Leu Glu Phe Asn Asn His Ala
    50                  55                  60
```

```
Leu Thr Glu Arg Leu Ser Ser Ala Glu Glu Gln Arg Glu Arg Asp Asp
65                  70                  75                  80
Ala Leu Ile Ser Glu Leu Arg Glu Arg Ile Arg Glu Leu Glu Gly Ser
                85                  90                  95
Pro Gly Ser Pro Ser Leu Thr Pro Gly Ala Glu Thr Pro Lys Arg Gly
            100                 105                 110
Thr Leu Gln Glu Asp Phe Glu Gly Ile Gly Ile Gln Glu Ser Gln Leu
        115                 120                 125
Ser Val Leu Pro Thr Ile Phe Glu Glu Ala Glu Leu Thr Asp Ser Ser
    130                 135                 140
Lys Ala Glu Asn Asp Glu Leu Arg Lys Asp Val Glu Ser Leu Lys Glu
145                 150                 155                 160
Gln Pro Ser Val Ser Trp Leu Glu Glu Glu Leu Gly Lys Phe Ala Ala
                165                 170                 175
Asp Asp Ala Asp Asp Glu Pro Gln Ile Gly Ser Gln Phe Glu Arg Phe
            180                 185                 190
Ser Glu Asn Phe Ser Gln Ile His Arg Leu Ala Gln Ala Asn Ser Ser
        195                 200                 205
Gln Gly Tyr Val Ile Glu Pro Leu Phe Ser Pro Arg Thr His Gly Thr
    210                 215                 220
Phe Ser Asp Glu Tyr Trp Lys Leu Tyr Glu His Tyr Thr Gln Ala Leu
225                 230                 235                 240
Gly Lys Leu Ala Asp Ala Gln Asp Ser Leu Glu Ile Thr Lys Arg Ala
                245                 250                 255
Leu Thr Asp Ala Met Ala Glu Gly Glu Leu Leu Ile Tyr Thr Ala Tyr
            260                 265                 270
Lys Thr Ser Arg Gln Ser Ala Tyr Glu Thr Thr Val Gly Leu Ala Gly
        275                 280                 285
Lys Glu Lys Val Asp Met Ile His Glu Val Lys Glu Ser Asn Ser Ala
    290                 295                 300
Glu Val Ala Lys Leu Arg Ala Glu Trp Asp Glu Cys Gln His Arg Ile
305                 310                 315                 320
His Ser Leu Glu Ala Glu Leu Asp Ala Ser Gln Glu Leu Val Arg Glu
                325                 330                 335
Val Cys Ala Glu Arg Asp Glu Leu Arg Ser Leu Phe Asp Lys Lys Gln
            340                 345                 350
Ala Glu Ile His Ala Glu Asp Lys Glu Met Ser Asn Glu Met Lys Arg
        355                 360                 365
Leu Leu Ala Glu Leu Met Ala Gln Glu Asn Gly Asp Ser Ala Asp Ala
    370                 375                 380
Ser Gln Lys Ser Gly Pro Glu Leu Ala Lys Glu Val Ala Glu Leu Ile
385                 390                 395                 400
Glu Lys Tyr Leu Glu Lys Leu Ala Lys Arg Ala Glu Val Ser Lys Phe
                405                 410                 415
Thr Pro Leu Pro Ser Asn Gly Ala Gly Pro Thr His Ser Gly Lys Gly
            420                 425                 430
Ile Ser Glu Ser Ser Phe Thr Ala Ala Val Asn Thr Gly Leu Arg Ala
        435                 440                 445
Gln Pro Arg Arg Val Pro Asp Phe Asp Ala Glu Cys Thr Asn Arg Glu
    450                 455                 460
Asn Pro Ala Lys Pro Leu Lys Arg Asp Val Pro Ser Ser Arg Trp Lys
465                 470                 475                 480
Cys Leu Met Ser Arg Phe Lys Arg Ser
                485
```

<210> 29713

<211> 101
<212> PRT
<213> A.fumigatus

<400> 29713
Gln Leu Arg Phe Leu Asp Ala Tyr Ala Leu Lys Val Phe Leu Gln Cys
1 5 10 15
Ala Ser Leu Trp Cys Phe Gly Ser Trp Ser Glu Arg Trp Thr Ser Gly
20 25 30
Arg Ala Leu Lys Leu Ala Asp Pro Phe Ser Gln Phe Thr Asp Gln Ser
35 40 45
Ile Ile Ser Leu Ala Leu Phe Phe Gly Thr Thr Glu Ala Phe Arg Lys
50 55 60
Arg Met Val Val Glu Phe Lys Leu Leu Phe Gln Ile Leu Asn Phe Ala
65 70 75 80
Ala Phe Leu Leu Asp Ala Trp Lys Asp Ser Ala Ile Phe Leu Lys Phe
85 90 95
His Phe Thr Phe Arg
100

<210> 29714
<211> 147
<212> PRT
<213> A.fumigatus

<400> 29714
Ile Cys Glu Lys Phe Ser Glu Asn Leu Ser Asn Trp Glu Pro Ile Trp
1 5 10 15
Gly Ser Ser Ser Ala Ser Ser Ala Ala Asn Phe Pro Asn Ser Ser Ser
20 25 30
Ser Gln Leu Thr Glu Gly Cys Ser Phe Ser Asp Ser Thr Ser Leu Arg
35 40 45
Asn Ser Ser Phe Ser Ala Leu Leu Leu Ser Val Ser Ser Ala Ser Ser
50 55 60
Lys Ile Val Gly Arg Thr Asp Ser Cys Asp Ser Trp Met Pro Met Pro
65 70 75 80
Ser Lys Ser Ser Cys Asn Val Pro Arg Phe Gly Val Ser Ala Pro Gly
85 90 95
Val Ser Asp Gly Leu Pro Gly Glu Pro Ser Ser Ser Arg Ile Arg Ser
100 105 110
Leu Ser Ser Leu Ile Arg Ala Ser Ser Leu Ser Arg Cys Ser Ser Ala
115 120 125
Leu Leu Arg Arg Ser Val Ser Ala Trp Leu Leu Asn Ser Ser Cys Phe
130 135 140
Phe Arg Phe
145

<210> 29715
<211> 271
<212> PRT
<213> A.fumigatus

<400> 29715
Val Ile Ala Phe Arg Asp Trp Arg Val Pro His Leu Thr Ala Val Glu
1 5 10 15
Ala Leu Glu Asp Ala Val Phe Arg Gln Glu Arg Pro Gln Glu Asn Arg

```
            20                  25                  30
Pro Gly Ser Asp Thr Ser Ala Val Ala Ala Ala Leu Arg Glu Gly Met
        35                  40                  45
Glu Met Leu Leu Gly His Leu Gln Gln Pro His Ser Arg Lys Arg Gln
    50                  55                  60
Cys Glu Asp Ser Val Ser Asp Ala Pro Arg Ser Pro Cys Asn Lys Arg
65                  70                  75                  80
Arg Arg Val Thr Asp Thr Leu Val Glu Pro Asp Glu Phe Ser Asp Leu
                85                  90                  95
Ser Ser Ser Leu Pro Pro Ala Ala Val Leu Glu Ala Val Val Asp Ala
            100                 105                 110
Tyr Phe Ala Leu Val Gln Pro Trp Ile Pro Ile Phe His Glu Lys Arg
        115                 120                 125
Phe Arg Arg Arg Leu Arg Ser Pro Asp Lys Ala Arg Leu Glu Val Val
    130                 135                 140
Leu His Ala Met Val Val Ala Met Leu Lys His Val Asp Gln Ser Val
145                 150                 155                 160
Leu Pro Ala Asp Leu His Asp Ile Glu Ala Val Cys Glu Arg Ser Arg
                165                 170                 175
Lys Ile Val Val Leu Thr Ala Met Asp Asp Leu Tyr Val Glu Asn Leu
            180                 185                 190
Gln Ala Leu Ile Ile Ile Cys Phe Glu Asp Val Cys Trp Met Pro Leu
        195                 200                 205
Cys Asp Leu Pro Pro Leu Thr Gly Leu Asp Trp Ile Arg Gln Ser Leu
    210                 215                 220
Ser Ser Val Ala Asp Arg Arg Leu Leu Asp Ala Asn Gly Gly Val Pro
225                 230                 235                 240
Ser Val Glu Arg Ser Val Arg Lys Thr Thr Ile Pro Asp Glu Ser Cys
                245                 250                 255
Asn Pro Arg Pro Phe Leu Pro Thr Gly Gly Arg Leu Gly Gly Arg
            260                 265                 270
```

<210> 29716
<211> 83
<212> PRT
<213> A.fumigatus

```
<400> 29716
Ser Phe Lys Ile Ser Leu Ile Ser Glu Thr Leu Phe Cys Cys Val Cys
1               5                   10                  15
Leu Met Glu Thr Thr Lys Asp Trp His Pro His Cys Ser Tyr Ser Tyr
            20                  25                  30
Ser Ser Tyr Ser Ser Cys Tyr His Ser Tyr Gln Leu Leu Pro Cys Ile
        35                  40                  45
Ala Ala Ala Gly Pro Thr Ser Ser Lys Lys Pro Leu Leu Pro Cys Gln
    50                  55                  60
Gly Pro Gln Cys Ser Glu Thr Leu Ser Lys Thr Tyr Leu Ile Met Asn
65                  70                  75                  80
Leu Ser Tyr
```

<210> 29717
<211> 61
<212> PRT
<213> A.fumigatus

<400> 29717
Ala Arg Ala Phe Ala Asp Gly Arg Tyr Gly Asp Ala Glu Asp Ala Lys
1 5 10 15
Gln Val Asp Gln Arg Pro Phe Gln Lys Arg Ile Val Leu Val Lys Ile
20 25 30
Tyr Leu Glu His Asp Phe Ser Val Ser Asp Ser Leu Arg Arg Ile Ser
35 40 45
Ala Glu Cys Arg Glu Thr Val Ala Leu Gly Gln Glu Arg
50 55 60

<210> 29718
<211> 171
<212> PRT
<213> A.fumigatus

<400> 29718
Asp Ile Cys Pro Phe Gly Asn Ala Leu Leu Val Lys Lys Leu Pro Gly
1 5 10 15
Glu Ile Ile Arg Gln Ser Leu Glu Asn Ser Val Ser Asp Lys His Thr
20 25 30
Asp Gly Arg Phe Leu Gln Ile Ser Gly Leu Arg Ile Val Ala Ser Trp
35 40 45
His Arg Pro Glu Gly Ser Arg Ile Ile Asp Val Gln Leu Glu Arg Ser
50 55 60
Asp Gly Arg Leu Glu Pro Leu Asp Pro Arg Arg Met Tyr Thr Val Ala
65 70 75 80
Met Pro Ser Phe Ile Ala Gln Gly His Asp Gly Phe Thr Trp Leu Pro
85 90 95
Gln Leu Glu Thr Ile Val Asn Glu Glu Ala Gly Met Thr Asp Thr Ala
100 105 110
Leu Leu Leu Asp Ile Phe Gly His Ser Glu Asp Pro Tyr Gly Gly Asp
115 120 125
Cys Glu Ser Ser Ser His Ala Leu Gly Val Glu Arg Ala Arg Asn Leu
130 135 140
Thr Ile Val Gly Arg Ser Met Ser Asp Ser Leu Pro Val Val Lys Pro
145 150 155 160
Ala Val Glu Gly Arg Ile Arg Phe Val Asp Ala
165 170

<210> 29719
<211> 61
<212> PRT
<213> A.fumigatus

<400> 29719
Pro Pro Gln Gln Pro His Ser Ala Ser Leu Pro Thr Ala Ala Cys Pro
1 5 10 15
Trp Trp Cys Gly Tyr Ser Pro Leu Thr Met Ala Ala Phe Val Arg Val
20 25 30
Ser Gly Pro Pro Asn Gly Asn Phe Leu Ile Gly Tyr Pro Gly Ile Ser
35 40 45
Ala Thr Met Val Ser Ala Gly Gln Asn Asn Val Lys Pro
50 55 60

<210> 29720
<211> 70

<212> PRT
<213> A.fumigatus

<400> 29720
Gln Tyr Glu Gly Cys Asp Asn Met Ala Ala Ala Leu Gly Ala Phe Arg
1 5 10 15
Leu Ser Arg Arg Arg Leu Glu Ile Ile Leu Leu Leu Ile Phe Tyr Ile
20 25 30
Phe Tyr Leu Ser Pro Ala Ser Val Lys Tyr Leu Met Gly Asn Glu Phe
35 40 45
Arg Val Asp Leu Gly Gln Tyr Trp His Arg Tyr Glu Leu Met Gly Gln
50 55 60
Asp Tyr Glu Thr Ile Tyr
65 70

<210> 29721
<211> 233
<212> PRT
<213> A.fumigatus

<400> 29721
Pro Asn Leu Val Ile Phe Met Ile Leu Met Ile Ala Lys Val Asn Gln
1 5 10 15
Gly Leu Gln Gly Thr Ala Arg Asp Ile Leu Thr Thr Tyr Trp Gln His
20 25 30
Ile Ile Asn His Leu Glu Ser Asp Asn His Asp Tyr Lys Ile His Gln
35 40 45
Leu Pro Leu Ala Arg Ile Lys Lys Val Met Lys Ala Asp Pro Glu Val
50 55 60
Lys Met Ile Ser Ala Glu Ala Pro Ile Leu Phe Ala Lys Gly Cys Asp
65 70 75 80
Ile Phe Ile Thr Glu Leu Thr Met Arg Ala Trp Ile His Ala Glu Asp
85 90 95
Asn Lys Arg Arg Thr Leu Gln Arg Ser Asp Ile Ala Ala Ala Leu Ser
100 105 110
Lys Ser Asp Met Phe Asp Phe Leu Ile Asp Ile Val Pro Arg Glu Glu
115 120 125
Ala Thr Ser His Ala Lys Arg Ser Ser Gln Thr Thr Ala Gly Ala Ala
130 135 140
Gly Ser Ser Ala Ala Thr Gly Ala Gln Leu Pro Pro Ser Gln His Gly
145 150 155 160
Val Gln His Pro Pro His His Met Gly Pro Pro Asp Tyr Gly Ser Leu
165 170 175
Gly Gln His Gly Met Gly Gln Asp Gln Glu Tyr Arg Gln Pro Thr Met
180 185 190
Tyr Gly Gly Ala Val Gln Ser Asp Pro Thr Ala Ala Tyr Gly Gln Pro
195 200 205
Gln Ser Gln Ile Phe Glu Gly Met Tyr Asn Pro Tyr Pro His Leu Pro
210 215 220
Pro Gln Gln Val Cys Gln Asn Ser Ser
225 230

<210> 29722
<211> 156
<212> PRT
<213> A.fumigatus

<400> 29722
Asp Glu Leu Pro Ser Asn Gln Val Cys Asp Thr Leu Val Glu Arg Leu
1 5 10 15
Ser Ser Gln Tyr Leu Gly Gln Ile Val Gln Ile Leu Ile Asn Leu Glu
20 25 30
His Phe Glu Ser Ala Cys Arg Glu Leu Glu Glu Leu Leu Ala Ala Ala
35 40 45
Arg Ser Gln Gly Ala Ala Gly Gly Pro Ile Ser Leu Arg Ala Thr Glu
50 55 60
Lys Phe Arg Ser Asn Lys Lys Ala Ala Glu Lys Arg Ile Phe Glu Val
65 70 75 80
Val Asn Ser Lys Ile Asp Asp Leu Ile Glu Thr Ala Glu Tyr Asp Trp
85 90 95
Met Ala Leu Thr Pro Pro Thr Glu Pro Ser Asn Tyr Met Gln Thr Leu
100 105 110
Thr Arg Phe Leu Ser Asn Ile Met Asn Ser Thr Leu Leu Gly Leu Pro
115 120 125
Thr Glu Ile Lys Glu Leu Ile Tyr Phe Asp Ala Leu Ser His Ala Ala
130 135 140
Asn Met Ile Leu Val Ile Pro Tyr Tyr Ser Leu Ile
145 150 155

<210> 29723
<211> 70
<212> PRT
<213> A.fumigatus

<400> 29723
Lys Tyr His Thr Ser Ile Phe Phe Ala Val Ser Glu Met Gln Asn Ile
1 5 10 15
Leu Gln Trp Ile Ala Asp Cys Pro Asn Ser Thr Thr Trp Ile Asp Thr
20 25 30
Lys Met Ser Thr Ser Lys Glu Arg Ala Glu Thr Gly Ala Lys Asn Tyr
35 40 45
Ala Pro Tyr Leu Tyr Thr Tyr Leu Gln Val Arg Asp Thr Leu Cys Val
50 55 60
Leu Phe Tyr Cys Leu Ser
65 70

<210> 29724
<211> 226
<212> PRT
<213> A.fumigatus

<400> 29724
Leu Ile Pro Ser Phe Ala Val Leu Arg Glu Leu Arg Thr Leu Phe Gln
1 5 10 15
Asn Met Ile Thr Ser Ser Asn Ser Phe Val Thr Pro Arg Pro Glu Leu
20 25 30
Ala Arg Leu Thr Leu Ile Ser Pro Ser Asn Glu Ala Ala Ile Arg Arg
35 40 45
Arg Ser Thr Ile Ser Met Thr Arg Pro Gly Gly Leu Gly Glu Ile Asn
50 55 60
Gly Met Pro Ile Met Gly Pro Leu Gly Pro Pro Leu Pro Met Ala Asp
65 70 75 80

```
Gln Thr Gln Ser Pro Thr Asp Ala Glu Thr Glu Thr Pro Lys Arg Lys
                85                  90                  95
Thr Thr Ser Asp Val Asp Ser Glu Ala Thr Leu Val Ser Glu Thr Ala
            100                 105                 110
Lys Pro Asp Thr Ser Leu Gly Pro Ser Glu Asp Lys Glu Asn Glu Val
        115                 120                 125
Pro Pro Ala Asp Ala Met Leu Thr Asp Ile Pro Val Ser Gln Asp Ile
    130                 135                 140
Glu Ser Asn Leu Ser Pro Lys Asp Glu Thr Pro Ala Ile Ala Phe Gly
145                 150                 155                 160
Pro Pro Asn Gln Pro Pro Pro Val Pro Pro Arg Pro Thr Ile Gln Val
                165                 170                 175
Asp Pro Gln Lys Gln Leu Leu Glu Glu Val Glu Ile Gly Ala Gln Gln
            180                 185                 190
Asp Val Thr Glu Val Ile Asn Asn Val Leu Phe Gln Ser Gln Cys Ala
        195                 200                 205
Ile Lys Pro Ile Ala Phe Ala Gln Asp Gly Glu Gln Leu Asp Gln Val
    210                 215                 220
Lys Glu
225
```

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<210> 29725
<211> 157
<212> PRT
<213> A.fumigatus

<400> 29725

```
His Met Ile Ala Ser Leu Phe Tyr Gly Arg Thr Lys Ser Tyr Ile Leu
1               5                   10                  15
Ala Glu Ala Gly Ala Arg Ser Lys Glu Glu Trp Trp Cys Asp Ile Lys
            20                  25                  30
Val Asp Val Ala Thr Gly Pro Arg Asp Ile Tyr Ser Ala Ile Asp Gly
        35                  40                  45
Ala Phe Asp Ala Gln Lys Val Asn Val Asp Asp Thr Val Val Glu Gln
    50                  55                  60
Phe Gly Ala Ile Ser Lys Leu Pro Pro Val Leu Gln Ile Gln Val Gln
65                  70                  75                  80
Arg Val Gln Phe Asp Pro Val Lys Lys Ser Ser Phe Lys Ser Thr His
                85                  90                  95
His Leu Glu Leu Lys Glu Thr Ile Tyr Leu Asp Arg Tyr Met Asp Thr
            100                 105                 110
Gln His Pro Glu Ile Met Asn Arg Arg Arg Gln Cys Trp Glu Trp Lys
        115                 120                 125
Asn Thr Leu Lys Thr Leu Glu Asp Arg Arg Ala Glu Leu Leu Arg Gln
    130                 135                 140
Thr Val Arg Asp Asp Ile Tyr Gln Cys Cys Val Lys Asn
145                 150                 155
```

<210> 29726
<211> 82
<212> PRT
<213> A.fumigatus

<400> 29726

```
Val Leu Leu His Arg Arg Met Asn Arg Ala Phe Val Ser Gly Glu Ser
1               5                   10                  15
```

```
Gly Ile Ala Glu Glu Val Ser Val Ser Ser Pro Trp Arg Lys Thr Val
            20                  25                  30
Ser Asp Pro Leu Tyr Lys Phe Arg Tyr Ile Thr Val Leu Ile Ile Glu
        35                  40                  45
Gln Gly Val Thr Asn Val Glu Gln Ala Glu Ile Phe Leu Gly Val Asp
    50                  55                  60
Ser Thr Thr Ser Asp Glu Phe Val Leu Thr Met Tyr Thr Thr Lys Val
65                  70                  75                  80
Lys Gly
```

<210> 29727
<211> 294
<212> PRT
<213> A.fumigatus

<400> 29727

```
Met Leu Ile Val Phe Arg Leu Met Thr Thr Arg Arg Leu Gly Thr Leu
1               5                   10                  15
His Gly Val Leu Ser Lys Leu Met Gln Lys Gly Arg Asn Ser Ala Val
            20                  25                  30
Leu Arg His Phe Leu Lys Thr Gly Glu Met Thr Thr Gly Glu Met Asp
        35                  40                  45
Val Ala Asp Ala Tyr Arg Leu Leu Gln Ile Pro Asp Arg Thr Val Asp
    50                  55                  60
Asp Ala Ala Ile Met Ala Ala Tyr Thr Ile Cys Val Asp Glu Ala Pro
65                  70                  75                  80
Gly Gln Ala Glu Arg Tyr Tyr Gln Ala Leu Ser Ile Ile Ala Lys Glu
                85                  90                  95
Lys Asn Ser Ser Leu Leu Ser Ser Met Ile Ala Gly Pro Gly Ala Glu
            100                 105                 110
Ser Gly Arg Asp Leu Ser Glu Trp Pro Val Gly Leu Gln Asn Ile Gly
        115                 120                 125
Asn Thr Cys Tyr Leu Asn Ser Leu Leu Gln Phe Tyr Phe Ser Ile Arg
    130                 135                 140
Pro Phe Arg Glu Met Val Leu Asp Phe Glu Ser Phe Arg Met Glu Leu
145                 150                 155                 160
Asp Asp Glu Ser Leu Ser Lys Lys Arg Val Gly Ser Arg Glu Val Leu
                165                 170                 175
Lys Lys Glu Val Glu Arg Ser Gln Thr Cys Arg Cys Cys Pro Val Val
            180                 185                 190
Cys Thr Ile Ser Glu Arg Leu Thr Asn Ser Phe Ile Arg Ser Pro Glu
        195                 200                 205
Arg Ile Thr Asp Ala Val Ser Lys His Asp His Phe Ile Lys Phe Phe
    210                 215                 220
Cys Asp Ser Ser Ser Gly Val Ser Thr Phe Asp Ala Asn Lys Pro Val
225                 230                 235                 240
Gln Arg Gly Ser Asn Ser Ala Pro Val Asp Asp Ile Tyr Asp Pro Thr
                245                 250                 255
Trp Arg Thr Gly Arg Asp Gln Arg His Ala Tyr His Gly Ser Pro Arg
            260                 265                 270
Pro Ala Thr Ala Asn Gly Arg Ser Asn Ser Lys Ser Asn Arg Cys Arg
        275                 280                 285
Asp Arg Asp Ala Gln Thr
    290
```

<210> 29728
<211> 174
<212> PRT
<213> A.fumigatus

<400> 29728
Val Asp Leu Ile Leu Asn His Met Phe Ser Lys Gly Cys Pro Pro Thr
1 5 10 15
Thr Ile Ile Ser Met Asn Ala Arg Tyr Asp Pro His Tyr His Met Lys
20 25 30
Val Gly Ala Thr Leu Arg Pro Leu Arg Tyr Glu Asn Tyr Leu Leu Ile
35 40 45
Gly Thr Gly Gly Ala Val His Asn Leu Tyr Arg Asn Arg Trp Ala Pro
50 55 60
Met Leu Arg Phe Arg Asp Asn Phe Ala Met Glu Thr Pro Pro Glu Glu
65 70 75 80
Trp Ala Leu Glu Phe Arg Gln Ala Val Glu Asp Val Ile Thr Lys Thr
85 90 95
Ser Gly Pro Ala Leu Arg Arg Ala Met Thr Arg Leu Met Lys His Pro
100 105 110
Gln Tyr Arg Asp Ala His Ala Thr Asp Asp His Phe Met Ala Ala Met
115 120 125
Phe Val Ala Gly Ala Met Gly Asp Phe Glu Asp Thr Gly Ser Pro Ala
130 135 140
Val Leu Gly Ala Glu Ser Trp Glu Leu Thr Asn Met Cys Asn Ser Gln
145 150 155 160
Phe Thr Leu Gly Ser Trp Ser Lys Asp Ile Ala Val Tyr Leu
165 170

<210> 29729
<211> 173
<212> PRT
<213> A.fumigatus

<400> 29729
Ser Leu Leu Ser Leu Thr Val Phe Arg Ser Gly Pro Leu Ala Ala Thr
1 5 10 15
Tyr Ala Phe Gly Ser Ala Ser Ala Ala Lys Tyr Ile Thr Gln Phe Ile
20 25 30
Asp Ala Ala Val Ser Trp Ile Asn His Val Pro Val Asp Met Leu Ser
35 40 45
Thr Ser Ser Phe Pro Phe Pro Ser Thr Gln Leu Thr Asp Ser Val Gly
50 55 60
Pro Ala Tyr Pro Ile Asn Thr Ala Pro Ser Thr Glu Thr Arg Tyr Thr
65 70 75 80
Pro Ala Leu Phe Gln Val Pro Arg Pro Gln Phe Val Thr Glu Ala Asn
85 90 95
Thr Ser Ala Leu Val Arg Ser Ile Leu Asp Pro Ser Asp Ala Thr Arg
100 105 110
Ser Ala Thr Ala Trp Arg Glu Ala Leu Ala Pro Leu Pro Ser Thr Gly
115 120 125
Gln Arg Pro Gly Arg Arg Ile Gly Phe Phe Glu Gln Gly Leu Ile Thr
130 135 140
Gly Gly Val Ile Thr Leu Ala Thr Leu Ile Ala Thr Val Ser Thr Val
145 150 155 160
Gly Trp Tyr Thr Phe Thr Tyr Val Arg Arg Leu Arg Ala

165 170

<210> 29730
<211> 172
<212> PRT
<213> A.fumigatus

<400> 29730
Ser Ala Arg Ser Ser Ala Ser Ala Ala Ala Ser Pro Pro Ser Pro Pro
1 5 10 15
Pro Pro Pro Pro Ala Gln Ser Lys Ser Ala Thr Ala Ser Ala Ser Ala
20 25 30
Pro Arg Ala Cys Pro Ala Phe Ala Leu Thr Ala Ser Pro Ala Pro Lys
35 40 45
Ala Ala Arg Thr Thr Ala Pro Ala Ser Gln Ala Pro Thr Thr Ala Ala
50 55 60
Thr Pro Asp Lys Ser Lys Ala Tyr Gly Gly Phe Ala Glu Phe Trp Arg
65 70 75 80
Gly Pro Ala His Phe Ala Phe Lys Ile Pro Asp Ala Leu Pro Ser Ala
85 90 95
Ala Ala Ala Pro Leu Leu Cys Gly Gly Val Thr Val Tyr Ala Pro Arg
100 105 110
Arg Lys Tyr Ala Ala Arg Pro Gly Thr Thr Val Gly Asn Val Gly Ile
115 120 125
Gly Gly Val Gly Ala Tyr Gly Asp Thr Val Trp Gln Ile His Gly Leu
130 135 140
Gly Thr Ala Trp Val Ala Ile Ser Arg Ser Ser Lys Gln Thr Gly Gly
145 150 155 160
Lys Ala Pro Gly Arg Gly Leu Gly Ala Thr Phe Leu
165 170

<210> 29731
<211> 79
<212> PRT
<213> A.fumigatus

<400> 29731
Pro Leu Leu Ser Pro Val Glu Arg Phe His Leu Ser Thr Thr Asn Leu
1 5 10 15
Cys Ile Ser Asp Gly Asn Thr Leu Arg Thr Ile Arg Arg Leu Tyr Thr
20 25 30
Glu Tyr Thr Arg Thr Asn Tyr Lys Phe Thr Leu Lys Thr Ser Ser Tyr
35 40 45
Pro Ile Asn Asp Val Leu Val Thr Thr Gln Asn Ile Ser Trp Leu Gly
50 55 60
Cys Pro Arg Arg His Gln Pro Ser Asp Ile His His Leu Arg Thr
65 70 75

<210> 29732
<211> 230
<212> PRT
<213> A.fumigatus

<400> 29732
Arg Pro Pro His Ile Gln Ser Met Met Ser Ser Ser Pro Pro Lys Thr
1 5 10 15

```
Phe His Gly Trp Val Ala Arg Asp Ala Thr Ser Pro Leu Thr Phe Thr
            20                  25                  30
Thr Phe Glu Pro Lys Pro Phe Thr Glu Thr Asp Ile Glu Val Lys Val
        35                  40                  45
Ser His Cys Gly Ile Cys Gly Thr Asp Ile His Thr Leu Arg Ser Gly
    50                  55                  60
Trp Gly Pro Ser Asp Tyr Pro Cys Val Val Gly His Glu Ile Ile Gly
65                  70                  75                  80
Thr Val Val Arg Ile Gly Arg Ser Val Pro Thr Leu Ala Ser Ser Pro
                85                  90                  95
Ala Ser Arg Thr Ile Lys Val Gly Asp Arg Val Gly Ile Gly Ala Gln
            100                 105                 110
Ser Met Ser Cys Leu Arg Ala Asp Cys Glu Pro Cys Ala Glu Gly Arg
        115                 120                 125
Glu Asn Tyr Cys Pro Arg Ile Thr Gly Pro Tyr Asn Ser Arg Tyr Ala
    130                 135                 140
Arg Gln Glu Gln Ser Ile Arg Arg Val Arg Gly Ile Leu Ala Arg Ala
145                 150                 155                 160
Cys Thr Leu Cys Val Gln Asp Pro Arg Cys Ala Ala Leu Arg Gly Arg
                165                 170                 175
Ser Ala Thr Ala Leu Arg Arg Arg Asp Gly Leu Arg Ala Ala Ala Glu
            180                 185                 190
Ile Cys Cys Pro Ala Gly Asp Asn Arg Trp Glu Cys Arg Asp Trp Arg
        195                 200                 205
Gly Gly Gly Ile Trp Gly Tyr Cys Leu Ala Asn Pro Trp Ala Gly Asn
    210                 215                 220
Arg Val Gly Cys Asn Leu
225                 230

<210> 29733
<211> 211
<212> PRT
<213> A.fumigatus

<400> 29733
Arg Ser Val Arg Pro Thr Asn Gln His Glu Ser Ser Ala Arg Leu Val
1               5                   10                  15
Arg Gly Ala Gln Glu Phe Thr Met Arg Gly Ser Lys Gln Leu Thr Glu
            20                  25                  30
Ser Ser Ile Phe Arg Ser Gln Pro Leu Cys Ile Leu Val Gly Ser Glu
        35                  40                  45
Gln Ile Arg Leu Ser Ile His Ser Ala Val Val Glu Arg Phe Pro Gln
    50                  55                  60
Pro Leu Arg Glu Asp Leu Asp Ile Pro Gly Arg Ile Gln Gly Glu Glu
65                  70                  75                  80
Pro Ile Val Val Arg Asn Ile Asp Leu Asp Thr Phe Ala Leu Tyr Cys
                85                  90                  95
Glu Tyr Val Tyr Thr Gly Asn Tyr Ser Ile Ser Glu Thr Val Leu Ala
            100                 105                 110
Ser Gln Asn Ser Ser Gln Val Ser Leu Gln Leu Glu Glu Ala Asn Ala
        115                 120                 125
Gln Ala Phe Asp Gly Pro Phe Ala Val Val Val Pro Lys His Pro Arg
    130                 135                 140
Glu Ser Arg Thr Leu Leu Pro Thr Leu Phe Ile His Ser Trp Ile Tyr
145                 150                 155                 160
Ile His Ala Ala Lys Tyr Lys Trp Glu Ser Leu Lys Ser Leu Ser Phe
```

```
                165                 170                 175
Gln Lys Phe Gln Asn Ala Leu Glu Thr Ser Pro Leu Thr Ala Ala Leu
            180                 185                 190
Ile Asp Glu Leu Ala Pro Met Phe Cys Phe Ile Ser Glu Gln Glu Ser
        195                 200                 205
Glu Ser Pro
    210
```

<210> 29734
<211> 61
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (21)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29734

```
Gly Pro Glu Pro Thr Pro Val Cys Ser Leu Gly Val Ala Pro Ser Pro
1               5                   10                  15
Pro Pro Pro Pro Xaa Glu Gly Asp Gln Glu Thr Pro Lys Arg Val Ser
            20                  25                  30
Pro Pro Pro Pro Thr Pro Pro Pro His Pro Pro Pro Pro Pro Pro Pro
        35                  40                  45
Pro Pro Thr Thr Ala Pro Pro Pro Pro Pro Thr Pro Pro
    50                  55                  60
```

<210> 29735
<211> 268
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (80),(228)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29735

```
Asp Tyr Asp Glu Glu Leu Val Val Ala Cys Asp Leu Leu Cys Glu Ser
1               5                   10                  15
Ser Phe Leu Ile Arg Ile Gly Arg Val Glu Pro Val Ala Gln Gly Met
            20                  25                  30
Arg Arg Arg Gly Arg Lys Val Arg Gly Gly Thr Lys Glu Ile Val Glu
        35                  40                  45
Gly Asn Phe Leu Lys Glu Lys Glu Met Trp Lys Ile Lys Lys Lys Lys
    50                  55                  60
Asp Lys Lys Phe Arg Glu Asn Ile Thr Ile Phe Thr Asp Ser Ser Xaa
65                  70                  75                  80
Lys Glu Ala Glu Tyr Pro Pro Gly Arg Ser Leu Thr Glu Cys Ser Gln
                85                  90                  95
Ala Pro Ile Gln Trp His His Tyr His Pro His Leu Pro Ala Leu Arg
            100                 105                 110
Pro Leu Thr Pro Ala Cys Pro Cys Leu Pro Ser Asp Pro His Pro Ser
        115                 120                 125
Pro His Ser Pro Leu Pro Pro Leu Asn Ala Pro Pro Thr Pro Pro Gln
```

```
    130                 135                 140
Pro Leu Pro Ala Pro Leu Pro Ala Pro His Pro Pro Pro Leu Leu Ala
145                 150                 155                 160
Pro Gln Arg His Pro Pro Ala Thr Pro Leu Leu Pro Pro Pro Thr Pro
                165                 170                 175
Pro His Thr Pro Ser Gln Cys Phe Gly Thr Asn Gln Thr Asn Thr Thr
            180                 185                 190
His Pro His His Pro Ala Pro Thr Pro Asp Pro Leu Ser Phe Lys Gly
        195                 200                 205
Leu Ser Arg His Arg Phe Val Pro Leu Ala Trp Pro Pro Pro Arg Pro
    210                 215                 220
Pro Pro Pro Xaa Lys Gly Thr Arg Lys His Gln Ser Glu Cys Pro Pro
225                 230                 235                 240
Pro Pro Pro Pro Pro Pro Pro Thr Pro Pro Pro Pro Pro Pro Arg Pro
                245                 250                 255
Pro Pro Pro Pro Pro Pro Pro Arg Pro Pro Pro Pro
            260                 265
```

<210> 29736
<211> 96
<212> PRT
<213> A.fumigatus

<400> 29736

```
Pro Ile Ser Cys Phe Leu Cys Arg Ile Lys Asn Pro Leu Ala Asp Leu
1               5                   10                  15
Thr Pro Ser Gln Val Ile Arg Asp Val Glu Glu Phe Ala Asn Glu His
            20                  25                  30
Asp Leu Ile Asp Ile Leu Pro Glu Leu Lys Lys Gly Ala Leu Val Ala
        35                  40                  45
Arg Asp Pro Glu His Phe Glu Thr Val Pro Asp Met Thr Glu Ala Glu
    50                  55                  60
Ile Thr Ala Ile Arg Asp Glu Thr Glu His Lys Trp Arg Gln Pro Phe
65                  70                  75                  80
Ala Leu Tyr Phe Thr Ile Ile Leu Cys Ser Ile Gly Ala Ala Val Gln
                85                  90                  95
```

<210> 29737
<211> 135
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (41)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29737

```
Gly Gly Gly Trp Ala Gly Gly Gly Gly Arg Trp Trp Gly Ala Gly Gly
1               5                   10                  15
Gly Gly Gly Gly Gly Gly Gly Gly Gly Trp Gly Gly Gly Gly Thr Leu
            20                  25                  30
Ala Leu Val Phe Pro Gly Pro Leu Xaa Gly Gly Gly Gly Ala Gly Arg
        35                  40                  45
Gly Pro Arg Gln Gly Asn Lys Pro Val Ser Ala Gln Ala Leu Lys Ala
    50                  55                  60
```

```
Gln Gly Val Gly Arg Gly Gly Gly Val Met Gly Val Gly Ser Val Ser
65                  70                  75                  80
Leu Val Ser Ala Lys Ala Leu Gly Gly Gly Val Gly Gly Ser Gly Gly
                85                  90                  95
Gly Glu Glu Gly Ser Arg Gly Arg Val Ala Leu Trp Gly Glu Gln Gly
            100                 105                 110
Gly Trp Val Gly Gly Gly Gln Gly Gly Gly Glu Gly Leu Trp Trp Gly
        115                 120                 125
Gly Arg Gly Val Glu Gly Arg
    130                 135
```

<210> 29738
<211> 172
<212> PRT
<213> A.fumigatus

<400> 29738

```
Ser Gln Ser Phe Ser Cys Ile Lys Thr Trp Leu Thr Ser Met Ser Arg
1               5                   10                  15
Gly Pro Tyr Ile Ala Ser Ala Ala Ile Gly Cys Trp Leu Ser Asp Pro
            20                  25                  30
Cys Asn Ala Phe Leu Gly Arg Arg Gly Ala Ile Phe Ile Ser Ala Ile
        35                  40                  45
Phe Cys Val Leu Thr Pro Ile Gly Ser Ala Val Ala Gln Thr Trp Pro
    50                  55                  60
Gln Leu Phe Val Thr Arg Leu Leu Leu Gly Leu Gly Met Gly Leu Lys
65                  70                  75                  80
Ala Ser Thr Val Pro Ile Phe Cys Ala Glu Asn Thr Pro Ala Ser Val
                85                  90                  95
Arg Gly Gly Leu Val Met Cys Trp Gln Leu Trp Thr Ala Phe Gly Ile
            100                 105                 110
Phe Leu Gly Phe Ser Ala Asn Leu Ala Val Lys Asp Thr Gly Asp Ile
        115                 120                 125
Ala Trp Arg Leu Gln Phe Gly Ser Ala Phe Ile Pro Ala Ile Pro Leu
    130                 135                 140
Leu Val Gly Val Tyr Phe Cys Pro Glu Ser Pro Arg Trp Tyr Ile Lys
145                 150                 155                 160
Asn Leu His His Gly Gly Gly Arg Ile Arg Ala Ser
                165                 170
```

<210> 29739
<211> 329
<212> PRT
<213> A.fumigatus

<400> 29739

```
Gly Pro Leu Gln Val Gly Arg Arg Leu Ala Ser Asn Phe Thr Lys Gly
1               5                   10                  15
Arg Ile His Leu Ala Gly Asp Ala Ile His Thr His Ser Pro Lys Ala
            20                  25                  30
Gly Leu Gly Met Asn Met Ser Met Gln Asp Gly Phe Asn Ile Gly Trp
        35                  40                  45
Lys Met Ala Leu Val Ala Lys Gly Val Ala Arg Pro Ser Ile Leu Ala
    50                  55                  60
Thr Tyr Glu Leu Glu Arg Lys Arg Thr Ala Gln Met Leu Ile Asp Leu
65                  70                  75                  80
```

```
Asp Arg Arg Leu Gln Pro Leu Phe Val Lys Gln Gln Gln Ser Asp Ala
                85                  90                  95
Thr Glu Ser Thr Ala Pro Ser Asn Gly Lys Glu Thr Leu Ile Asp Val
            100                 105                 110
Ile Gln Leu Ser Ile Ala Phe Ala Asn Gly Tyr Ala Cys His Tyr Gly
        115                 120                 125
Pro Ser Ser Leu Val His Lys Gly Gly Glu Asn Ile Ala Ala Asn Leu
    130                 135                 140
Ile Pro Gly Glu Arg Phe Pro Pro Val Lys Val Arg Asn Gln Ala Asp
145                 150                 155                 160
Gly Gln Ala Trp Trp Thr Thr Arg Leu Phe Lys Ser Asp Gly Arg Phe
                165                 170                 175
Arg Ile Val Leu Leu Ala Gly Asp Leu Arg His Lys Tyr Gln Arg Gln
            180                 185                 190
Arg Val Glu Ala Phe Ser Ala His Leu Ala Ser Ala Glu Ser Val Leu
        195                 200                 205
Gln Arg Tyr Arg Leu Glu Gly Glu Lys Leu Asp Ser Leu Ile Glu Val
    210                 215                 220
Ile Thr Ile His Ser Ala Pro Met Arg Glu Met Asp Phe Pro Asp Phe
225                 230                 235                 240
Pro Glu Met Leu Arg Leu Phe Asp Gln Glu Arg Gly Trp Ala Tyr Asp
                245                 250                 255
Lys Ile Trp Ser Asp Asp Asp Cys Phe Trp Asp Arg Gln Cys Thr Gly
            260                 265                 270
Lys Gly Tyr Glu Thr Trp Gly Val Asp Arg Ile Arg Gly Ala Leu Val
        275                 280                 285
Ile Leu Arg Pro Asp Gln His Ile Gly Trp Val Gly Asn Ile Glu Asp
    290                 295                 300
Val Asp Glu Met Thr Cys Tyr Phe Glu Gln Ile Phe Gln Pro Pro Gln
305                 310                 315                 320
Lys Ser Val Asn Met Glu Gly Asn Ala
                325
```

<210> 29740
<211> 89
<212> PRT
<213> A.fumigatus

<400> 29740

```
Leu Leu Val Ala Asp Ile Arg Arg Val Cys Thr Val Glu Thr Glu His
1               5                   10                  15
Gly Thr Leu Leu Ile Ile Pro Arg Glu Arg Gln Leu Val Arg Leu Tyr
            20                  25                  30
Leu Pro Leu Gln Val Val Asp Gly Ile Ser Gly Ser Leu Asp Arg Ser
        35                  40                  45
Ser Val Thr Leu Asp Met Val Arg Gln Arg Ala Lys Glu Met Leu Arg
    50                  55                  60
Pro Phe Asp Phe Asp Phe Lys Val Cys Asp Trp Trp Thr Val Tyr Gln
65                  70                  75                  80
Val Trp Phe Asn Ser Asn Ser Ala Phe
                85
```

<210> 29741
<211> 69
<212> PRT
<213> A.fumigatus

<400> 29741
Ser Asp Ile Pro Leu Tyr Tyr Ile Asp Gln Thr Ile Gln Ala Arg Phe
1 5 10 15
Ala Thr Ala Asp Gln Arg Arg Val Leu Ile Phe Glu Phe Asn Pro Phe
20 25 30
Thr Trp Gln Tyr Ala Leu Ile Phe Ser Thr Thr Cys Phe Asp Arg His
35 40 45
Ile Gly His Ala Leu Leu Pro Ser Ser Tyr Ser Gln Leu Lys Ala Arg
50 55 60
Asp Val Leu Ile Gly
65

<210> 29742
<211> 156
<212> PRT
<213> A.fumigatus

<400> 29742
Val Ser Tyr Ser Asp Pro Ser Leu Arg Cys Ser Thr Asn Gly Pro Ser
1 5 10 15
Pro Ile Phe Arg Ser Val Glu Phe Ala Ser Asp Ile Ser Val Thr Glu
20 25 30
His Asp Val Gln Ala Leu Ala Arg Leu Ser Ser Ala Cys Ala Lys His
35 40 45
Phe Ala Leu Ser Asn Asp Leu Tyr Ser Tyr Pro Lys Glu Val Ile Ala
50 55 60
Glu Lys Glu Asn Gly Glu Pro Leu Val Asn Ala Val Lys Val Val Gln
65 70 75 80
Glu Leu Met Asn Val Ser Ser Ser Ser Ala Lys Ser Ile Leu Arg Gly
85 90 95
Ile Ile Leu Asp Thr Glu Arg Gln Ile Gly Glu Glu Tyr Glu Ser Leu
100 105 110
Val Asn Ala Lys Ser Thr Thr Leu Ser Gln Leu Val Tyr Ala Arg Gly
115 120 125
Leu Ile Ile Ala Val Ala Gly Asn Met Phe Phe Ser Ala Thr Ser Tyr
130 135 140
Arg Tyr Ala Lys Ala Val Asp Gly Ser Arg Leu Met
145 150 155

<210> 29743
<211> 101
<212> PRT
<213> A.fumigatus

<400> 29743
Thr Arg Gln Arg Gly Cys Ala Ile Asp Cys Pro Ala Gln Val Tyr Ser
1 5 10 15
Asn Lys Ser Lys Val Phe Asn Tyr Lys Lys Met Glu Ser Asp Tyr Lys
20 25 30
His Gly Val Ser Cys Gln Glu Ile Thr Thr Gly Ala His Arg Ser Pro
35 40 45
Ser Val Leu Asp Ser Glu Cys His Asp Ile Val Ile Arg His Val Met
50 55 60
Ile Thr Lys Leu Ser Ile Ser Tyr Ala Leu Leu Asn Val Met Asp Gln
65 70 75 80

```
Ile Asn Val Lys Asp Leu His Ile Leu Val Leu Gly Val Leu Val Leu
                85                  90                  95
Ser Ile Tyr Pro Asn
            100
```

<210> 29744
<211> 422
<212> PRT
<213> A.fumigatus

<400> 29744

```
Ala Tyr Ala Cys Ala Asp Ala Gly Ser Cys Gly Glu Asp Tyr Arg Ala
1               5                  10                  15
Cys Asp Thr Cys Lys Lys Lys Lys Ile Arg Cys Asp Gly Thr Ile Pro
            20                  25                  30
Cys Thr Asn Cys Thr Lys Arg Lys Val Ser Cys Ala Tyr Asp Met Lys
        35                  40                  45
Tyr Gly Arg Gly Arg Pro Pro Thr Pro Pro Ser Ser Ala Ala Ile Arg
    50                  55                  60
Glu His Gln Asn Arg Leu Arg Ser Asn Tyr Ser Tyr Asp Leu Ser Asn
65                  70                  75                  80
Trp Gln Pro Pro Val Ser Val Ala Pro Glu Ile Ser Ser Pro Leu Val
                85                  90                  95
His Ser Arg Ala Ser Pro Thr Gly Glu Ile Glu Gly Gln Tyr Phe Asp
            100                 105                 110
Pro Thr Ser Gly Leu Asn Phe Leu His Arg Ala Trp Lys Lys Leu Leu
        115                 120                 125
Thr Thr Gln Asn Asp Gln Pro Ala Ser Tyr Arg Leu Ser Val Ala Glu
    130                 135                 140
Gln Asn Gln Leu Leu Thr Ser Ala Gly Asp Arg Pro Phe His Ile Glu
145                 150                 155                 160
Ser Asp Ala Leu Asp Ser Phe Ile Pro Asp Ala Ser Thr Ala Arg Lys
                165                 170                 175
Leu Gln Gln Phe Tyr Phe Glu Thr Cys Val Val Thr Tyr Arg Met Phe
            180                 185                 190
His Arg Pro Ser Val Glu Gly Trp Met Glu Ile Phe Leu Lys Asp Gly
        195                 200                 205
Gln Gly Ala Gly Pro Thr Ala Arg Ser Leu Gly Lys Ala Lys Thr Ala
    210                 215                 220
Thr Leu Leu Thr Ile Met Ala Ile Ala Asn Leu Arg Leu His Arg Val
225                 230                 235                 240
Ser Gly Glu Thr Ser Thr Glu Ala Glu Ser Leu Ala Leu Lys Arg Ser
                245                 250                 255
Asp His Leu Phe Cys Ala Gly Met Arg Met Thr Glu Glu Glu Ile Gly
            260                 265                 270
Phe Pro Arg Leu Glu Ser Ala Gln Ala Arg Leu Val Gln Val Leu Tyr
        275                 280                 285
Leu Leu Gln Thr Ser Arg Ile Asn Lys Ala Trp Tyr Thr Phe Gly Asn
    290                 295                 300
Ala Phe Gln Ile Thr Leu Ser Leu Gly Met His Arg Arg Arg Asp Gln
305                 310                 315                 320
Lys Arg Asp Tyr Pro Phe Thr Ser Arg Arg Gln Asp Tyr Ile Thr Ser
                325                 330                 335
Glu Cys Tyr Lys Arg Thr Phe Trp Val Ala Tyr Thr Val Asp Arg Tyr
            340                 345                 350
Leu Ser Val Val Leu Gly Arg Pro Arg Leu Tyr Gln Asp Glu Asp Ile
```

```
        355                 360                 365
Asp Gln Asn Phe Pro Asp Ile Val Asn Asp Glu Asp Met Thr Pro Asp
    370                 375                 380
Gly Phe Ser Ile Ser Asp Asp Pro Ala Asp Cys Tyr Ile Asp Ala Leu
385                 390                 395                 400
Ile Tyr His Ala Lys Tyr Ile Thr Thr Pro Ala Asp His His Asn Thr
                405                 410                 415
Ala Leu Leu Ile Arg Leu
            420
```

<210> 29745
<211> 238
<212> PRT
<213> A.fumigatus

<400> 29745

```
Ser Phe Ser Lys Phe Lys Ala Gly Ile Ala Asp Arg Leu Thr Ser Leu
1               5                   10                  15
Gln Asn Glu Ala Asp Ala Ala Arg Met Glu Glu Arg Gln Leu Ala Val
            20                  25                  30
Glu Met Asp Gln Leu Arg Glu Phe Glu Arg Glu Lys Gln Asn Ser Arg
        35                  40                  45
Thr Arg Ile Lys Tyr Met Glu Gly Tyr Phe Asn Asn Ala Gln Pro Pro
    50                  55                  60
Pro Thr Ser Asp Ser Glu Ser Asn Ser Gly Ser Asp Gln Thr Thr Pro
65                  70                  75                  80
Val Arg Gln Tyr Thr Asn Gln Gln Lys Ala Leu Leu Ala Gln Glu Tyr
                85                  90                  95
His Asp His Glu Cys Met Asp Arg Leu His Ser Ala Lys Ile Lys Val
            100                 105                 110
Leu Arg Asp Arg Gln Glu Ile Arg Leu Gln Glu Ala Ile Ala Arg Met
        115                 120                 125
Ala Arg Glu Leu Asp Ala Leu Ile Asp Lys His Ala Leu Glu Phe Ala
    130                 135                 140
Glu Leu Gln Arg Gln His Gln Gln Glu Glu Ala Leu Ala Met His Ala
145                 150                 155                 160
Phe Glu Ala Lys Lys Thr Lys Leu Arg His Arg Trp Asn Leu Glu Glu
                165                 170                 175
Ala Ile Leu Arg Lys Lys Leu Glu Leu Gln His Gly His Pro Tyr Gly
            180                 185                 190
Pro Leu Pro Pro Leu Ser Phe Ser Glu Ser His Tyr Glu Thr Arg Asp
        195                 200                 205
Ser Ala Ile Cys Val Ser Glu Asn Ser Thr Asn Met Ser Gly Asp Glu
    210                 215                 220
Gln Thr His Pro Lys Glu Ser Glu Glu Ser Glu Pro Val His
225                 230                 235
```

<210> 29746
<211> 278
<212> PRT
<213> A.fumigatus

<400> 29746

```
Asn Asn Glu Asp Glu Ala Leu Arg Ala Trp Arg Ser Ala Leu Asp Thr
1               5                   10                  15
Ile Ser Tyr His Asn Ala Tyr Arg Leu Ser Ser Thr Tyr Thr Pro Lys
```

```
            20                  25                  30
Asn Glu Thr Glu Lys Ala Leu Gln Asp Ser Ile Arg Gln Leu Glu Leu
        35                  40                  45
Gln Cys Arg Glu Arg Val Asp Leu Leu Glu Ala Leu Arg Glu Ser Arg
    50                  55                  60
Lys Glu Ala Gln Glu Lys Asp Ser Pro Thr Thr Ser Gly Ile Ser His
65                  70                  75                  80
Arg Phe Phe Lys Gly Lys Ser Ala Ser Lys Pro Pro Thr Ser Asn Thr
                85                  90                  95
Pro Gly Trp Ile Gly Asp Gly Thr Val Pro Pro Val Asp Tyr Thr Asp
            100                 105                 110
Leu Ser Arg Pro Pro Pro Ile Pro Gly Arg Pro Ala Pro Val Thr Gln
        115                 120                 125
Gly Ser Ser Glu Ser Val Ile Gln Asp Ser Ser Val Ala Ser Ala Thr
    130                 135                 140
Ser Leu Pro Ala Leu Arg Ile Pro Ser His Ser Ser Ala Lys Asn Gln
145                 150                 155                 160
Ser Arg Asn Ser Ser Pro Glu Lys Arg Lys Thr Met Pro Thr Thr Leu
                165                 170                 175
Arg Lys Ser Asp Gly His Lys Lys His Ser Lys Asn Arg Asp Thr Leu
            180                 185                 190
Arg Arg Lys Asp Leu Arg Pro Ala Ala Ser Gln Ala Ala Gly Leu Ala
        195                 200                 205
Trp Gly Asn Ile Tyr Arg Leu Pro Ser Ala Ser Gly Asn Leu Ala Ser
    210                 215                 220
Asp Ala Ala Ala Thr Ser Ser Arg Gln Ser Ile Ser Ser Asp Ser Gly
225                 230                 235                 240
Phe Arg Lys Asp Ser Gly Gln Phe Arg Ser His Ser Gly Asp Glu Leu
                245                 250                 255
Val Ser Lys Lys Asn Val Ala Asp Asp Ser Gly Leu His Arg Gly Leu
            260                 265                 270
Gln Gly Arg Ser Leu Pro
        275
```

<210> 29747
<211> 113
<212> PRT
<213> A.fumigatus

```
<400> 29747
Gln Ser Cys Leu Pro Asp Ser Asn His Pro Thr Thr Leu Pro Ala Ser
1               5                   10                  15
Phe Arg Thr Ser Phe Pro Leu Arg Leu Asn Pro Leu Tyr Leu Ala Arg
            20                  25                  30
Arg Ser Glu Ser Leu Thr Thr Ala Ala Met Arg Leu Pro Pro Pro Gln
        35                  40                  45
Val Leu Leu Thr Trp Pro Thr Pro Asn Tyr Val Asp Pro Leu Thr Arg
    50                  55                  60
Gly Asn Gly Ala Leu Ile Val Asn Ile Val Cys Leu Ser Phe Ala Phe
65                  70                  75                  80
Val Val Thr Leu Leu Arg Leu Tyr Thr Arg Leu Lys Ile Thr Tyr Ser
                85                  90                  95
Pro Gly Leu Asp Asp Ala Leu Ile Val Ile Ala Leu Val Cys Ala Lys
            100                 105                 110
Thr
```

<210> 29748
<211> 65
<212> PRT
<213> A.fumigatus

<400> 29748
Leu Lys Pro Ser Asn Asp Thr Thr Gly Leu Phe Ser Asp Leu Phe Ser
1 5 10 15
Phe Thr Thr Glu Pro Ser Val Phe Gly Thr Ser Ile Arg Ile Ser Asn
20 25 30
Asp Arg Arg Asn Glu Thr Ala Thr Ser Pro Gly Ser Ala Tyr Met Ala
35 40 45
Asp Thr Gln Leu Arg Arg Ser Pro His Ser Arg Glu Trp Cys Pro Asp
50 55 60
Arg
65

<210> 29749
<211> 254
<212> PRT
<213> A.fumigatus

<400> 29749
Arg Ala Ile Thr Phe Gln Pro Pro Pro Cys Lys Thr Asn Leu Gly Ser
1 5 10 15
Asp Val Ala Thr Glu Trp Lys Pro Thr Asp Asn Ser Asp Ser Ile Cys
20 25 30
Gln Lys Val Thr Thr Arg Asn Leu Ile Lys Ser Thr Gln Met Ser Lys
35 40 45
Ala Gly Ser Thr Asp Leu Ala Ala Val Gly Ser Leu Ala Ala Val Thr
50 55 60
Asp Lys Val Asp Thr His Phe Thr Leu Gly Gly Leu Asn Gly Gly Val
65 70 75 80
Ser Leu Thr Arg Arg Asn Gly Val Ser Leu Gly Glu Glu Lys Glu Val
85 90 95
Val Asp Gln Arg Leu His Val Leu Leu His Gly Gly Thr Gly Arg Gly
100 105 110
Arg Asp Leu Val Val Phe Asp Ala Asp Arg Thr Ser Gly His Leu Val
115 120 125
Gln Ala Leu Val Asn Asp Ala Gln Gly Leu Ala Glu Leu Leu His Ser
130 135 140
Ala Lys Val Thr Val Val Ala Val Thr Val Asp Thr Asn Gly Asn Val
145 150 155 160
Glu Leu Asn Leu Ile Val Gly Ile Val Gly Leu Arg Leu Ala Asp Ile
165 170 175
Pro Arg Asp Thr Gly Thr Thr Glu His Asp Thr Ser Glu Thr His Val
180 185 190
Asp Gly Val Ser Cys Gly Asp Asn Thr Asn Thr Leu Ser Ser Ser Leu
195 200 205
Pro Asp Thr Val Ile Cys Lys Gln Leu Leu Gly Leu Val Asn Ala Val
210 215 220
Ala Glu Leu Gly Gly Pro Leu Val Asp Ile Ile Glu Lys Ala Lys Gly
225 230 235 240
Lys Val Leu Arg Tyr Ala Thr Arg Ala Asn Ile Cys Ser Met
245 250

<210> 29750
<211> 192
<212> PRT
<213> A.fumigatus

<400> 29750
Thr Gly Thr Gly Asp Thr Leu Val Glu Leu Leu Leu Lys Met Lys Gly
1 5 10 15
Gln Cys Ile Ala Leu Asn Pro Tyr Ala Ile Lys Arg Lys Asn Ala Thr
20 25 30
Tyr His Glu Leu Leu Thr Leu Leu Glu Thr Pro Gln Glu Arg Cys Gln
35 40 45
Ser Thr Asn Val His Ser Met Gly Lys Asn Arg His Glu Val Val Gln
50 55 60
Asp Thr Arg Asn Leu Ala Glu His Ser Pro Asn Pro Leu Gly Ser Leu
65 70 75 80
Gly Asn Phe Asp Val Lys Gln Leu Leu Asn Ser Gln Arg Glu Ala Leu
85 90 95
Leu Ile Arg His His Gly Asn Ile Val Lys Thr Ile Lys Val Gly Gln
100 105 110
Ser Leu His Val Gly Leu Val Leu Asp Gln Leu Leu Gly Thr Thr Val
115 120 125
Gln Gln Thr Asp Met Gly Ile Cys Ala Asp Asn Phe Phe Ala Ile Glu
130 135 140
Phe Gln Asn Gln Ser Lys His Thr Val Ser Gly Arg Met Leu Gly Thr
145 150 155 160
Glu Val Asp Ser Val Val Thr Asp Leu Ala Val Asp Ser Phe Arg Leu
165 170 175
Arg Leu Lys Ile Arg Gly Ser Leu Gly Leu Cys Gly Ser Leu Val Gly
180 185 190

<210> 29751
<211> 308
<212> PRT
<213> A.fumigatus

<400> 29751
Arg Gly Tyr Ala Leu Glu Thr Ile Gly Arg Pro Thr Arg Gly Gly Val
1 5 10 15
Met Thr Arg Thr Ile Tyr His Val Ile Ile Gln Phe Val Pro Gln Pro
20 25 30
Pro Ser Val Ser Ser His Arg Pro Ser Cys Lys Ser Ala Ser Phe Thr
35 40 45
Thr Ser Gly Leu Arg Thr Val Gly Gln Phe Asp Pro Ser Ser Phe Leu
50 55 60
Ala Ile Phe Arg Met Ala Ala Ser Phe Ala Arg Leu Ala Gly Ser Ala
65 70 75 80
Pro Lys Lys Leu Cys Leu Arg Pro Ser Thr Phe Ala Arg Asn Thr Arg
85 90 95
Ser Ile Ser Thr Thr Leu Pro Arg Arg Tyr Ala Glu Pro Thr Ser Tyr
100 105 110
Gln Ala Thr Arg Leu Val Pro Thr Asp Ser Thr Phe Thr His Leu Ala
115 120 125
Asn Lys Ala Thr Ala Glu Ser Glu Ala Ala Ser Asn Leu Glu Ser Gln
130 135 140

```
Ala Glu Gly Val Asp Arg Lys Ile Arg His Tyr Thr Val Asn Phe Gly
145                 150                 155                 160
Pro Gln His Pro Ala Ala His Gly Val Leu Arg Leu Ile Leu Glu Leu
                165                 170                 175
Asn Gly Glu Glu Ile Val Arg Ala Asp Pro His Val Gly Leu Leu His
            180                 185                 190
Arg Gly Thr Glu Lys Leu Ile Glu Tyr Lys Thr Tyr Met Gln Ala Leu
        195                 200                 205
Pro Tyr Phe Asp Arg Leu Asp Tyr Val Ser Met Met Thr Asn Glu Gln
    210                 215                 220
Cys Phe Ser Leu Ala Val Glu Lys Leu Leu Asn Ile Glu Ile Pro Glu
225                 230                 235                 240
Arg Ala Lys Trp Ile Arg Thr Met Phe Gly Glu Ile Thr Arg Ile Leu
                245                 250                 255
Asn His Leu Met Ser Val Leu Ser His Ala Met Asp Val Gly Ala Leu
            260                 265                 270
Thr Pro Phe Leu Trp Gly Phe Glu Glu Arg Glu Lys Leu Met Val Gly
        275                 280                 285
Gly Ile Phe Ser Leu Asn Arg Val Trp Val Glu Ser Asn Ala Leu Thr
    290                 295                 300
Phe His Leu Gln
305
```

<210> 29752
<211> 249
<212> PRT
<213> A.fumigatus

<400> 29752

```
Glu Phe Tyr Glu Arg Val Ser Gly Ala Arg Leu His Ala Ala Tyr Val
1               5                   10                  15
Arg Pro Gly Gly Val Ser Gln Asp Leu Pro Leu Gly Leu Leu Asp Asp
            20                  25                  30
Ile Tyr Gln Trp Ala Thr Gln Phe Gly Asp Arg Ile Asp Glu Thr Glu
        35                  40                  45
Glu Leu Leu Thr Asp Asn Arg Ile Trp Lys Ala Arg Thr Gln Gly Val
    50                  55                  60
Gly Val Val Thr Ala Ala Asp Ala Ile Asn Met Ser Phe Thr Gly Val
65                  70                  75                  80
Met Leu Arg Gly Ser Gly Val Pro Trp Asp Ile Arg Lys Ser Gln Pro
                85                  90                  95
Tyr Asp Ala Tyr Asp Gln Val Glu Phe Asp Val Pro Val Gly Val Asn
            100                 105                 110
Gly Asp Cys Tyr Asp Arg Tyr Leu Cys Arg Met Glu Glu Phe Arg Gln
        115                 120                 125
Ser Leu Arg Ile Ile His Gln Cys Leu Asn Lys Met Pro Ala Gly Pro
    130                 135                 140
Val Arg Val Glu Asp Tyr Lys Ile Ser Pro Pro Pro Arg Ala Ala Met
145                 150                 155                 160
Lys Glu Asn Met Glu Ala Leu Ile His His Phe Leu Leu Phe Thr Lys
                165                 170                 175
Gly Tyr Ala Val Pro Pro Gly Glu Thr Tyr Ser Ala Ile Glu Ala Pro
            180                 185                 190
Lys Gly Glu Met Gly Val Tyr Leu Val Ser Asp Gly Ser Glu Arg Pro
        195                 200                 205
Tyr Arg Cys Lys Ile Arg Ala Pro Gly Phe Ala His Leu Ser Gly Phe
```

```
    210                 215                 220
Asp Gln Ile Ser Arg Gly His Leu Leu Ala Asp Ala Val Ala Ile Ile
225                 230                 235                 240
Gly Gly Phe Pro Phe Cys Cys His Ile
                245
```

<210> 29753
<211> 191
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (37),(58)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29753

```
Lys Ile Ser Pro Arg Asn Phe Arg Asn Gln Lys Lys Asn Leu Gly Ala
1               5                   10                  15
Pro Pro Ser Asp Asn Ser His Glu Val Val Phe Phe Ser Lys Gly Arg
            20                  25                  30
Ser Ile Ser Arg Xaa Tyr Phe Ala Arg Val Ala Ile Leu Leu Gly Cys
        35                  40                  45
Ser Trp Arg Lys Cys Leu Phe Pro Pro Xaa Glu Ser Lys Glu Glu Pro
    50                  55                  60
Arg Gly Ile Tyr Thr Glu His Glu Met Phe Lys Val Leu Ala Ala Leu
65                  70                  75                  80
Tyr Asn Cys Leu Tyr Phe Asp Ile Asp Lys Thr Lys Ser Tyr Pro Leu
                85                  90                  95
His His Ala Ser Gln Ala Val Gly Glu Pro Leu Gly Lys Ala Leu Glu
            100                 105                 110
Ala Asn Val Lys Ala Leu Gly Gly Ser Ser Leu Leu Ser Gly Ile Phe
        115                 120                 125
Arg Ser Phe Arg Glu Asn Lys Asn Ala Leu Lys Glu Tyr Gly Val His
    130                 135                 140
Leu Thr Lys Gln Leu Leu Glu Asn Gly Leu Gly Ala His Glu Ile Ala
145                 150                 155                 160
Trp Ala Gln Phe Leu Pro Thr Val Ile Ala Met Val Pro Ala Gln Ala
                165                 170                 175
Gln Ala Val Ser Pro Ser Pro Asn Asp Cys Ala Pro Arg Asp Asn
            180                 185                 190
```

<210> 29754
<211> 106
<212> PRT
<213> A.fumigatus

<400> 29754

```
Ala Lys Ala Asn Arg Asp Ala Ser Val Phe Pro Asp Pro Ala Glu Val
1               5                   10                  15
Arg Leu Asp Arg Pro Met Asn Ser Tyr Ile Asn Pro Thr Leu Gly Pro
            20                  25                  30
His Gly Phe Leu Ser Lys Glu Thr Ser His Ile Ala Leu Thr Ala Met
        35                  40                  45
Leu Arg Ala Val Gly Arg Leu Asn Asn Leu Arg Val Ala Pro Gly Val
    50                  55                  60
```

```
Gln Gly Gln Leu Lys Lys Ile Pro Gln Pro Gly Gly Tyr Ser Ala Tyr
65                  70                  75                  80
Leu Arg Glu Asp His Gly Ser Tyr Ser Ile Phe Pro Thr Ser Glu Cys
                85                  90                  95
Ser Arg Leu Pro Leu Ala His Gln Ser Cys
            100                 105
```

<210> 29755
<211> 94
<212> PRT
<213> A.fumigatus

<400> 29755

```
Phe Thr Gln Ile Val Asp Phe Tyr Leu Ser Lys Glu Gly Ser Lys His
1               5                   10                  15
Leu Pro Ala Ile Gln Arg Leu Ala Lys Gln Asp Thr Lys Lys Ser Asp
            20                  25                  30
Glu Gln Leu Leu His Tyr Cys Leu Glu Ala Val Arg Leu Asn Asp Met
        35                  40                  45
Ser Gly Leu Tyr Arg Gln Ser Glu Thr Thr Leu Ala Val Thr Asp Glu
    50                  55                  60
Ala Val Glu Val Thr Ile Gln Pro Gly Asp Lys Val Phe Val Ser Phe
65                  70                  75                  80
Val Arg Ser Thr Pro Leu Val Leu Tyr Tyr Pro Ala Ser Phe
                85                  90
```

<210> 29756
<211> 190
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (177),(186)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29756

```
Asp Thr Gly Asn Lys Ile Ser Arg Arg Ser Gln Ile His Gly Thr Gln
1               5                   10                  15
His Ile Ile Leu Gly Gly Lys Thr Val Ile Gln Ala Asp Ala Val Ile
            20                  25                  30
Arg Gly Asp Leu Tyr Arg Ser Ser Ser Ser Ala Pro Ala Asp Gly Ser
        35                  40                  45
Gly Gly Gly Ser Thr Arg Pro Ser Gln Pro Ser Thr Pro Phe Val Ala
    50                  55                  60
Ile Thr Ile Gly Arg Tyr Ser Tyr Ile Ser Arg Gln Ala Val Leu Arg
65                  70                  75                  80
Pro Pro Ser Arg Leu His Arg Gly Val His Thr Phe Tyr Pro Leu Lys
                85                  90                  95
Ile Gly Asp His Val Phe Val Gly Glu Arg Ala Val Val Glu Ala Ala
            100                 105                 110
Met Val Gly Asn His Val His Ile Gly Arg Glu Ala Val Val Gly Ser
        115                 120                 125
Met Ala Ile Leu Lys Asp Phe Ala Tyr Val Leu Asp Gly Ala Val Val
    130                 135                 140
Pro Ala Gly Met Val Val Pro Ser Trp Cys Val Val Gly Gly Ala Pro
```

```
145                 150                 155                 160
Ala Arg Ile Val Gly Glu Val Gly Glu Gly Tyr Gly Val Glu Gly Ala
                165                 170                 175
Xaa Gly Gly Met Ala Thr Glu Lys Tyr Xaa Met Val Gly Arg
            180                 185                 190

<210> 29757
<211> 103
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (11),(19)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29757
Thr Phe Arg Val Ile Tyr Arg Pro Thr Ile Xaa Tyr Phe Ser Val Ala
1               5                   10                  15
Ile Pro Xaa Ser Ala Pro Ser Thr Pro Tyr Pro Ser Pro Thr Ser Pro
            20                  25                  30
Thr Ile Leu Ala Gly Ala Pro Pro Thr Thr His Gln Leu Gly Thr Thr
        35                  40                  45
Met Pro Ala Gly Thr Thr Ala Pro Ser Ser Thr Tyr Ala Lys Ser Phe
    50                  55                  60
Arg Ile Ala Met Leu Pro Thr Thr Ala Ser Arg Pro Ile Cys Thr Trp
65                  70                  75                  80
Leu Pro Thr Ile Ala Ala Ser Thr Thr Ala Leu Ser Pro Thr Asn Thr
                85                  90                  95
Trp Ser Pro Ile Leu Ser Gly
            100

<210> 29758
<211> 67
<212> PRT
<213> A.fumigatus

<400> 29758
Arg Leu Asn Cys Val Arg Phe Leu Asn Tyr Pro Cys Cys Ser His His
1               5                   10                  15
Leu His Cys Thr Tyr His Tyr Tyr Ala Thr Leu Asp Tyr Lys Ala Asn
            20                  25                  30
Pro Gln Tyr Pro Asn Glu Arg Tyr Leu Ser Arg Val Lys Ser Trp His
        35                  40                  45
Ala His Leu Tyr Thr Ser Tyr Lys Thr Lys Leu Gly Thr Ala Arg Arg
    50                  55                  60
Ser Leu Ala
65

<210> 29759
<211> 482
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
```

<222> (445)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29759

```
Trp Tyr Pro Leu Gly Ser Pro Asp Leu Ser Ile Pro Arg Gln Gln Thr
1               5                  10                  15
Ser Asp Ser Thr Glu Thr Met Ala Ala Glu Ser Glu Arg Ser Pro Tyr
            20                  25                  30
Pro Asn Gly Ser Ser Asp Gly Pro Gly Val Ala Gln Asp Asp Asp Glu
        35                  40                  45
Ala Thr Ser Phe Thr Ser Arg Arg Ser Ala Ser Glu Ser Asp Met Val
    50                  55                  60
Glu Leu Pro Arg Ser Ala Phe Lys Ser Arg Thr Gln Ala Ser Thr Leu
65                  70                  75                  80
Ala Gln Leu Pro Lys Val Ser Ser Ala Val Pro Ser Ile Ser Ala Pro
                85                  90                  95
Pro Ser Thr Thr Asn Ser Ala Arg Ser Ser Arg Glu Ser Ser Pro Ile
            100                 105                 110
Arg Ser Ser Arg Arg Ala Arg Asn Pro Thr Ser Ala Pro Arg Thr Ser
        115                 120                 125
Arg Ser Arg Gln Asn Ser Gln Asp Arg Ser Pro Gln Arg Ser Leu Pro
    130                 135                 140
Val Pro Thr Ala Ser Ala Val Gln Arg Ala Leu Ser Gln Pro Ser Ser
145                 150                 155                 160
Lys Pro Leu Val Leu Ser Ala Ser Pro Asn Val Glu Ser Ser Ser Asn
                165                 170                 175
Val Pro Ser Pro Asp Lys Ser Asn Asn Met Pro Leu Trp Gly Ser Thr
            180                 185                 190
Pro Pro Asn Thr Ser Ser Lys Arg Ser Leu Pro Pro Ser Asp Asp Leu
        195                 200                 205
Ala Thr Arg Gly Asp Arg Ser Ala Pro Arg Asn Val Ser Ser Arg Ile
    210                 215                 220
Ser Ala Pro Gly Ser Ala Leu Glu Thr Val Glu Glu Met Thr Ser Asp
225                 230                 235                 240
Pro Ser Thr Pro Ser Ala Asp Thr Ile Leu Asn Gln Pro Leu Ser Glu
                245                 250                 255
Glu Pro Lys Leu Gln Lys Ile Asp Glu Asp Thr Thr Pro Lys Ala Ser
            260                 265                 270
Arg His Asn Thr Asn Val Glu Ser Gly Ser Asp Ser Gly Gly Asn Lys
        275                 280                 285
Ser Ser Glu Arg Met Glu Asp Thr Arg Arg Trp Val Ser Thr Gly Thr
    290                 295                 300
Arg Arg Ser Asp Ser Leu Leu Ala Lys Arg Ser Thr Thr Ser Leu Ser
305                 310                 315                 320
Gly Ala Arg Gly Lys Pro Ala Glu Gly Ser Val Arg Asn Met Ile Val
                325                 330                 335
Glu Thr Glu Thr Val Thr Ser Ile Pro Gln Val Ser Leu Gly Val Val
            340                 345                 350
Pro Gly Glu Arg Gly Ile Ser Gly Arg Val Asp Ser Gly Thr Leu Arg
        355                 360                 365
Met Lys Pro Ser Thr Glu Thr Ile Arg Pro Arg Lys Glu Lys Arg Lys
    370                 375                 380
Thr Arg Lys Pro Ala Ala Leu Ala Ser Gly Ala Ala Ser Ser Lys Ala
385                 390                 395                 400
Asp Ile Phe Glu Ala Lys Val Ala Ser Ala Val Asp Glu Ala Asp Val
                405                 410                 415
```

```
Ser Asp Ser Asp Glu Thr Phe Val Tyr Glu Ser Asn Pro Pro Asp Pro
            420                 425                 430
Tyr Pro Val Arg Gln Asn Arg Tyr His Ser Arg Thr Xaa Ser Ala Thr
        435                 440                 445
Ser Met Ala Ser Gln Val Asp Gln Leu Ala Gly Arg Ala Arg His Ser
    450                 455                 460
Met Arg Asp Ser Thr His Ser Ile Thr Arg Gln Thr Gln His Glu Ile
465                 470                 475                 480
His Lys
```

<210> 29760
<211> 77
<212> PRT
<213> A.fumigatus

<400> 29760

```
Gln Ala Ala Trp Asp Pro Thr Thr Pro Phe Thr Thr Ala Ile Gly Pro
1               5                   10                  15
Leu Gly Pro Ser Ser Gly Ile Arg Ile Leu Ser Phe Arg Thr Cys Lys
            20                  25                  30
Ala Asp Val Val Val Gly Leu Lys Pro Gly Glu Asp Glu Lys Leu Arg
        35                  40                  45
Glu Thr Gln Gly Gly Asp Asn Pro Lys Ala Arg Lys Trp Ala Trp Ser
    50                  55                  60
Gly Lys Tyr Ala Val Ile Ser Phe Cys Asp Gly Lys Ala
65                  70                  75
```

<210> 29761
<211> 343
<212> PRT
<213> A.fumigatus

<400> 29761

```
Pro Gly Ile Gly Ala Glu Gly Asn Ala Leu Met Ala Glu Cys Val Val
1               5                   10                  15
Val Val Leu Arg Met Leu Ser Leu Cys Val Ser Lys Tyr Ile Tyr Val
            20                  25                  30
Val Met Arg Ala Val Leu Thr Lys Thr Asp Arg Arg Val Ser Thr Leu
        35                  40                  45
Phe Ala Leu Ser Lys Asn Trp Lys Gly Tyr Asp Val Phe Ser Arg Gln
    50                  55                  60
Lys Met Ser Thr Phe Lys Ser Ser Arg Pro Ala Val Leu Glu Leu Ala
65                  70                  75                  80
Ala Arg Tyr His Glu Leu Ala Leu Gln Ala Gln Lys Gly Lys Gly Val
                85                  90                  95
Asp Gly Lys Ala Val Glu Glu Ile Glu Glu Ala Glu Arg Leu Leu Phe
            100                 105                 110
Ser Glu Met Cys Glu Ile Cys Leu Trp Gly Asn Ala Thr Asp Leu Ser
        115                 120                 125
Leu Leu Thr Ser Leu Thr Tyr Glu Asp Ile Gln Lys Leu Gln Gly Ser
    130                 135                 140
Lys Ala Arg Lys Ala Ala Glu Glu Asn Ile Leu Ile Asn Asp Leu Asp
145                 150                 155                 160
Ala Ala Phe Asp Ala Leu Ala Lys Ala Gln Lys Glu Lys Lys Asp Gly
                165                 170                 175
```

```
Glu Arg Arg Val Asp Ile Val Leu Asp Asn Ser Gly Phe Glu Leu Phe
            180                 185                 190
Val Asp Leu Ile Leu Ala Gly Tyr Leu Leu Ser Ala Gly Leu Ala Thr
        195                 200                 205
Thr Val Val Leu His Pro Lys Val Ile Pro Trp Phe Val Ser Asp Val
    210                 215                 220
Thr Pro Arg Asp Phe Met Asp Leu Leu Asn Ala Leu Ala Asp Ala Gln
225                 230                 235                 240
Gly Phe Tyr Thr Ala Pro Asp Glu Thr Gly Arg Glu Tyr Glu Pro Leu
                245                 250                 255
Ser Glu Lys Glu Leu Ala Glu Val Lys Phe Leu Phe Asp Gln Trp Ser
            260                 265                 270
Lys Phe His Ser Glu Gly Lys Leu Val Ile Arg Pro His Ala Phe Trp
        275                 280                 285
Thr Ala Gly Gly Ser Tyr Trp Arg Met Pro Tyr Val Ala Pro Asp Leu
    290                 295                 300
Phe Glu Asp Leu Lys Gln Ser Glu Leu Val Leu Phe Lys Gly Asp Leu
305                 310                 315                 320
Asn Tyr Arg Lys Leu Thr Asn Asp Val Ser Phe Ser Ser Ala Pro His
                325                 330                 335
Asn Gly Val Tyr Phe Arg Gly
            340
```

<210> 29762
<211> 196
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (37)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29762

```
Ile Val Ser Cys Ala Ser Ala Gly Arg Ser Arg Cys Arg Ala Ala Ser
1               5                   10                  15
Ala Phe Phe Arg Arg Ser Cys Ala Ala Thr Ile Ala Ala Val Cys Ser
            20                  25                  30
Ala Val Cys Ser Xaa Ala Arg Ala Pro Asp Ser Ile Arg Ser Ser Pro
        35                  40                  45
Pro Ser Ser Ala Ser Ala Ser Ser Thr Thr Ala Gly Ala Ser Ser Ser
    50                  55                  60
Pro Pro Ser Pro Ser Pro Arg Arg Ala Ala Leu Ser Ala Ala Ala Asp
65                  70                  75                  80
Ala Arg Ile Ala Ser Ala Ala Ser Arg Ser Ser Phe Ala Phe Glu Leu
                85                  90                  95
Pro Val Ala Gly Pro Pro Thr Val Leu Gln Phe Asp Phe Phe Ala Arg
            100                 105                 110
Arg Asn Ser Ala Leu Arg Thr Glu Val Thr Lys Leu Gly Pro Ser Ser
        115                 120                 125
Ser Ser Leu Ser Lys Leu Val Ala Asp Val Arg Arg Ser Gly Gly Ser
    130                 135                 140
Ser Ser Ala Ile Met Arg Pro Ser Pro Ala Val Ser Thr Val Leu Val
145                 150                 155                 160
Phe Leu Arg Phe Phe Phe Gly Arg Ser Val Ala Gly Ser Ala Val Arg
                165                 170                 175
```

```
Tyr Phe Leu Ala Arg Tyr Ser Ala Ser Asp Glu Gly Gly Met Val Leu
            180                 185                 190
Asn Leu Arg Val
        195

<210> 29763
<211> 168
<212> PRT
<213> A.fumigatus

<400> 29763
Tyr His Gln Gly Val Gln His His Ile His Ala Glu Ser Val Gln Ile
1               5                  10                  15
Pro Leu Pro Pro Met Gln Phe Thr His Pro Ser Ala Thr Gly Asn Pro
            20                  25                  30
Thr Leu Pro Val Ser Leu Ser Cys Phe Ser Leu Gln Thr Ile Pro Ser
        35                  40                  45
Arg Thr His Cys Pro Asp Pro Pro His Pro Thr Asp Val Pro Asp Gly
    50                  55                  60
Ser His Ile Gly Leu Val Glu Lys Pro Pro Tyr Thr Ala Ala Ser Pro
65                  70                  75                  80
Ser His Ser Arg Pro Ala Pro Leu Ser Trp Ser Lys Thr Leu Pro Gln
                85                  90                  95
Asp His Ser Thr Ala Ala Ala Pro Ser Val Pro His Ser Gly His Arg
            100                 105                 110
Pro Arg Ser Ser Ala Gln Val Ala Ser Arg Glu Pro Pro Val Ser Ala
        115                 120                 125
Val Cys Val Pro Pro Ala Pro Pro Ala Ala His Arg Pro Ser Ala Pro
    130                 135                 140
Pro Ser Pro Pro Leu Leu Ser Pro Ala Ser Pro Ala Pro Leu Ala Ala
145                 150                 155                 160
Pro Pro Pro Ala Ser Gly Gln Arg
                165

<210> 29764
<211> 160
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (54)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29764
Arg Thr Gly Arg Arg Arg Arg Asp Pro Ser Val Arg Cys Gly Gly Glu
1               5                  10                  15
Arg Arg Ser Pro Trp Gly Arg Arg Gly Arg Arg Arg Arg Gly Ala Cys
            20                  25                  30
Cys Cys Gly Arg Gly Gly Arg Gly Arg Arg Gly Arg Ala Ala Asp Gly
        35                  40                  45
Val Arg Cys Ser Gly Xaa Thr Ala Asp Gly Gly Thr Asp Gly Gly Asp
    50                  55                  60
Gly Gly Cys Ala Gly Thr Thr Glu Glu Gly Arg Gly Gly Ala Ala Ser
65                  70                  75                  80
Arg Ala Ala Gly Gly Gly Thr Gly Asp Asp Leu Pro Arg Cys Val Trp
```

```
                85                  90                  95
Ala Asp His Gln Arg Cys Pro Glu Ala Gly Gly Gly Ala Ala Ser Gly
            100                 105                 110
Ala Gly Glu Ala Gly Glu Arg Arg Gly Gly Glu Gly Gly Ala Asp Gly
        115                 120                 125
Arg Cys Ala Ala Gly Gly Ala Gly Gly Thr Gln Thr Ala Asp Thr Gly
    130                 135                 140
Gly Ser Arg Asp Ala Thr Cys Ala Asp Asp Arg Gly Arg Cys Pro Glu
145                 150                 155                 160
```

<210> 29765
<211> 350
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (160)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29765

```
Thr Leu Arg Phe Asn Thr Met Pro Pro Ser Ser Leu Ala Glu Tyr Leu
1               5                   10                  15
Ala Lys Lys Tyr Leu Thr Ala Asp Pro Ala Thr Asp Arg Pro Lys Lys
            20                  25                  30
Lys Arg Lys Lys Thr Lys Thr Val Asp Thr Ala Gly Asp Gly Leu Ile
        35                  40                  45
Ile Ala Asp Asp Asp Pro Pro Asp Leu Arg Thr Ser Ala Thr Asn Phe
    50                  55                  60
Asp Asn Glu Asp Asp Glu Gly Pro Ser Leu Val Thr Ser Val Arg Ser
65                  70                  75                  80
Ala Glu Phe Arg Arg Ala Lys Lys Ser Asn Trp Arg Thr Val Gly Gly
                85                  90                  95
Pro Ala Thr Gly Ser Ser Asn Ala Asn Asp Glu Arg Asp Ala Ala Asp
            100                 105                 110
Ala Ile Leu Ala Ser Ala Ala Ala Glu Ser Ala Ala Arg Arg Gly Glu
        115                 120                 125
Gly Glu Gly Gly Asp Asp Glu Ala Pro Ala Val Val Asp Glu Ala Asp
    130                 135                 140
Ala Asp Asp Gly Gly Glu Leu Arg Met Glu Ser Gly Ala Arg Ala Xaa
145                 150                 155                 160
Leu Gln Thr Ala Glu Gln Thr Ala Ala Met Val Ala Ala Gln Glu Arg
                165                 170                 175
Arg Lys Lys Ala Glu Ala Ala Arg His Arg Glu Arg Pro Ala Glu Ala
            180                 185                 190
Gln Glu Thr Ile Tyr Arg Asp Ala Ser Gly Arg Ile Ile Asn Val Ala
        195                 200                 205
Leu Lys Arg Ala Glu Ala Arg Arg Ala Glu Gln Glu Lys Arg Glu Lys
    210                 215                 220
Glu Glu Ala Ala Lys Glu Ala Leu Met Gly Asp Val Gln Arg Ala Glu
225                 230                 235                 240
Arg Glu Ala Arg Arg Gln Gln Ile Gln Glu Ala Arg Ala Met Pro Leu
                245                 250                 255
Ala Arg Thr Ile Glu Asp Asp Ala Leu Asn Glu Glu Leu Lys Ala Gln
            260                 265                 270
Gln Arg Trp Asn Asp Pro Ala Ala Gly Phe Leu Thr Lys Thr Lys Gly
```

```
        275                 280                 285
Pro Gly Val Ser Val Thr Gly Lys Pro Leu Tyr Lys Gly Ala Phe Gln
    290                 295                 300
Pro Asn Arg Tyr Gly Ile Arg Pro Gly His Arg Trp Asp Gly Val Asp
305                 310                 315                 320
Arg Gly Asn Gly Phe Glu Lys Glu Trp Phe Ala Ala Arg Asn Lys Lys
                325                 330                 335
Gly Arg Leu Glu Ala Leu Asp Tyr Gln Trp Gln Met Asp Glu
            340                 345                 350

<210> 29766
<211> 76
<212> PRT
<213> A.fumigatus

<400> 29766
Ser Thr Pro Ala Ser Thr Ser Asn Val Pro Thr Cys Ser Leu Glu Asn
1               5                   10                  15
Ala Leu Phe Arg Lys Arg Thr Gln Tyr Pro Ser Ile Gln Leu Ile Leu
            20                  25                  30
Cys Leu Val Asp Glu Ser Glu Ile Thr Gln Val Pro Val Trp Ser Gly
        35                  40                  45
Ser His Met Lys Thr Gly Asn Gly Gly Gly Ala Asp Glu Glu Leu Met
    50                  55                  60
Glu Phe Val Ala Asp Ile Ser Gly Asp Leu Asn Gly
65                  70                  75

<210> 29767
<211> 81
<212> PRT
<213> A.fumigatus

<400> 29767
Leu Arg Leu Ser Arg Ala Arg Arg Ser Thr Val Val Gln Ile Asp Lys
1               5                   10                  15
Tyr Asp Asp Leu Gly Ser Val Asn Ile Asp Leu Ser Ser Ile Arg Val
            20                  25                  30
Lys Val Thr Ile Asn Met Glu Arg Met Glu Met Met Asp Ser Thr Ala
        35                  40                  45
Met Pro His Arg Ser Asn Leu Lys Val Phe Ala Ile Met Val Ala Leu
    50                  55                  60
Ser Val Arg Lys Thr Ile Thr Glu Asp Asp Ser Val Ser Thr Asn Asn
65                  70                  75                  80
Ser


<210> 29768
<211> 118
<212> PRT
<213> A.fumigatus

<400> 29768
Leu Ile Lys Ile Gln Leu Ser Met Phe Val Ala Ala Leu Asp Gln Thr
1               5                   10                  15
Ile Met Ala Thr Ala Ile Pro Thr Ile Ala Ala Lys Leu His Ser Ala
            20                  25                  30
```

```
Ala Gly Tyr Thr Trp Ile Gly Gly Ala Tyr Leu Leu Ala Asn Ala Ala
        35                  40                  45
Gly Ala Cys Ile Trp Ala Lys Leu Ser Asp Ile Trp Gly Arg Lys Pro
    50                  55                  60
Ile Leu Leu Leu Ala Val Ala Trp Phe Phe Gly Ser Ser Ile Ile Cys
65                  70                  75                  80
Ala Thr Ala Val Asp Met Pro Met Leu Ile Ala Gly Arg Ala Leu Gln
                85                  90                  95
Gly Val Ala Gly Gly Gly Leu Leu Gln Leu Val Thr Ile Val Ile Ser
            100                 105                 110
Asp Leu Phe Ser Val Arg
        115
```

<210> 29769
<211> 164
<212> PRT
<213> A.fumigatus

<400> 29769

```
Arg Arg His Ser Tyr Cys Asn Ala Arg Pro Ala Val Gly Arg Ile Cys
1               5                   10                  15
Thr Pro Arg Ser Tyr Ile Val Lys Ser Val Asn Thr Tyr Leu Arg Met
            20                  25                  30
Glu Thr Met Glu Glu Leu Thr Gly Arg Ala Ala Thr Ile Ser Leu Glu
        35                  40                  45
Ser Ala Lys Pro Ala Arg Ser Ile Gln Val Gln Pro Gly Pro Leu Ser
    50                  55                  60
Ser His Leu Asp Lys Ile Tyr Ala Ser Leu Thr Ser Thr Ser Thr Thr
65                  70                  75                  80
Asp Phe Ile Lys Asp Leu Gln Lys Glu Ala Ile Ala Gly Ser Val Glu
                85                  90                  95
Ala Ala Asn Pro Leu Ala Ser Leu Ala Ala Phe Arg Ala Tyr Met Ala
            100                 105                 110
Ser Pro Ala Ser Asp Ala Leu Leu Pro Ala Glu Gly Glu Asp Leu Ser
        115                 120                 125
Ala Pro Ile Thr Asp Tyr Tyr Val Ser Ser Ser His Asn Thr Tyr Leu
    130                 135                 140
Thr Gly Asn Gln Leu Tyr Ser Asp Ala Ala Ala Ala Ala Tyr Thr Asn
145                 150                 155                 160
Val Cys Leu Thr
```

<210> 29770
<211> 268
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (253)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29770

```
Val Leu Leu Asn Gly Cys Arg Cys Val Glu Ile Asp Val Trp Asp Gly
1               5                   10                  15
Asp Ala Asp Asp Asp Ser Val Ser Gly Asp Asp Thr Ser Ser Ser Ser
```

```
            20                  25                  30
Ser Ser Ser Ser Glu Trp Ser Ser Asp Glu Glu Asn Pro Ser Arg Arg
        35                  40                  45
Lys Lys Gln Asp Val Gln Lys Thr Asp Gly Ser Thr Gln Ser Ala Lys
    50                  55                  60
Ala Pro Ser Arg Arg Lys Gly Leu Ser Ser Lys Leu Gly Ser Leu Leu
65                  70                  75                  80
Gly Arg Lys Ser Ser Pro Pro Asn Gly Ala Thr Asp Lys Pro Ala Ser
                85                  90                  95
Thr Ala Thr Ala Ala Ala Val Gly Thr Ala Ala Gln Thr Leu Arg Arg
            100                 105                 110
Pro Glu Pro Arg Val Leu His Gly His Thr Leu Thr Lys Gly Thr Lys
        115                 120                 125
Phe Arg Asp Val Cys Tyr Ala Ile Arg Asp Ser Ala Phe Val Ala Ser
    130                 135                 140
Asp Leu Pro Val Ile Val Ser Leu Glu Val His Thr Cys Ile Glu Gln
145                 150                 155                 160
Gln Ala Thr Met Val Glu Ile Met Glu Glu Ala Phe Lys Gly Met Leu
                165                 170                 175
Ile Glu Val Thr Pro Glu Leu Glu Ala Ser Gln Ala Pro Pro Pro Leu
            180                 185                 190
Glu Ser Leu Lys Arg Lys Ile Leu Ile Lys Val Lys Trp Val Pro Ala
        195                 200                 205
Thr Gly Asp Gly Gln Ala Glu Ala Gln Lys Asp Asp Gln Thr Asp Thr
    210                 215                 220
Leu Asp Thr Pro Pro Ser Val Asn Gln Asp Gly Glu Pro Ala Pro Ala
225                 230                 235                 240
Lys Pro Ser Lys Ile Leu His Ser Leu Ser Arg Leu Xaa Val Phe Thr
                245                 250                 255
Lys Gly Phe Ser Phe Arg Gln Phe Thr Gln Pro Gly
            260                 265
```

<210> 29771
<211> 395
<212> PRT
<213> A.fumigatus

<400> 29771

```
Pro His Arg Leu Glu Arg Ser Ala Phe Gly Gln Asp Val His His Arg
1               5                   10                  15
Arg Thr Asn Asp Gly Arg Phe Ala His Gly Asn His Arg His Arg Met
            20                  25                  30
Gln Pro Leu Ala Thr Ala Leu Pro Ser Met Asp Ala Thr Asp Gly Phe
        35                  40                  45
Gly Leu Arg Pro Val Arg Asp Asn Glu Arg Leu Pro Ser Met Leu Pro
    50                  55                  60
Gly Phe His Thr Gly Leu Thr Ser Gln Pro Asp Ser Pro Thr Thr Pro
65                  70                  75                  80
Asn Ala Pro Val Gln Pro Arg Ser Ser Ala Gln Ala Thr Ile Ala Arg
                85                  90                  95
Gln Arg Pro Ser Leu Arg Gln Gln Gln Ser Ala Ser Gly Glu Ser Asp
            100                 105                 110
Asp Gly Asn Gly Asp Gly Ser Thr Met Asp Glu Asp Pro Ala Ser Thr
        115                 120                 125
Glu Ala Ala Glu Pro Ile Val Gly Leu Gln Asn Arg Met Asp Ile Asp
    130                 135                 140
```

```
Asp Val Gly Asp Arg Asp Thr Ile Leu Gly Gly Val Ser Asp Ser His
145                 150                 155                 160
Asp Leu Thr Val Thr Asp Pro Ser Glu Glu Gln Glu Ala Glu Thr Phe
                165                 170                 175
Asn Ile Thr His Arg Ser Thr Val Asp Gly Ser Met Ile Asn Thr Asp
            180                 185                 190
Asn Ala Gln Asn Asn Ala Ala Leu Gly Leu Ser Pro Thr Gln Ala Ala
        195                 200                 205
Asp Asn Ala Asn Ser Pro Ala Leu Val Pro Ser Pro Tyr Ser Leu Tyr
    210                 215                 220
Phe Arg Asp Arg Thr Thr Thr Ala Ala His Gly Val Leu Thr Thr Leu
225                 230                 235                 240
Pro Arg Asp Glu Asp Val Leu Met Ser Leu Gln Leu Leu Ala Tyr Val
                245                 250                 255
Ser Lys Tyr Cys Asn Leu Arg Ser Tyr Phe Gln His Ser His Phe Val
            260                 265                 270
Pro Lys Leu Lys Ile Asp Arg Glu Leu Gln Met Leu Glu Glu Gly Thr
        275                 280                 285
Ser Pro Ile Glu Phe Pro Glu Asp Glu Asp Glu Tyr Leu Leu Pro Asp
    290                 295                 300
Asp Val Asn Ile Phe Pro Leu Val Glu Lys Phe Thr Val Arg His His
305                 310                 315                 320
Ser Lys Asp Met Gln Tyr Trp Ala Cys Val Val Met Arg Asn Leu Cys
                325                 330                 335
Arg Lys Asp Glu Ser Arg Gly Gly Ile Arg Gln Cys Ala Tyr Tyr Lys
            340                 345                 350
Cys Gly Lys Trp Glu Glu Phe Gln Arg Gln Phe Ala Lys Cys Arg Arg
        355                 360                 365
Cys Arg Arg Thr Lys Tyr Cys Ser Lys Asp Cys Gln Lys Ala Ala Trp
    370                 375                 380
Val Tyr His Arg His Trp Cys His Ser Thr Pro
385                 390                 395
```

<210> 29772
<211> 222
<212> PRT
<213> A.fumigatus

<400> 29772

```
Leu Val Ile Pro Arg Phe Pro Leu Ile Ala Ile Ala Gln Ile Pro Asn
1               5                   10                  15
Asp Phe Phe Thr Ser Arg His Asp Pro Gln Asn Gly Pro Thr Gly Cys
            20                  25                  30
Ile Leu Arg Tyr Leu Tyr Tyr Pro Ser Ile Phe Ser Pro Ala Thr Ser
        35                  40                  45
Ser Tyr Gln His Asp Val Asp Val Arg Ala Gly Ala His Ser Asp Tyr
    50                  55                  60
Gly Ser Ile Thr Leu Leu Phe Gln Arg Pro Gly Gln Pro Gly Leu Glu
65                  70                  75                  80
Ile Arg Thr Pro Asp Gly Ser Trp Ala Pro Val Pro Val Gln Pro Gly
                85                  90                  95
Asn Ala Glu Asp Ala Ser Ala Tyr Thr Phe Pro Pro Ile Leu Val Asn
            100                 105                 110
Ile Gly Asp Leu Leu Ser Tyr Trp Thr Asp Gly Leu Leu Lys Ser Thr
        115                 120                 125
Ile His Arg Val Val Phe Pro Leu Ser Glu Gln Arg Asn Pro Asn Pro
```

```
    130                 135                 140
Gln Asp Arg Tyr Ser Ile Ala Tyr Phe Cys His Pro Val Asp Thr Thr
145                 150                 155                 160
Glu Leu Val Pro Val Pro Ser Lys Ala Val Val Ala His Arg Glu Tyr
                165                 170                 175
Cys Arg Lys Asn Gly Ile Ala Asn Glu Gln Val Gly Phe Gly Gly Gly
            180                 185                 190
Ala Gly Asn Met Ala Pro Gly Lys Arg Ala Leu Thr Ala Tyr Glu His
        195                 200                 205
Leu Glu Ser Arg Leu Ala Ala Thr Tyr Gly Phe Lys Lys Glu
    210                 215                 220

<210> 29773
<211> 102
<212> PRT
<213> A.fumigatus

<400> 29773
Ser Leu Ser His Arg Ser Arg Thr Thr Ser Leu His Pro Ala Met Thr
1               5                   10                  15
Pro Arg Thr Val Pro Gln Ala Ala Tyr Ser Ala Thr Ser Thr Thr Pro
            20                  25                  30
Arg Ser Ser His Pro Gln His Pro Pro Thr Ser Thr Thr Ser Thr Cys
        35                  40                  45
Ala Leu Val Pro Thr Pro Thr Thr Ala Val Ser Pro Phe Ser Ser Ser
    50                  55                  60
Gly Pro Asp Ser Gln Val Ser Arg Ser Gly Arg Gln Met Val Pro Gly
65                  70                  75                  80
Leu Leu Cys Pro Cys Ser Arg Ala Thr Pro Arg Met Leu Val Pro Thr
                85                  90                  95
Arg Ser Arg Leu Phe Trp
            100

<210> 29774
<211> 172
<212> PRT
<213> A.fumigatus

<400> 29774
Leu Leu Phe Glu Lys Gly Ile Met Leu Leu Thr Ile Pro Leu Gly Ile
1               5                   10                  15
Ala Tyr Thr Val Pro Asp Leu Asp Ala Lys Val Arg Ile Tyr Ile Asn
            20                  25                  30
Ser Thr Glu Thr Arg Lys Ser Ile Thr Cys Ile Glu Ala Ser Leu Ser
        35                  40                  45
Asn Gly Lys Thr Val Tyr Gln Lys Gly Val Gly Trp Thr Thr Ala Ile
    50                  55                  60
Ile Ser Gly Leu Gly Leu Ala Ala Ser Ala Ile Thr Ser Gly Leu Gly
65                  70                  75                  80
His Ser Asn Thr Ala Ala His Val Ala Ala Asn Ala Leu Ser Leu Phe
                85                  90                  95
Gly Phe Met Gln Ser Gln Ala Met Phe Gly Met Ile Ser Val Ala Met
            100                 105                 110
Pro Pro Ile Val Glu Ala Trp Thr Gln Asn Phe Gln Trp Asn Met Gly
        115                 120                 125
Ile Ile His Ile Gly Phe Leu Glu Thr Leu Cys Thr Trp Asp Leu Pro
```

```
    130                 135                 140
Ser Thr Gly Gly Thr Pro Ser Thr Leu Leu Ser Gln Leu Ser Thr Thr
145                 150                 155                 160
Phe Arg Gln Ser Pro Glu Thr Pro Lys Thr Phe His
                165                 170
```

<210> 29775
<211> 163
<212> PRT
<213> A.fumigatus

<400> 29775

```
Ala Leu Phe Ser Pro Pro Ser Thr Asn Phe Phe Pro Ala Val Glu Cys
1               5                   10                  15
Lys Asn Thr Ala Arg Gln Ser Pro Ala Thr Met Arg Leu Met Ser Leu
            20                  25                  30
Ile Ile Ser Leu Phe Val Ala Phe Leu Ala Thr Pro Leu Val Ser Ala
        35                  40                  45
Ile Arg Leu Ile Glu Ser Asn Ala Leu Asn Leu Cys Gln Asp Ser Ser
    50                  55                  60
Asn Phe Thr Ala Thr Phe Phe Ser Val Thr Phe Thr Pro Asn Asn Arg
65                  70                  75                  80
Ser Leu Ala Phe Ala Phe Asp Gly Val Ala Ala Ile Ser Gly Lys Val
                85                  90                  95
Thr Ala Glu Leu Val Leu Thr Ala Tyr Gly Tyr Glu Ala Leu Arg Lys
            100                 105                 110
Glu Leu Asp Pro Cys Gln Met Asn Leu Ala Gly Leu Cys Pro Met Asn
        115                 120                 125
Ala Gly Pro Ile Asp Val Pro Ser Ala Asn Ile Ile Val Ser Glu Asp
    130                 135                 140
Val Ala Lys Gln Ile Pro Gly Glu Asp Ala Tyr Thr Asp Cys Cys Leu
145                 150                 155                 160
Lys Arg Val
```

<210> 29776
<211> 61
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (54)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29776

```
Gly Ile Tyr Ser Ala Ser Gly Gln Ser Gly Ser Pro Lys Ala Glu Ile
1               5                   10                  15
Glu Tyr Gln Ala Leu Arg Thr Asn Gly His Met Glu Tyr Gln Met Gln
            20                  25                  30
Lys Ser Thr Gly Ile Pro Ala Cys Asn Val Ala Ile Asn Cys Ser Ile
        35                  40                  45
Pro Asp Ala Val Arg Xaa Gly Asp Leu Gly Val Ser Ala
    50                  55                  60
```

<210> 29777

<211> 88
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (76)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29777

```
Gly Arg Thr Ile Thr Gly His Tyr Ile Gly Arg Tyr Ala Asp Tyr Phe
1               5                  10                  15
Met Gly Gly Ala Lys Ala Phe Glu Ala Thr Lys Thr Asp Tyr Val Arg
            20                  25                  30
Ser Gly Gln Gly Arg Met Lys Arg Leu Thr Val Glu Lys Val Leu Leu
        35                  40                  45
Arg Glu Thr Glu Ile Val Gln Lys Gln Ile Lys Ala Leu Leu Arg Cys
    50                  55                  60
Asp Val Gly Leu His Leu Thr Val Thr Gly Ala Xaa Ser Val Thr Asp
65                  70                  75                  80
Ser Ser Pro Ser Ala Ser Asp Arg
                85
```

<210> 29778
<211> 418
<212> PRT
<213> A.fumigatus

<400> 29778

```
Arg Asp Trp Pro Leu Glu His Tyr Phe Glu Met Ser Arg Pro Asp Ser
1               5                  10                  15
Glu Arg Ala Leu Glu Ile Tyr Lys Thr Phe Thr Ala Gln Thr Glu Glu
            20                  25                  30
Val Val Lys Phe Leu Gly Val Ala Arg His Phe Gln Ser Ala Thr Arg
        35                  40                  45
Leu Glu Ile Pro Lys Leu Lys His Ala Ser Thr Asp Leu Thr Arg Leu
    50                  55                  60
Leu Glu Asp Asp Leu Asn Asp Pro Asp Phe Asn Ile Arg Arg Arg Glu
65                  70                  75                  80
Tyr Leu Ala Arg Lys Gly Ala Lys Asn Gly Gly Ala Asp Thr Ala Leu
                85                  90                  95
Lys Ser Ser Ile Thr Gly Gly Pro Gln Asn Thr Ser Asn Met Ser Ser
            100                 105                 110
Ala Pro Ser Arg Pro Gln Thr Glu Pro Asn Pro Gln Lys Lys Thr Asn
        115                 120                 125
Pro Ala Asp Leu Ile Asp Phe Phe Glu Pro Ile Glu Pro Asn Pro Gln
    130                 135                 140
Pro Thr Ala Gln Pro Thr Asn Phe Gln His Pro Tyr Gln Ala Gln Gln
145                 150                 155                 160
Gln Gln Gln Thr Met Pro Phe Gln Pro Thr Gly Phe Gln Pro Gln Gln
                165                 170                 175
Thr Gly Leu Tyr Thr Gln Gln Thr Gly Phe Gln Gln Gln Pro Gln Gly
            180                 185                 190
Ala Ser Phe Gly Gln Pro Thr Gly Phe Gly Glu Pro Phe Pro Gln Gln
        195                 200                 205
Asn Asn Asn Gln Phe Gly Gln Ala Gln Ala Pro Gln Pro Leu Gln Ser
```

```
    210                 215                 220
Met Pro Thr Gly Ala Gly Phe Gly Gly Tyr Ser Ala Gln Pro Gln Thr
225                 230                 235                 240
Tyr Gly Phe Gln Thr His Leu Ser Pro Ile Pro Gln Ser Gly Val Ala
                245                 250                 255
Ser Phe Ser Gln Gln Gln Gln Pro Ala Leu Gly Val Gln Gln Gln Pro
            260                 265                 270
Gln Gln Gln Ser Thr Asn Pro Phe Arg Gln Ser Met Leu Met Ser Thr
        275                 280                 285
Pro Thr Gly Thr Ala Val Pro Ala Ser Pro Leu Ser Arg Gln Asn Thr
    290                 295                 300
Asn Pro Phe Ala Arg Arg Leu Ser Thr Val Asn Pro Gln Val Ser Ser
305                 310                 315                 320
Gly Pro Thr Glu Gly Thr Gln Ser Pro Ala Gln Gln Pro Leu Arg Pro
                325                 330                 335
His Arg Thr Gly Thr Asn Pro Phe Ala Arg Ser Ser Ser Val Pro Pro
            340                 345                 350
Gln Gln Ser Gln Gly Leu Gln Pro Pro Ala Ala Ala Pro Leu Arg Pro
        355                 360                 365
Asn Pro Thr Gly Ser Thr Asn Pro Phe Arg Gln Ser Ala Phe Val Asn
    370                 375                 380
Gln Gln Thr Gly Gln Gly Trp His Val Gly Gly Gln Gln Gly Thr Met
385                 390                 395                 400
Gly Gly Leu Glu Lys Leu Glu Thr Val Pro Val Phe Pro Arg Pro Gly
                405                 410                 415
Met Ala


<210> 29779
<211> 276
<212> PRT
<213> A.fumigatus

<400> 29779
Gln Ser Val Leu Ser Thr Leu Cys Glu Arg Ser Pro Tyr Gln Thr Glu
1                   5                   10                  15
Ser Asp Leu Leu Leu Tyr Arg Tyr Phe Arg Pro Glu Gly Arg Lys Arg
            20                  25                  30
Pro Ser Arg Val Gln Tyr Cys Gly Asn Met Asp Glu Thr Ile Asp Ser
        35                  40                  45
Glu Ser Val Leu Ala Pro Val Arg Ala Ser Ser Pro Ser Pro Ser Ile
    50                  55                  60
Pro Ala Thr Pro Ala Ile Ser Ser Cys Pro Ser Pro Asp Arg Thr Phe
65                  70                  75                  80
Ser Thr Ile Ser Ser Leu Ser Thr Ser Ser Ala Thr Ser Ala Asp Ala
                85                  90                  95
Arg Ser Ser Ile Ser Val Ser Ser Lys Arg His Gly Tyr Ile Arg Pro
            100                 105                 110
Gln Gly Ala Glu Phe Ala Glu Ser Ala Lys Asn Arg Glu Ser Val Met
        115                 120                 125
Ser Leu Gly Ser Ile Ala His Leu Gln Tyr Tyr Phe Ala Arg Thr Gly
    130                 135                 140
Leu Leu Asp Gly Lys Gly Gly His Ala Arg Glu Trp Lys Lys Lys Lys
145                 150                 155                 160
Lys Pro Glu Glu Glu Pro Arg Leu Leu Leu Thr Pro Asn Ala Arg Phe
                165                 170                 175
```

```
Ile Asp Asp Leu Thr Glu Ser Pro Thr Glu Glu Tyr Ser Ser Asp Leu
            180                 185                 190
Gly Glu Glu Asp Pro Glu Asp Glu Met Met Leu Pro Pro Thr Val Ser
        195                 200                 205
Thr Tyr Ser Val Lys Thr His His Ile Pro Pro Pro Arg Asp Val Leu
    210                 215                 220
Ala Leu Arg Lys Asp Leu Leu His Ala Val Asp Gln Ala Glu Lys Thr
225                 230                 235                 240
Phe Arg Asp Leu Tyr Ser Gln Asn Gly Pro Pro Pro Gly Cys Asp Gly
                245                 250                 255
Pro Arg Gly Ser Val Val Ser Pro Glu Asp Pro Glu Ser Asp Phe Pro
            260                 265                 270
Ala Gln Ala Pro
        275
```

<210> 29780
<211> 105
<212> PRT
<213> A.fumigatus

```
<400> 29780
Gln Ser Cys Ser Thr Gly Gly Lys Gly Gly Lys Gly Leu Gly Lys Gly
1               5                   10                  15
Gly Ala Lys Arg His Arg Glu Ile Leu Arg Asp Asn Ile Gln Gly Ile
            20                  25                  30
Thr Lys Pro Ala Ile Arg Arg Leu Ala Arg Arg Gly Gly Val Lys Arg
        35                  40                  45
Ile Ser Ala Met Ile Tyr Glu Glu Thr Arg Gly Val Leu Lys Ser Phe
    50                  55                  60
Leu Glu Ser Val Ile Arg Asp Ala Val Thr Tyr Thr Glu His Ala Lys
65                  70                  75                  80
Arg Lys Thr Val Thr Ser Leu Asp Val Val Tyr Ala Leu Lys Arg Gln
                85                  90                  95
Gly Arg Thr Leu Tyr Gly Phe Gly Gly
            100                 105
```

<210> 29781
<211> 343
<212> PRT
<213> A.fumigatus

```
<400> 29781
Asp Ser Tyr Gln Leu Tyr Tyr Arg Tyr Asp Asn Pro Pro Pro Glu Lys
1               5                   10                  15
Asp Trp Lys Arg Ala Ala Leu Arg Gly Pro Ala Leu Pro Ala Val Gly
            20                  25                  30
Asn Ala Val Ala Gly Ala Val Gly Ala Ala Ile Ser Asn Val Val Thr
        35                  40                  45
Tyr Pro Leu Ser Leu Ile Val Thr Arg Leu Gln Thr Gln Ala Gln Arg
    50                  55                  60
Arg Thr Lys Lys Lys Asn Lys Ser Glu Ser Glu Asp Leu Asp Glu Glu
65                  70                  75                  80
Glu Asp Glu Glu Tyr Thr Asp Val Leu Asp Ala Thr Arg Lys Ile Tyr
                85                  90                  95
Ala Lys Glu Gly Leu Gly Ser Phe Tyr Thr Gly Leu Ala Gln Asp Thr
            100                 105                 110
```

```
Val Lys Thr Val Ala Asp Ser Phe Leu Phe Phe Leu Ala Tyr Gly Phe
        115                 120                 125
Phe Arg Gln Arg Arg Ile Arg Ala Arg Tyr Gly Asp Gly Arg Arg Ser
    130                 135                 140
Lys His Val Val Leu Pro Ile Leu Asp Glu Leu Ala Ile Gly Val Leu
145                 150                 155                 160
Ala Gly Ala Phe Ala Lys Leu Phe Thr Thr Pro Leu Ala Asn Ile Val
                165                 170                 175
Ala Lys Lys His Ala Ala Ser Gly Lys Lys Ala Leu Ser Thr Lys Asp
            180                 185                 190
Ile Ala Ala Arg Ile Lys Thr Glu Lys Gly Leu Arg Gly Phe Trp Ser
        195                 200                 205
Gly Tyr Ser Ala Ser Leu Ile Leu Thr Leu Asn Pro Ser Ile Thr Phe
    210                 215                 220
Phe Leu Asn Glu Val Leu Lys Tyr Ala Leu Leu Ser Arg Lys Lys Arg
225                 230                 235                 240
Gly Lys Pro Ser Pro Ala Thr Thr Phe Leu Leu Ala Ala Ile Ser Lys
                245                 250                 255
Ser Ala Ala Ser Ser Ile Thr Tyr Pro Phe Ser Met Ala Lys Thr Arg
            260                 265                 270
Ala Gln Val Asp Gly Ser Gly Asn Ser Gly Lys Pro Ser Ile Lys Ser
        275                 280                 285
Val Ser Glu Asp Gly Ile Ser Phe Ala Pro Gln Ile Ile Met Asp Val
    290                 295                 300
Leu Ala Ile Ala Arg Asn Glu Gly Val Ser Ala Leu Tyr Ala Gly Leu
305                 310                 315                 320
Pro Gly Glu Val Leu Lys Gly Phe Phe Ser His Gly Phe Thr Met Leu
                325                 330                 335
Ala Lys Asp Ala Val Tyr Ser
            340
```

<210> 29782
<211> 463
<212> PRT
<213> A.fumigatus

<400> 29782

```
Thr His Pro Thr Arg Ser Ser Gln Thr Val Glu Met Ser Ser Ser Pro
1               5                   10                  15
Thr Arg Arg Glu Arg Ile His Leu Asp Gly Arg Thr Leu Glu Gly Gly
            20                  25                  30
Gly Gln Leu Val Arg Ile Ala Val Ala Leu Ser Thr Ile Thr Gly Gln
        35                  40                  45
Pro Ile Thr Ile Glu His Ile Arg Gly His Arg Thr Gly Lys Lys Gly
    50                  55                  60
Leu Lys Ala Ser His Leu Ala Ala Ile Lys Tyr Leu Ala Asp Val Ser
65                  70                  75                  80
Gly Ser Ala Val Ser Gly Ala Glu Val Gly Ser Ser Ser Leu Thr Tyr
                85                  90                  95
His Pro Leu Pro Asp Ala Glu Thr Cys Val Arg Gln Gln Gln Glu Ile
            100                 105                 110
Asp Ile Arg Leu Arg Thr Ala Gly Ala Ile Ser Leu Val Phe Gln Ala
        115                 120                 125
Leu Tyr Pro Tyr Ile Leu His Thr Ala Ser Cys Leu Ala Val Ala Glu
    130                 135                 140
Pro Lys Pro Gln Pro Val Arg Val Ser Ile Thr Gly Gly Thr Asn Val
```

```
145                 150                 155                 160
Ser Phe Ser Pro Ser Tyr Asp Tyr Ile Ser Gln Val Leu Val Pro Asn
                165                 170                 175
Leu Ala Arg Val Gly Leu Pro Pro Leu Ala Val His Leu Glu Lys Arg
            180                 185                 190
Gly Trp Ala Thr Gly Pro Phe Ser Leu Gly Lys Val Thr Phe Val Leu
        195                 200                 205
His Ser Met Asp Arg Asn Glu Glu Ser Pro Tyr Gly Phe Pro Arg Val
    210                 215                 220
Asp Leu Asp Arg Tyr Pro Arg Gly Glu Ile Thr Gln Val Asp Val Thr
225                 230                 235                 240
Val Leu Ala Pro Asp Thr Leu Leu Phe Gly Gly Ser Gly Gln His Glu
                245                 250                 255
Ala Arg Lys Lys Gly Asn Ser Gln Ile Ser Asp Gly Thr Ser Gln Ser
            260                 265                 270
Ile Thr Leu Arg Gln Val Ile Glu Tyr Glu Thr Met Arg Val Leu Arg
        275                 280                 285
Thr Arg Leu Arg Gln Leu Pro Ser Ser Ile Val Lys Arg Ala Arg Ala
    290                 295                 300
Asp Ser Pro Phe Ala Arg Thr Tyr Glu Asn Asp Glu Ile Val Pro Ile
305                 310                 315                 320
Arg Leu His Thr Ser Glu Arg Thr His His His Ser His Ile Tyr Ile
                325                 330                 335
Leu Ile Val Ala His Thr Ser Asn Gly Phe Arg Leu Gly Arg Asp Thr
            340                 345                 350
Leu Phe Gly Ala His Gly Glu Asp Ser His Arg Lys Ser Gly Gly Arg
        355                 360                 365
Lys Gly Arg Pro Thr Asp Asp Arg Gly Ile Ala Leu Lys Leu Val Glu
    370                 375                 380
Arg Cys Val Asn Asp Phe Val Arg Glu Leu Tyr Asp Pro Arg Leu Arg
385                 390                 395                 400
Ser Thr Ser Glu Gly Arg Gln Pro Cys Val Asp Glu Tyr Met Arg Asp
                405                 410                 415
Gln Leu Val Ile Phe Glu Ala Leu Gly Lys Ser Thr Ser Lys Cys Glu
            420                 425                 430
Ala Asp Gly Arg Gly Lys Glu Asp Glu Arg Tyr Cys Ser Leu His Thr
        435                 440                 445
Gln Thr Ala Arg Trp Val Cys Glu Gln Met Leu Asp Val Asp Gln
    450                 455                 460
```

<210> 29783
<211> 202
<212> PRT
<213> A.fumigatus

<400> 29783

```
Gln Asp Gln His Asp Asp Arg Tyr Ala Ile Ala Glu Glu Tyr Val Arg
1               5                   10                  15
Val Thr Tyr Lys Leu Trp Glu Ser Ser Trp Arg Asp Asp Ala Val Val
            20                  25                  30
Leu Asp Arg Glu Arg Gly Ile Tyr Thr Asp Pro Ser Arg Val Arg Glu
        35                  40                  45
Ile Asn His Glu Gly Lys Tyr Phe Asn Val Pro Gly Pro His Leu Cys
    50                  55                  60
Gln Pro Ser Pro Gln Arg Thr Pro Val Ile Leu Gln Ala Gly Thr Ser
65                  70                  75                  80
```

```
Lys Ala Gly Lys Thr Phe Ala Ala Gln His Ala Glu Ala Ile Phe Val
                85                  90                  95
Ala Gly His Ser Pro Val Val Val Ala Lys Asn Ile Ala Glu Ile Arg
            100                 105                 110
Ala Thr Ala Gln Ala Gln Phe Gly Arg Asp Pro Lys Ser Ile Lys Phe
        115                 120                 125
Leu Ala Leu Leu Cys Pro Val Leu Gly Arg Thr Glu Glu Glu Ala Arg
    130                 135                 140
Glu Lys Phe Gln Tyr Tyr Arg Ser Leu Gly Ser Ile Asp Gly Ala Leu
145                 150                 155                 160
Ala Leu Phe Gly Gly Trp Thr Gly Ile Asn Leu Asp Thr Tyr Gly Asp
                165                 170                 175
Asp Glu Glu Leu Arg His Val Glu Ser Asn Ala Ile Arg Trp Ala Ser
            180                 185                 190
Met Val Val Glu Thr Arg Asp Gly Ala Asn
        195                 200
```

<210> 29784
<211> 74
<212> PRT
<213> A.fumigatus

<400> 29784

```
Pro Ser Ser Ser Ala Val Glu Gly Trp Ser Lys Ser Thr Pro Glu Val
1               5                   10                  15
Ala Lys Trp Thr Lys Ser Thr Val Gly Gln His Ile Thr Val Gly Gly
            20                  25                  30
Leu Gly Ala Thr Pro Val Gly Thr Pro Ala Gln Val Ala Asp Glu Met
        35                  40                  45
Glu Arg Trp Val Arg Glu Ala Asp Val Asp Gly Phe Asn Leu Val Ser
    50                  55                  60
Cys Pro Ala Asp Asp His Ser His Arg Ser
65                  70
```

<210> 29785
<211> 78
<212> PRT
<213> A.fumigatus

<400> 29785

```
Gln Gly Lys Ala Tyr Ala Ile Lys Pro Gly Ser Phe Lys Asp Ile Ile
1               5                   10                  15
Asp Leu Leu Ile Pro Glu Leu Arg Arg Arg Gly Leu Phe Trp Glu Asp
            20                  25                  30
Tyr Ala Val Glu Arg Gly Thr Tyr Arg Glu Asn Leu Tyr Gly Lys Pro
        35                  40                  45
Gly Gln Thr Gly Pro Pro Ala Asp His Pro Ala Ser Arg Tyr Arg Trp
    50                  55                  60
His Ala Gly Val Asp Ala Ala Asp His Lys Ile Pro Glu Asn
65                  70                  75
```

<210> 29786
<211> 251
<212> PRT
<213> A.fumigatus

<400> 29786
Leu Gly Pro Phe Arg Asp Phe Trp Cys Arg Phe Gly Pro Ala Leu Asp
1 5 10 15
Arg Gly Ala Arg Arg Leu Ile Ser Thr Ile Ser Gly Phe Asp Asp His
20 25 30
Arg Ser Pro Pro Asn Cys Ile Ala Leu Asp Met Ser Lys Leu Phe Val
35 40 45
Ile Thr Val Arg Ile Gln Val Asp Ser Arg Pro Pro Ala Lys Glu Arg
50 55 60
Gln Ser Thr Ile Asp Arg Ala Gln Ala Ala Val Val Leu Glu Phe Phe
65 70 75 80
Ala Ser Leu Leu Leu Arg Pro Ala Gln Asn Arg Ala Gln Gln Gly Gln
85 90 95
Glu Phe Asp Ala Phe Gly Ile Thr Pro Glu Leu Cys Leu Arg Arg Arg
100 105 110
Pro Asp Leu Cys Asn Ile Leu Gly Asn His Tyr Trp Thr Val Ser Gly
115 120 125
Tyr Lys Asp Arg Leu Gly Met Leu Cys Gly Lys Arg Leu Ser Cys Leu
130 135 140
Gly Gly Ala Arg Leu Lys Asp Asp Trp Gly Ser Leu Gly Ala Arg Leu
145 150 155 160
Thr Gln Met Trp Thr Gly Asp Val Glu Val Phe Ala Leu Val Val Asp
165 170 175
Phe Pro His Thr Ala Gly Ile Gly Val Asp Ser Ala Leu Thr Ile Glu
180 185 190
Asp Asn Ser Ile Val Ser Pro Gly Arg Leu Pro Gln Phe Val Gly Tyr
195 200 205
Ser His Ile Phe Leu Gly Asn Gly Ile Ser Val Val Met Leu Val Leu
210 215 220
Leu Glu Lys Ala Ser Gly Leu Gly Met Glu Pro Thr Cys Gly Cys Trp
225 230 235 240
Ala Trp Pro Arg Phe Arg Ala Ala Glu Ser Arg
245 250

<210> 29787
<211> 80
<212> PRT
<213> A.fumigatus

<400> 29787
Met Ala Gly His Ala Tyr Asn Ser Ser Lys Arg Tyr Gly Ala Glu Ser
1 5 10 15
Asn Asp Ala Cys Lys Ala Thr Leu Thr Asp Gly Leu Pro Gln Thr Lys
20 25 30
Gly Val Asn Ala Ala Ser Ile Thr Arg Gln Ser Arg His Asp Val Thr
35 40 45
Glu Pro Lys Pro Ile Ala Met Ile Glu Ala Arg Leu Leu Ile His Thr
50 55 60
Phe Phe Val Ala Leu Phe Ile Lys Leu Leu Cys Gly Thr Ala Ala Glu
65 70 75 80

<210> 29788
<211> 76
<212> PRT
<213> A.fumigatus

<400> 29788
Tyr Ala Met Val Cys Arg Asp Pro Arg Glu Leu Pro Phe Asp Arg Val
1 5 10 15
Leu Gly Asp Leu Ser Leu Pro Pro Ala Val Leu Tyr Ala Asp Ile Ala
20 25 30
Ser Pro Met Phe Lys Asp Phe His His Thr Leu Ser Ala Leu Ala Lys
35 40 45
Asp Gly Gln Val Ser Tyr Arg Val Arg Tyr Arg Pro Thr Gln His Trp
50 55 60
Ile Ser Arg Pro Leu Phe Val Ser Gly Tyr Gly Val
65 70 75

<210> 29789
<211> 655
<212> PRT
<213> A.fumigatus

<400> 29789
His Ser Ile Cys Leu Ser Ile Asp Leu Phe Leu Phe Phe Leu Phe His
1 5 10 15
Pro Leu Phe Phe Leu Gly Ser Leu Cys Pro Tyr Lys Pro Pro Phe His
20 25 30
Cys Phe Pro Leu Ser Gln Leu Pro Thr Leu Arg Tyr Arg Pro Ser His
35 40 45
Arg Ser Arg Pro Thr Leu Ser Thr His Cys Glu Arg Gly Ala Ser Thr
50 55 60
Leu Ser Tyr Leu Leu Cys Arg Ser Glu Ile Thr Thr Tyr Leu Ser Leu
65 70 75 80
Met Ala Phe Arg Leu Pro Pro Gln Val Thr Arg Arg Arg Asn Ser Tyr
85 90 95
Ser Thr Gln Tyr Val Pro Glu Pro Asp Ile Pro Ser Pro Val Ser Pro
100 105 110
Leu Phe Glu Asn Glu Asn Glu Ser Thr Gln Trp Val Leu Phe Ser Pro
115 120 125
Pro Gln Pro Ser Thr Ala Arg Thr His Thr Thr Ser Thr Glu Arg Thr
130 135 140
Pro Arg Arg Thr Gly Ala Ser Arg Leu Ser Asp Phe Gly Ser Phe Asp
145 150 155 160
Thr Ala Thr Arg Ser Ile Phe Gly Ser Glu Gly Asp Asn Thr Glu Gly
165 170 175
Asp Ala Glu Glu Pro Leu Asp Glu Asp Gly Thr Glu Leu Asp Ser Leu
180 185 190
Asp Asp Gly Leu His Ala Phe Arg Ala Pro Ser Val Thr Gln Glu Ser
195 200 205
Thr Ser Arg Leu Asn Gln Ser Thr Pro Ala Val Leu Pro Thr His Asp
210 215 220
Gly Leu Gly Ser Phe His Ala Ser Ser Gln Pro Val Gln Glu Gln Leu
225 230 235 240
Trp Gln Tyr Glu Gln Phe Asn Pro Arg Arg Arg Gly Asp Val Arg Pro
245 250 255
Arg Arg Arg Ser Ser Val Gln Arg Gln Leu Asp Thr Val Glu Asp Arg
260 265 270
Glu Gln Val Asp Met Glu Tyr Asp Arg Trp Arg Arg Ile Glu Lys Trp
275 280 285
Arg Met Asp Gln Ser Arg Ala Leu Leu Gln Glu Ile Glu Arg Glu Thr
290 295 300

```
Arg Arg Arg Arg Arg Asn Ser Arg Val Ser Val Gln Thr Asp Gln Val
305                 310                 315                 320
Thr Ser Arg Pro Ile Val Pro Gly Thr Ser Asp Gly Ala Leu Glu Thr
                325                 330                 335
Pro Lys Glu Asp Ser Leu Gln Pro His Gln Glu Ser Glu Glu Asp Glu
            340                 345                 350
Ser Phe Trp Arg Arg Ile Thr Arg Lys Val Ile Arg Asp Leu Ile Gly
        355                 360                 365
Ile Asp Asp Ser Leu Leu Ser Val Ile Leu Gly Glu Ser Leu Pro Asn
    370                 375                 380
Met Gly Ser Glu Asp Asn Lys Ser Ala Gly Thr Asp Asn Ser Leu Asp
385                 390                 395                 400
Leu Ser Lys Thr Leu Gly Glu Leu Asp Ser Met Pro Asp Glu Gln Gly
                405                 410                 415
Leu Trp Gln Ser Lys Leu Leu Gln Arg Ile Ala Arg Glu Leu Gly Ile
            420                 425                 430
Leu Val His His Leu Cys Glu His Pro Gly Ala Phe Thr Thr Tyr Leu
        435                 440                 445
Asn Val Thr Asn Glu Ile Pro Ser Glu Tyr Ala Gly Ile Pro Leu Gly
    450                 455                 460
Arg Leu Ala Glu Glu Asn Glu Ala Ala Ser Gln Gly Ala Ser Ala Glu
465                 470                 475                 480
Pro Ala Leu His Thr Ala Met Ser Ser Gln Asp Ser Met Met Ser Pro
                485                 490                 495
Gln Phe Ser Pro Thr Met Arg Asp Pro Thr Ser Arg Glu His Ala Ala
            500                 505                 510
His Trp Gly Ile Glu Asp Glu Glu Asp Ala Ser Arg Glu Pro Leu Pro
        515                 520                 525
Glu Ser Thr Arg Leu Gln Gln Glu Lys Glu Tyr Trp Glu Arg Glu Leu
    530                 535                 540
Asp Val Met Met Val Phe Arg Tyr Leu Arg Asn Arg Phe Gly Arg Arg
545                 550                 555                 560
Gly Ser Asn Ala Asp Ser Thr His Ala Cys Ser Arg Arg His Pro Gln
                565                 570                 575
Asp Ala Ser Arg Arg Ala Val Ile Ile Arg Gln His Gln Pro Leu Val
            580                 585                 590
Ala Gly Ala His Ser Arg Ser Gln Thr Gln Leu Arg Arg Gln Ser Trp
        595                 600                 605
Pro Thr Ser Phe Thr Ser Pro Ala Ala Pro Ser Thr Pro Pro Pro Asn
    610                 615                 620
Gln Phe Gln Leu Ala Arg Ser His Lys Lys Leu Ser Gly Ser Leu Gln
625                 630                 635                 640
Phe Gly Val Arg Leu Pro His Phe Gln Thr Arg Asn Tyr Trp Glu
                645                 650                 655
```

<210> 29790
<211> 66
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (10),(15),(28)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29790

Thr Val Trp Ala Gly Gly Leu Ser Pro Xaa Thr Ile Ile Leu Xaa Gly
1 5 10 15
Ile Asn Asn Pro Val Asn Ser Leu Gly Gly Phe Xaa Thr Thr Ala Leu
20 25 30
Ile Phe Tyr Pro Val Leu Ala Leu Gln Asn Leu Ser Arg Thr Asn Lys
35 40 45
Glu Pro Ser Pro Pro Pro Phe Asn Ser Arg Trp Phe Arg Ile Val Ser
50 55 60
Thr Asn
65

<210> 29791
<211> 157
<212> PRT
<213> A.fumigatus

<400> 29791
Pro Val Leu Thr Asn Gly Thr Val Gly Asp Gln Leu Trp Met Ser Arg
1 5 10 15
Phe Leu Leu His Arg Val Ala Glu Glu Phe Gly Val Lys Ile Ser Phe
20 25 30
Glu Pro Lys Pro Ile Lys Gly Asp Trp Asn Gly Ala Gly Leu His Thr
35 40 45
Asn Val Ser Thr Ala Ala Thr Arg Ala Glu Gly Gly Leu Lys Val Ile
50 55 60
Glu Ala Tyr Met Gln Lys Leu Glu Ala Arg His Asn Glu His Ile Ala
65 70 75 80
Val Tyr Gly Glu Gly Asn Glu Glu Arg Leu Thr Gly Arg His Glu Thr
85 90 95
Gly Ser Ile Asp Lys Phe Ser Tyr Gly Val Ala Asp Arg Gly Gly Ser
100 105 110
Ile Arg Ile Pro Arg Gln Val Ala Lys Asp Gly Lys Gly Tyr Phe Glu
115 120 125
Asp Arg Arg Pro Ala Ser Asn Ala Asp Pro Tyr Gln Ile Thr Gly Ile
130 135 140
Ile Val Glu Thr Val Ser Leu His Leu Leu Ile Pro Arg
145 150 155

<210> 29792
<211> 82
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (17),(61),(75)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29792
His Phe Ser Leu Gly Met Thr Gly Trp Pro Leu Trp Gly Gly Pro Arg
1 5 10 15
Xaa Gly Phe Pro Val Ala Pro Gly Ser Leu Leu Leu Arg Cys Trp Asn
20 25 30
Trp Pro Gly Phe Thr Ala Trp Thr Leu Leu Arg Phe Ile Thr Ala Pro
35 40 45
Gly Leu Tyr Ala Gly Ile Lys Ile Ser Gly Ile Asn Xaa Glu Val Met

```
    50                  55                  60
Pro Ser Gln Trp Glu Tyr Gln Val Gly Pro Xaa Gln Gly Ile Glu Ser
65                  70                  75                  80
Thr Ser
```

<210> 29793
<211> 62
<212> PRT
<213> A.fumigatus

<400> 29793

```
Pro Glu Leu Ala Ile Cys Glu Ala Val Leu Ser Ser Gln Ser Ala Arg
1               5                   10                  15
Leu Pro Thr Ala Thr Ser Thr Ile Pro Tyr Asp Ser Gly Leu Tyr Thr
            20                  25                  30
Phe Gly Lys Val Leu Val Ser Ala Glu His Leu Gln Trp Leu Tyr Ser
        35                  40                  45
Thr Asp Pro Trp Val Ser His Cys Leu Phe Asn Thr Phe Gly
    50                  55                  60
```

<210> 29794
<211> 235
<212> PRT
<213> A.fumigatus

<400> 29794

```
Val Ile Asn Ser Ser Asp Cys Ile Gln Ala Pro Pro Ser Ala Arg Gly
1               5                   10                  15
Leu Gly Arg Ser Gly Pro Arg Arg Arg Ser Gly Cys Leu Thr Cys Arg
            20                  25                  30
Ala Arg Lys Val Arg Cys Asp Glu Ala Lys Pro Ile Cys Ala Asn Cys
        35                  40                  45
Thr Arg Leu Arg Leu Gly Cys Val Tyr Lys Thr Ile Val Pro Ala Ala
    50                  55                  60
Val Pro Arg Gln Ala Asn Gly Pro Thr Ala Ser Val Thr Gly Asn Pro
65                  70                  75                  80
Thr Ala Asn Ala Phe Gln Arg Pro Asp Ala Gly Tyr Phe Ser Thr Val
                85                  90                  95
Leu Arg Pro Asp Gly Gln Gln Ala Tyr Arg Pro Pro Gln Ala Ser Asn
            100                 105                 110
Ala Ser Gln Leu Arg Ser Val Asp Asn Ala Ala Thr Ser Pro Gly Pro
        115                 120                 125
Phe Asp Met Leu Gly Phe Met Ser Glu Ile Thr Ser Glu Leu Glu Arg
    130                 135                 140
Lys His Leu Asp Leu Thr Asn Gly Leu Ser Glu Phe Thr Ser Ser Thr
145                 150                 155                 160
Ser Cys Lys Ala Ser Asn Asp Thr Ala Asn Val Pro His Thr Asp Arg
                165                 170                 175
Ser Met Ser Cys Asp Ser Cys Phe His Ser Lys Gly Thr Gln Ser Gln
            180                 185                 190
Pro Pro Ala Thr Glu Gly Leu Trp Pro Glu Thr Gly Ala Ala Tyr Glu
        195                 200                 205
Glu His Leu Leu Ala Ser Phe Leu Ser Ser Glu Pro Pro Ala Thr Ile
    210                 215                 220
Phe Gly Pro Val Asn Leu Glu Trp Lys Tyr Val
```

225 230 235

<210> 29795
<211> 291
<212> PRT
<213> A.fumigatus

<400> 29795

```
Val Tyr Asn Ala Ile Pro Glu Leu Val Arg Thr Ala Ser Val Pro Thr
1               5                  10                  15
Asp Asp Gly Tyr Arg Ala Val Glu Asp Ala Arg Glu His Pro Thr Ala
            20                  25                  30
Asn Gln Lys Gly Ile Ile Lys Ser Ala Ile His Leu Val Lys Arg Ala
        35                  40                  45
Ala Ser Pro Trp Arg Gln Tyr Val Ala Ser Pro Val Phe Leu Ala Ser
    50                  55                  60
Phe Ala Leu Ser Leu Leu Tyr Leu Thr Val Leu Ser Phe Gly Thr Thr
65                  70                  75                  80
Met Val Thr Tyr Leu Leu His Met Gly Phe Asp Pro Leu Gln Val Ser
                85                  90                  95
Cys Met Arg Ile Gly Ala Val Leu Ala Glu Leu Ser Gly Thr Trp Ala
            100                 105                 110
Ala Pro Phe Ile Met Gly Arg Ile Gly Pro Ile Arg Ser Gly Leu Trp
        115                 120                 125
Phe Leu Asn Trp Gln Leu Gly Cys Leu Ala Thr Ala Ala Val Ala Phe
    130                 135                 140
Ala Leu Tyr Asp Ser Asn Ser Arg Leu Val Ala Val Ser Leu Ile Leu
145                 150                 155                 160
Gly Val Ala Leu Ser Arg Ile Gly Leu Trp Gly Phe Asp Leu Ser Val
                165                 170                 175
Gln Phe Leu Val Gln Glu Val Ile Thr Phe Ser Pro Glu Gly Cys Tyr
            180                 185                 190
Gln Arg Leu Leu Met Phe Ile Asn Lys Gly Val Glu Glu Asp Thr Arg
        195                 200                 205
Gly Arg Phe Ser Ser Thr Glu Met Gly Val Gln Asn Val Phe Glu Met
    210                 215                 220
Leu Ser Phe Ala Thr Thr Val Val Phe Pro Leu Pro Glu Gln Phe Lys
225                 230                 235                 240
Tyr Pro Val Phe Ile Ser Tyr Gly Ala Ile Ala Leu Ala Ala Ile Cys
                245                 250                 255
Phe Ala Ala Tyr Val Arg Lys Glu Arg Gly His Leu Leu His Ile Ser
            260                 265                 270
Arg Cys Trp Gly Gly Asp Lys Met Arg Arg Ser Tyr Gln Ala Leu Pro
        275                 280                 285
Gly Gly Leu
    290
```

<210> 29796
<211> 163
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (158)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29796
Leu Asp Met Ser Asp Gln Gln His His Gln Asp Ala Met Arg Arg Phe
1 5 10 15
Ser Leu Gly Thr Gly Gln Gly Gln Val Asp Pro Leu Asp Leu Pro Leu
20 25 30
Arg Gln Val Thr Asn Asp Ala Asn Met Glu Glu Tyr Thr Thr Glu Thr
35 40 45
Ala Ala Gly Glu Ile Ile Lys Pro Val Arg Ser Ser Ala Thr Gly Lys
50 55 60
Val Glu Asp Trp Lys Leu Val Thr Phe Lys Val Asp Asp Pro Glu Asn
65 70 75 80
Pro Lys Asn Trp Ser Lys Ala Tyr Lys Trp Tyr Cys Thr Met Val Val
85 90 95
Ser Phe Thr Cys Phe Val Leu Ser Phe Gly Asn Ser Phe Asp Pro Ala
100 105 110
Asp Leu Asp Gly Ala Pro Lys Gly Thr Lys Val Tyr Ser Arg Thr Arg
115 120 125
Leu Val Ile Glu Ser Ala Leu Val Thr Asn Pro Arg Trp Val Arg Leu
130 135 140
Lys Ala Glu Lys Gln Ser Pro Gly Pro Ser Gly Leu Ile Xaa Pro Cys
145 150 155 160
Cys Gly Asp

<210> 29797
<211> 62
<212> PRT
<213> A.fumigatus

<400> 29797
Arg Pro Val Arg Val Thr Ile Ala Asp Glu Lys Ala Ala Lys Ala Gly
1 5 10 15
Arg Gly Ala Trp Thr Leu Asp Gly Lys Met Ile Asp Ile Pro Val Ala
20 25 30
Glu Lys Ala Arg Ala Ile Val Lys Lys Ala Gly Ala Cys Gly Phe Asn
35 40 45
Val Lys Glu Leu Gln Asp Lys Trp Gln His Gln Glu Pro Glu
50 55 60

<210> 29798
<211> 198
<212> PRT
<213> A.fumigatus

<400> 29798
Asn Ala Gln Thr Asn Ile Ser Leu Ser Ala Ala Gln Ala Trp Asn Arg
1 5 10 15
Asn Asp Ala Arg Ala Ala Lys Ala Leu Ser Leu Arg Gly Gln Ala Glu
20 25 30
Asn Glu Ala Met Arg Arg Cys His Arg Glu Ala Ala Arg Gln Leu Tyr
35 40 45
Glu Glu Arg Asn Lys His Leu Leu Ser Ala Gly Leu Asp Glu Ser Ser
50 55 60
Glu Glu Leu Tyr Val Asp Leu His Gly Leu His Pro Glu Glu Ala Ile
65 70 75 80

```
Glu Tyr Leu Glu Lys Ile Leu Leu Lys His Ala Arg Glu Gly Arg Cys
                85                  90                  95
Val Ile Tyr Ala Ile Thr Gly Thr Gly His His Ser Lys Asn Gly Lys
            100                 105                 110
Asp Lys Ile Gly Lys Ala Val Lys Ala Trp Leu Asn Glu Trp Lys Tyr
        115                 120                 125
Leu Tyr Arg Glu Phe Ser Val Pro Gly Glu Arg Gly Gly Tyr Val Gly
    130                 135                 140
Gly Ile Leu Gly Ile Asp Pro Thr Ser Tyr Asp Lys Thr Leu Ala Lys
145                 150                 155                 160
Ser Leu Glu Glu Gly Glu Asp Gly Lys Gly Gly Asp Ser Asn Gly Ser
                165                 170                 175
Gln Pro Val Met Thr Met Gly Lys Ile Gln Leu Leu Lys Arg Glu Asp
            180                 185                 190
Leu Glu Ser Lys Ser Ser
        195
```

<210> 29799
<211> 430
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (19)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29799

```
Met Glu Ile Gly Gly Val Ala Asp Ala Glu Ala Leu Val Pro Asp Met
1               5                  10                  15
Thr Thr Xaa Tyr Gly Ile Leu Phe Arg Ala Arg Thr Gln Gly Leu Leu
            20                  25                  30
Val Tyr Ala Lys Ala Leu Asn Cys Asp Trp Glu Gly Val Asp Ala Gly
        35                  40                  45
Leu Gln Glu Met His Lys Leu Lys Leu Thr Arg Arg Arg Arg Asp Phe
    50                  55                  60
Leu Pro Ile Phe Asp Arg Ile Phe Leu Glu Tyr Trp Val Ser His Ser
65                  70                  75                  80
Gly Ile Glu Ile Arg Asn Phe Val Phe Arg Tyr Leu Asp Lys Phe Asp
                85                  90                  95
Ile Val Pro Asp Arg Val Leu Tyr Lys His Ile Leu Glu Ala Phe Val
            100                 105                 110
Glu Lys Gly Asp Lys Glu Met Ile Ala Glu Phe Thr Ser Met Ala Lys
        115                 120                 125
Gln Arg Ser Trp Asn Ile Pro Ile Asn Glu Gln Gln Phe Leu Glu Ile
    130                 135                 140
Leu Arg Ser Arg Arg Leu Ala Leu Glu Gly Ala Pro Val Gly Phe Trp
145                 150                 155                 160
Gln Met Leu Gln Ala Ala Arg Val Lys Tyr Gly His Ser Ser Thr Ser
                165                 170                 175
Gln Arg Ile Met Gly Tyr Asp Gln Gln Ser Phe Pro Leu Pro Glu Val
            180                 185                 190
Asn Ser Met Pro Tyr Thr Gln Asn Pro Leu Ser Trp Tyr Gln Arg Thr
        195                 200                 205
Met Gln Glu Thr Thr Pro Ser Lys Pro Val Asp Gln Tyr Gln Lys Leu
    210                 215                 220
```

```
His Lys Gln Met Thr His Phe Leu His Ala Gly Lys Leu Lys Glu Ala
225                 230                 235                 240
Leu Lys Cys Phe Gln Asn Ala Lys Asn Ala Arg Phe Gln Met Arg Gln
                245                 250                 255
Leu His Val Glu Leu Ala Val Ile Ala Thr Leu Leu Glu Asp Gly Leu
            260                 265                 270
Ser Ala Ala Arg Ser Leu Ile Glu Ser Glu Trp Arg Thr Ile Arg His
        275                 280                 285
Leu Val Arg Phe Ser Pro Ile Phe Phe Arg Gln Val Met Ala Val Asp
    290                 295                 300
Glu Asp Ala Gly Gly His Ile Val Gln Met Ala Val Leu Arg Phe Tyr
305                 310                 315                 320
Gln Leu Cys Trp Ser Thr Lys His Met Lys Val Lys His His Leu Thr
                325                 330                 335
Val Ala Thr Ser Arg Arg Leu Ile Ser Gln His Lys Pro Glu Met Ala
            340                 345                 350
Leu Glu Leu Leu Thr Ala Val Tyr Lys Ser Arg Tyr Arg Phe Ala Ala
        355                 360                 365
Thr Phe Asp Gly Val Cys Met Lys Met Phe Ala Arg Ala Phe Ala Ala
    370                 375                 380
Thr Asp Asn Ile Leu Gly Leu Arg Trp Cys Ile Leu Thr Ala Leu Ser
385                 390                 395                 400
Arg Asp Ser Ala Leu Asn His Asp Phe Val Val Glu Val Arg Arg Ile
                405                 410                 415
Leu Gly Thr Leu Ser Pro Pro Ser Ala Ser Ser Pro Arg Gly
            420                 425                 430
```

<210> 29800
<211> 187
<212> PRT
<213> A.fumigatus

<400> 29800

```
Phe Ile Leu Ile Asp Lys Pro Arg Arg Thr Asn Arg Tyr Leu Gln Lys
1               5                   10                  15
Tyr Arg Glu Asp Ala Glu Ala Lys Arg Ala Glu Ala Ala Arg Arg Lys
            20                  25                  30
Ala Glu Arg Asp Ala Leu Leu Ala Ala Glu Glu Ala Ser Leu Pro Ser
        35                  40                  45
Lys Pro Lys Gly Ala Gly Ala Lys Gln Ala Gln Lys Lys Thr Arg Gly
    50                  55                  60
Leu Asp Leu Ser Gln Leu Asp Asp Glu Pro Ala Ser Arg Lys Ala Ala
65                  70                  75                  80
Ala Leu Asn Ala Ser Gly Ile Asp Asn Ala Leu Asp Ala Leu Ser Leu
                85                  90                  95
Thr Ala Lys Asp Ser Ser Lys Ile Asp Arg His Pro Glu Arg Arg Tyr
            100                 105                 110
Lys Ala Ala Tyr Ala Ala Tyr Glu Ala Arg Arg Leu Pro Glu Ile Glu
        115                 120                 125
Lys Glu Asn Pro Gly Leu Arg Arg Asn Gln Arg Val Glu Leu Cys Lys
    130                 135                 140
Lys Glu Phe Asp Lys Ser Glu Glu Asn Pro Phe Asn Gln Val His Val
145                 150                 155                 160
Ala Phe Asp Ala Thr Arg Glu Glu Val Ala Ala Ala Arg Glu Ala Glu
                165                 170                 175
Arg Arg Lys Val Glu Ala Arg Leu Ala Ser Arg
```

180 185

<210> 29801
<211> 76
<212> PRT
<213> A.fumigatus

<400> 29801
Pro Val Gly His Gly Ala Ile Arg Pro Leu Gln Asp Leu Trp Gly Met
1 5 10 15
Pro Ile Pro Cys Val Ala Val Pro Ala Gly Pro Val Met Gly Met Glu
20 25 30
Leu Gly Arg Met Asn Arg His Thr Glu Phe Val Thr Gly Val Asp Trp
35 40 45
Cys Leu Phe Gly Ser Glu Gly Trp Cys Ala Ser Val Gly Trp Asp Glu
50 55 60
Asn Leu Tyr Val Trp Asp Val Arg Ala Val Met Gly
65 70 75

<210> 29802
<211> 71
<212> PRT
<213> A.fumigatus

<400> 29802
Trp Asp Lys Asp Ala Met Ile Tyr Cys Ser Pro Val Pro Pro Thr Leu
1 5 10 15
Tyr Trp Leu Phe Arg Leu Pro Arg Asp Thr Ile Met Thr Arg Leu Arg
20 25 30
Asp Ser Asp Phe Thr Phe Pro Lys Lys Ser His Glu Tyr Val Lys Phe
35 40 45
Cys Val Asn Glu Ile Ser Pro Thr Ile Leu Phe Ser Ser Lys Ser Ser
50 55 60
His Glu Ile Tyr Pro Ile Arg
65 70

<210> 29803
<211> 248
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (2),(14),(15),(19),(22),(36)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29803
His Xaa Tyr Pro Leu Thr His Phe Val Thr Gly Ser Asp Xaa Xaa Ser
1 5 10 15
Ile Ser Xaa Trp Ser Xaa His Lys Arg Ser Leu Leu His Thr Ile Gln
20 25 30
Cys Ala His Xaa Leu Asp Leu Leu Leu Pro Leu Asp Glu Leu Ser Ala
35 40 45
Glu Val Asp Gln Lys Leu Ala Asp Ser Asn Ser Arg Phe Phe Arg Arg
50 55 60
Met Pro Arg Trp Ile Thr Ala Leu Ala Thr Val Pro Gly Thr Asp Ile

65 70 75 80
Val Leu Ser Gly Ser Trp Asp Gly Phe Ile Arg Ala Trp Lys Val Ser
85 90 95
Glu Asp Lys Lys Thr Ile Ile Pro Leu Gly Pro Val Gly Gly Gly Lys
100 105 110
Leu Gly Ser Ala Thr Gln Asp Thr Pro Ser Arg Gln Leu Lys Gln Thr
115 120 125
Leu Glu Phe Asn Thr Ala Ala Asp Ala Asp Ser Met Ser Val Asp Glu
130 135 140
Pro Gln Asn Gln His Thr Glu Asp Thr Lys Asn Glu Ala Glu Pro Leu
145 150 155 160
Ile Lys Gly Val Ile Asn Asp Ile Ala Val Phe Glu Arg Arg Ala Asp
165 170 175
Thr Ala Lys Pro Gly Gln Gly Gln Ala Glu Ser Lys Thr Lys Thr Lys
180 185 190
Ser Ser Glu Pro Glu Pro Arg Gly Leu Cys Ile Val Ala Ala Val Gly
195 200 205
Lys Glu His Arg Phe Gly Arg Trp Lys Cys Phe Ala Asn Asn Phe His
210 215 220
Glu Gly Ser Ala Ala Asp Gly Arg Asn Gly Ala Val Val Phe Glu Val
225 230 235 240
Pro Phe Ile Ser Asp Ser Lys Gln
245

<210> 29804
<211> 276
<212> PRT
<213> A.fumigatus

<400> 29804
Thr Ser Phe Gln Leu Arg Ser Ile Arg Ser Ser Arg Thr Gln Thr Pro
1 5 10 15
Val Phe Phe Gly Ala Cys Pro Ala Gly Ser Gln Leu Trp Gln Arg Phe
20 25 30
Leu Ala Pro Thr Ser Phe Leu Ala Ala Ala Gly Thr Ala Ser Ser Glu
35 40 45
Pro Gly Arg Phe Pro Arg Thr Arg Arg Gln Ser Tyr Arg Leu Ala Pro
50 55 60
Ser Ala Glu Glu Ser Ser Val Leu Arg His Arg Thr His His Leu Asp
65 70 75 80
Ser Ser Asn Arg Leu Ser Ser Leu Thr Gln Pro Pro Thr Arg Thr Pro
85 90 95
Cys Pro Ser Thr Asn Pro Arg Ile Asn Thr Pro Arg Thr Pro Arg Thr
100 105 110
Lys Leu Asn Leu Ser Ser Arg Val Ser Ser Thr Ile Leu Pro Cys Leu
115 120 125
Ser Val Val Pro Thr Arg Pro Asn Pro Ala Lys Ala Arg Pro Ser Pro
130 135 140
Arg Pro Arg Pro Ser His Pro Asn Pro Ser Pro Ala Val Ser Ala Ser
145 150 155 160
Ser Leu Leu Leu Gly Arg Asn Thr Gly Ser Gly Ala Gly Ser Ala Leu
165 170 175
Arg Thr Ile Phe Thr Arg Asp Leu Gln Leu Thr Ala Ala Thr Ala Arg
180 185 190
Trp Ser Leu Lys Phe Pro Leu Ser Leu Thr Ala Ser Ser Asp Trp Asn
195 200 205

```
Thr Phe Ala Glu Trp Gly Ile Gly Ala Cys Ile Leu His Ala His Leu
    210                 215                 220
Ile Met Arg Ala Ser Val Ala Gln Met Lys Phe Arg Asn Pro Pro Arg
225                 230                 235                 240
Val Asp Leu Trp Tyr Arg Lys Thr Arg Met Pro Arg Arg Phe Val Cys
                245                 250                 255
Ile Phe Leu Tyr Trp Glu Asn Ser Pro Ala Phe Gly Thr Leu Pro Ser
            260                 265                 270
Leu Gln Cys Thr
        275
```

<210> 29805
<211> 156
<212> PRT
<213> A.fumigatus

<400> 29805

```
Glu Pro Leu Ser Asn Ala Asp Gly Ser Leu Asn Ala Ala Asp Ala Ser
1               5                   10                  15
Val Gly Ala Gly Ala Gly Ala Ala Gly Glu Gly Val Ala Gly Thr Ala
            20                  25                  30
Gly Ala Glu Gly Ala Ala Asp Gly Ala Gly Ala Asp Gly Ala Ala Gly
        35                  40                  45
Val Glu Ala Ala Ala Leu Glu Gly Val Glu Gly Ala Cys Glu Gly Val
    50                  55                  60
Ala Ala Asp Glu Gly Ala Leu Gly Cys Ile Arg Trp Tyr Gly Gln Met
65                  70                  75                  80
Gln Cys Ser Glu Ser Phe Asn Gly Glu Ala Gly Val Ile Thr Phe Asp
                85                  90                  95
Thr Met His Thr Met Lys Pro Phe Ser Ser Met Leu Tyr Val Ser Met
            100                 105                 110
Val Leu Ser Ser Trp Arg Ile Phe Pro Ala Ser Tyr Ser Ala Lys Arg
        115                 120                 125
Gln Arg Asp Lys Leu Arg Lys Ser Arg Ser Lys Gly His Lys Lys Gln
    130                 135                 140
Gln Leu Thr Val Pro Phe Gln Arg Ile Pro Glu Lys
145                 150                 155
```

<210> 29806
<211> 87
<212> PRT
<213> A.fumigatus

<400> 29806

```
Arg Arg Arg Phe Pro Arg Lys Lys Asp Gly Arg Tyr Leu Ser Ser Ser
1               5                   10                  15
Ser Ser Ile Pro Val Ser Leu Thr Met Ile Thr Leu Gly Phe Val Ile
            20                  25                  30
Ser Gln Glu Ser Ala Gly Met Ala Gln Ser Ile Val Val Phe Cys Val
        35                  40                  45
Leu Cys Phe Cys Phe Phe Leu Ala Tyr Leu Ala Asp Ala Ser Leu Asn
    50                  55                  60
Asn Ser Gln Gly Lys Ser Ser Lys Met Thr Arg Pro Ser Arg His Thr
65                  70                  75                  80
Thr Leu Arg Arg Arg Val Ser
                85
```

<210> 29807
<211> 131
<212> PRT
<213> A.fumigatus

<400> 29807
Pro Tyr His Leu Ile Gln Pro Lys Ala Pro Ser Ser Ala Ala Thr Pro
1 5 10 15
Ser Gln Ala Pro Ser Thr Pro Ser Arg Ala Ala Ala Ser Thr Pro Ala
20 25 30
Ala Pro Ser Ala Pro Ala Pro Ser Ala Ala Pro Ser Ala Pro Ala Val
35 40 45
Pro Ala Thr Pro Ser Pro Ala Ala Pro Ala Pro Ala Pro Thr Asp Ala
50 55 60
Ser Ala Ala Phe Asn Asp Pro Ser Ala Leu Leu Ser Gly Ser Gln Ser
65 70 75 80
Glu Ala Val Ile Ser Gln Met Glu Ser Met Gly Phe Pro Arg Ser Asp
85 90 95
Ile Asn Arg Ala Met Arg Ala Ala Phe Phe Asn Pro Asp Arg Ala Ile
100 105 110
Glu Tyr Leu Leu Asn Val Ser Cys His Leu Leu Tyr Ser Thr Cys Ala
115 120 125
Ser His Asp
130

<210> 29808
<211> 159
<212> PRT
<213> A.fumigatus

<400> 29808
Gly Ile Pro Asp Asn Ile Gln Gln Glu Gln Gln Gln Gln Ala Ala Ala
1 5 10 15
Ala Ala Ala Ala Pro Arg Pro Ser Ala Pro Ser Gly Glu Ser Ala Pro
20 25 30
Ser Ser Thr Gly Gly Asp Glu Pro Val Asn Leu Phe Glu Ala Ala Ala
35 40 45
Gln Ala Gly Thr Gly Glu Gly Thr Gly Arg Gly Ala Arg Ala Gly Ala
50 55 60
Val Gly Ala Gly Glu Gly Leu Pro Asn Leu Asp Phe Leu Arg Asn Asn
65 70 75 80
Pro His Phe Gln Gln Leu Arg Gln Leu Val Gln Gln Gln Pro Gln Met
85 90 95
Leu Glu Pro Ile Leu Gln Gln Val Ala Ala Gly Asn Pro Gln Ile Ala
100 105 110
Gln Leu Ile Gly Gln Asn Glu Glu Gln Phe Leu Gln Leu Leu Ser Glu
115 120 125
Glu Asp Asp Gly Ala Leu Pro Pro Gly Thr His Ala Ile Ser Val Thr
130 135 140
Glu Glu Glu Arg Asp Ala Ile Glu Arg Val Arg Thr Ser Pro Tyr
145 150 155

<210> 29809
<211> 79
<212> PRT

<213> A.fumigatus

<400> 29809
Glu Arg Asp Pro Pro Asp Lys His Arg Ser Ser Phe Cys Gln Val Lys
1 5 10 15
Glu Gln Asn Gly Gln Thr Ile His Thr Ala Ser Leu Pro Tyr Val Leu
20 25 30
Cys Val Val Pro Arg Ala Met Ser His Thr Val Lys Ile Cys Glu Gln
35 40 45
Met Ala Ala Ile Asp Gly Val Gln Ser Ala Pro Leu Ser Ala Ser Pro
50 55 60
Asp Gly Leu Ser Ala Trp Gly His Cys Ser Ile Ile Ala Gln Val
65 70 75

<210> 29810
<211> 103
<212> PRT
<213> A.fumigatus

<400> 29810
Leu Ile Asp Gly Gln Val Tyr Arg Tyr Arg Glu Lys Ser Leu Gln Gln
1 5 10 15
Lys Leu Glu Ile Leu Tyr Gln Arg Asn Leu Tyr Ile Leu Ala Ile Asn
20 25 30
Leu Ala Gln Lys Lys Gly Ile Asp Ala Leu Gln Gln Asn Ala Ile Tyr
35 40 45
Arg Lys Tyr Gly Asp Phe Leu Tyr Gln Lys Gly Asp Tyr Asp Thr Ala
50 55 60
Met Gln Gln Tyr Leu Arg Ala Ile Asp Asn Thr Glu Pro Ser Gln Val
65 70 75 80
Ile Arg Lys Val Leu Pro Leu Ala Leu Gly Asn Lys Ser Ile Tyr Leu
85 90 95
Thr Gly Leu Ile Ala Val Pro
100

<210> 29811
<211> 197
<212> PRT
<213> A.fumigatus

<400> 29811
Gln Ser Cys Pro Cys Asp Phe Pro Gly Leu Thr Gln Asp Lys Ala Tyr
1 5 10 15
His Asn Leu Met Lys Tyr Ala Arg Val Leu Leu Ala Asn Cys Pro Gln
20 25 30
Glu Thr Thr Glu Leu Phe Met Ala Tyr Tyr Lys Gly Gln Tyr Arg Pro
35 40 45
Arg Thr Glu Val Glu Val Pro Ala Ala Pro Gln Thr Gln Pro Thr Ser
50 55 60
Thr Leu Gln Ser Leu Ala Gly Phe Leu Pro Leu Ser Leu Ile Asn Ala
65 70 75 80
Gly Ser Gly Thr Lys Ala Glu Lys Thr Lys Asp Ile Val Asp Glu Glu
85 90 95
Thr Lys Ile Glu Arg Pro Thr Pro Ser Tyr Glu Ile Pro Arg Pro Arg
100 105 110
Thr Ala Phe Ser Ala Phe Val Gly Arg Pro Gln Glu Phe Ile Ala Phe

```
        115                 120                 125
Leu Glu Ser Leu Ile Asp Leu Glu Thr Leu Lys Glu Glu Asp Lys Val
    130                 135                 140
Asp Ile Tyr Thr Thr Leu Phe Glu Met Tyr Leu Asp Thr Ala Lys Arg
145                 150                 155                 160
Lys Lys Gly Ser Ala Glu Lys Glu Glu Trp Glu Asn Lys Ala Lys Thr
                165                 170                 175
Leu Ile Glu Gly Lys Asp Val Gly Ala Leu Ala Pro Val Val Ala Pro
            180                 185                 190
Pro Leu Ile Gly Phe
        195
```

<210> 29812
<211> 146
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (139)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29812

```
Ile Pro Ile Ser Thr Ser Asn Val Leu Leu Leu Ser Asp Leu Ser Asn
1               5                   10                  15
Phe Arg Glu Gly Ser Thr Leu Val Arg Glu Gln Glu Gly Leu Arg Ser
            20                  25                  30
Asp Ile Phe Arg Ser Phe Thr Ser Ala Lys Asp Thr His Gly Ala Ile
        35                  40                  45
Lys Ala Leu Arg Lys Tyr Gly Pro Glu Glu Pro Gln Leu Tyr Val Asp
    50                  55                  60
Ala Leu Thr Tyr Phe Ala Ser Ser Pro Ala Ile Leu Glu Glu Ala Gly
65                  70                  75                  80
Asp Glu Leu Asp Val Val Leu Lys Arg Ile His Asp Asp Gly Leu Met
                85                  90                  95
Ser Pro Leu Gln Val Ile Gln Ala Leu Ser Asn Asn Ser Val Val Thr
            100                 105                 110
Met Gly Arg Val Lys Lys Tyr Leu Ser Asp Asn Ile Glu Arg Glu Arg
        115                 120                 125
Lys Glu Ile Ser Thr Val Gly Cys Val Leu Xaa Ile Phe Tyr Val Val
    130                 135                 140
Ser Asn
145
```

<210> 29813
<211> 216
<212> PRT
<213> A.fumigatus

<400> 29813

```
Ile Ser Ala Phe Ala Ala Leu Glu Asp Leu Ser Gln Val Ala Val Gly
1               5                   10                  15
Phe Gly Asn Gly Ser Val Thr Ile Ile Arg Gly Asp Leu Ile His Asp
            20                  25                  30
Arg Gly Ala Arg Gln Arg Ile Val Phe Glu Ser Glu Glu Pro Ile Thr
        35                  40                  45
```

```
Gly Leu Glu Val Gln Ser Gly Val Leu Ser Thr Leu Phe Ile Ser Thr
    50                  55                  60
Thr Ser Arg Ile Leu Thr Leu Val Ile Ser Gly Arg Gly Gln Gly Gln
65                  70                  75                  80
Pro Ala Arg Val Leu Asp Asp Ser Gly Cys Gly Val Gly Cys Met Ala
                85                  90                  95
Leu Asp Arg Asp Thr Gly Asp Ile Val Val Ala Arg Glu Asp Ala Ile
            100                 105                 110
Tyr Thr Tyr Gly Pro His Gly Arg Gly Pro Ser Tyr Ala Phe Asp Ser
        115                 120                 125
Pro Lys Asn Ser Ile Asn Val Phe Arg Asp Tyr Met Ala Leu Val Cys
    130                 135                 140
Pro Pro Arg Ala Ala Leu Gly Asn Leu Arg Ser Gln Ala Asp Glu Ile
145                 150                 155                 160
Phe Ser Thr Thr Thr Phe Thr Leu Leu Asp Thr Asp Leu Lys Phe Ile
                165                 170                 175
Ala His Ser Glu Ser Leu Ala Ala Ser Val Arg His Val Phe Ile Glu
            180                 185                 190
Trp Gly Asp Leu Phe Leu Leu Ser Thr Asp Gly Lys Val Cys Ser Asn
        195                 200                 205
Thr Glu Asn Glu Tyr Cys Tyr Ser
    210                 215
```

<210> 29814
<211> 127
<212> PRT
<213> A.fumigatus

<400> 29814

```
Ser Gln Tyr Leu Asp Thr Gln Arg Ile His Asn Leu Ile Glu Tyr Leu
1               5                   10                  15
Glu Glu Leu His Asp His Asp Arg Ala Thr Val Asp His Thr Thr Leu
            20                  25                  30
Leu Leu Asn Cys Tyr Ala Lys Leu Lys Asp Thr Asn Lys Leu Asn Ser
        35                  40                  45
Phe Ile Lys Ala Pro Gly Glu Leu Lys Phe Asp Leu Glu Thr Ala Ile
    50                  55                  60
Ala Met Cys Arg Gln Gly Gly Tyr Tyr Glu Gln Ala Ala Tyr Leu Ala
65                  70                  75                  80
Thr Lys Tyr Gly Glu Asn Asp Met Val Ile Asp Ile Leu Ile Glu Asp
                85                  90                  95
Ser Lys Lys Tyr Ala Glu Ala Val Glu Tyr Ile Trp Arg Leu Glu Pro
            100                 105                 110
Asp Leu Val Arg Asn Asp Ser Arg Val Leu Val Ile Phe Gln Gly
        115                 120                 125
```

<210> 29815
<211> 132
<212> PRT
<213> A.fumigatus

<400> 29815

```
Gly Ala Ala Ser Leu Tyr Phe Ser Pro Gln Asp Arg Ser Ala Leu Ala
1               5                   10                  15
Met Ala Ala Ser Ile Ile Thr Arg Gly Ser Ser Ser Leu Glu Ser Leu
            20                  25                  30
```

```
Lys Gly Arg Ser Arg Pro Lys Ile Gln Ile Asp Leu Val Asn Gln Thr
        35                  40                  45
Glu Gly Leu Val Ser Ser Tyr Thr Thr Lys Gly Gln Ile Glu Gly Thr
    50                  55                  60
Val Thr Ile Arg Val Asp His Asp Thr Arg Phe Glu Asp Val Glu Ile
65                  70                  75                  80
Thr Phe Glu Gly Ala Thr Asp Ser Pro Val Ser Trp Pro Gly Phe Ala
                85                  90                  95
Cys Met Leu Thr Ala Glu Asn Arg Asn Ser Lys Asn Ile Ser Arg Ala
            100                 105                 110
Arg Gly Leu Pro Arg Pro His Arg Gly Val Ser Asp Ile Pro Gln Ala
        115                 120                 125
Ala Pro Ala His
    130
```

<210> 29816
<211> 106
<212> PRT
<213> A.fumigatus

```
<400> 29816
Gln Pro Arg Ile Gly Thr Ala Arg Thr Ser Val Glu Arg Ala Ala Tyr
1               5                   10                  15
Pro Gly Arg Thr Gly Ala Tyr Gln Thr Phe Leu Lys Leu Arg Gln Pro
            20                  25                  30
Ile Asp Asp Ala Ala Tyr Pro Thr Pro Arg Ile Leu Glu Ser Gly Arg
        35                  40                  45
Ala Tyr Gln Phe Pro Phe Thr Phe Val Val Pro Asp Arg Leu Leu Pro
    50                  55                  60
His Val Cys Thr His Ser Lys Ile Asn Ala His Val Glu Arg Ser His
65                  70                  75                  80
Thr Leu Leu Pro Pro Thr Leu Gly Asp Pro Ile Leu Ala Ser Asn Gly
                85                  90                  95
Lys Thr Leu Leu Asp Asp Met Val Pro Glu
            100                 105
```

<210> 29817
<211> 109
<212> PRT
<213> A.fumigatus

```
<400> 29817
His Ser Pro Val Val Ala Leu Pro Leu Leu Gln Gly Gly Ala Glu Lys
1               5                   10                  15
Leu Phe Glu Phe Lys Ala Phe Asp Leu Asp Ala Val Val Gly Thr Ser
            20                  25                  30
Val Val Ser Phe Gly Lys Arg Asp Ser Ser Tyr Ile Cys Leu Asn Gly
        35                  40                  45
Gln Arg Ala Ser Asp Phe Gly Tyr Lys Glu Glu Ser Val Phe Trp Thr
    50                  55                  60
Phe Pro Phe Pro Val Asp Gln Val Ala Glu Gln Lys Ile Asn Val Ser
65                  70                  75                  80
Lys Leu Lys Ser Ala Asp Leu Ile Arg Leu Ser Arg Thr Glu Thr Gly
                85                  90                  95
Pro Ser Phe Leu Phe Asp Val Tyr Thr Glu Lys Ser Ser
            100                 105
```

<210> 29818
<211> 165
<212> PRT
<213> A.fumigatus

<400> 29818
Thr Gly Ser Val Leu Ser Tyr Ile Ser Ile Ile Asp Pro Pro Gly Val
1 5 10 15
Ile Glu Ala Leu Arg Phe Arg Ser Phe Ser Ala Cys Val Tyr Arg Leu
20 25 30
Asp Met Phe Pro Ser Pro Pro Ser Pro His Leu Glu Ala Ile Glu Asn
35 40 45
Trp Arg Ile Leu Tyr Ser Leu Ile Ala Ala Tyr Leu Ser Arg Ser Gln
50 55 60
Leu Lys Met Pro Phe Ala Gln Leu Val Ile Gly Pro Pro Gly Ala Gly
65 70 75 80
Lys Ser Thr Tyr Cys Asn Gly Met His Gln Phe Leu Gly Ala Ile Gly
85 90 95
Arg Lys Cys Ser Ile Val Asn Leu Asp Pro Ala Asn Asp Lys Thr Ser
100 105 110
Tyr Pro Cys Ala Leu Asp Val Arg Asp Leu Val Thr Leu Glu Glu Ile
115 120 125
Met Ser Glu Asp Gln Leu Gly Pro Asn Gly Gly Val Leu Tyr Ala Leu
130 135 140
Glu Glu Leu Glu Glu His Phe Glu Trp Leu Glu Glu Gly Leu Lys Asp
145 150 155 160
Leu Gly Gly Arg Pro
165

<210> 29819
<211> 80
<212> PRT
<213> A.fumigatus

<400> 29819
Met Leu Gln Leu Ile Val Ile His Leu Ile Asp Ser Tyr Asn Leu Thr
1 5 10 15
Leu Pro Ser Met Tyr Ile Ser Ala Leu Leu Leu Ser Leu Arg Ala Met
20 25 30
Leu Gln Met Asp Leu Pro His Ile Asn Val Leu Thr Lys Ile Asp Asn
35 40 45
Leu Ser Asn Tyr Ala Pro Leu Pro Phe Asn Leu Asp Phe Tyr Thr Glu
50 55 60
Val Gln Asp Leu Ser Ser Ser Pro Arg Glu Ala Ala Pro Gln Gln His
65 70 75 80

<210> 29820
<211> 139
<212> PRT
<213> A.fumigatus

<400> 29820
Ser Thr Ile Trp His Gln Val Arg Ser Ile Glu Thr Ala Val His Ala
1 5 10 15
Cys Thr Asp Arg Lys Leu Asp Gln Phe Ala Val Ala Asn Pro Pro Ala

```
            20                  25                  30
Asp Ala Ile Ser Ala Leu Lys Phe Ser Pro Asp Pro Asn Ser Thr Arg
        35                  40                  45
Ile Val Val Ser Ser Trp Asp Lys Asn Val Tyr Leu Tyr Asp Leu Arg
    50                  55                  60
Asp Glu Asn Gly Asn Val Ser Glu Gly Lys Leu Leu Gln Lys Phe Glu
65                  70                  75                  80
His Arg Ala Pro Val Leu Asp Ala Cys Phe Gly Glu Asn Glu Asp Val
                85                  90                  95
Ile Tyr Thr Ala Gly Leu Asp Trp Asp Val Arg Lys Tyr Val Phe Pro
            100                 105                 110
Ser Pro Leu Gly Ala Phe Ser Arg Leu Thr Val Ser Cys Tyr Trp Gln
        115                 120                 125
Asp Arg Cys His Ile Ile Tyr Thr Asp Arg Ala
    130                 135
```

<210> 29821
<211> 261
<212> PRT
<213> A.fumigatus

<400> 29821

```
Leu Ser Leu Val Ile Gly Arg Ile Asp Val Thr Ser Ser Thr Gln Thr
1               5                   10                  15
Val Leu Ser Ser His Asn Ala Gly Val Arg Cys Val Ala Tyr Ser Lys
            20                  25                  30
Glu His Asn Ile Val Ile Ser Ala Ser Trp Asp Ser Thr Leu His Val
        35                  40                  45
His Arg Val Asn Thr Glu Ala Asp Ser Ile Pro Ala Ile Ile Pro Leu
    50                  55                  60
Pro Ser Lys Pro Phe Ser Met Ser Leu Thr Ala Thr Lys Leu Val Val
65                  70                  75                  80
Ala Met Ala Ser Arg Ser Leu His Ile Tyr Asp Leu Lys Ala Leu Ala
                85                  90                  95
Leu Leu Thr Asp Gln Ser Asp Ala Thr Ser Pro Asn Lys Val Asp Ile
            100                 105                 110
Glu Pro Trp Gln Arg Arg Glu Ser Ser Leu Lys Phe Met Thr Arg Cys
        115                 120                 125
Val Ala Cys Met Pro Asp Asp Ala Gly Tyr Ala Ser Ser Ser Ile Glu
    130                 135                 140
Gly Arg Val Ala Val Glu Trp Phe Asp Pro Ser Ala Glu Ser Gln Ala
145                 150                 155                 160
Arg Lys Tyr Ala Phe Lys Cys His Arg Gln Thr Ala Asp Asp Val Asp
                165                 170                 175
Val Val Tyr Pro Val Asn Thr Leu Ala Phe His Pro Ile His Gly Thr
            180                 185                 190
Phe Ala Ser Gly Gly Gly Asp Gly Val Val Ala Leu Trp Asp Gly Ile
        195                 200                 205
Ala Lys Arg Arg Ile Arg Gln Tyr Gln Lys Tyr Pro Ser Ser Ile Ala
    210                 215                 220
Ala Val Asp Phe Ser Gly Asn Gly Lys Tyr Leu Ala Ile Ala Val Ser
225                 230                 235                 240
Thr Gly Phe Glu Asp Gly Arg His Asp Ser Ser Leu Arg Glu Leu Pro
                245                 250                 255
Asp Thr Asn Ile Gly
            260
```

<210> 29822
<211> 260
<212> PRT
<213> A.fumigatus

<400> 29822
His Ala Ala Leu Arg Lys Ala His Asn Asn Arg Tyr Cys Ala Phe Pro
1 5 10 15
Pro Gln Leu Pro Phe Ser Lys Leu Glu Ile Leu Ile Ser Leu Gly Gln
20 25 30
Arg Pro Lys His Leu Gln Asp Ala Leu Ala Glu Cys Gly Trp Glu Asp
35 40 45
Ala Ala Glu Phe Arg Gln Gln Asp Thr Ser Glu Ala Phe Thr Phe Ile
50 55 60
Thr Glu Lys Leu Glu Leu Pro Leu Leu Thr Leu Lys Met Asp Ile Tyr
65 70 75 80
His Thr Gly Lys Glu Asp Val Ser Ser Asp His Lys Phe Val Asn Glu
85 90 95
Arg Leu Leu Glu Val Ala Ile Pro Glu Pro Val Asp Gly Lys Thr Val
100 105 110
Thr Leu Glu Asp Cys Leu Glu Ser Tyr Phe Asn Asn Arg Ile Glu Val
115 120 125
Lys Arg His Leu Glu Arg Arg Asn Thr Val Gly Ser Thr Arg Ser Phe
130 135 140
Asp Ser Thr Ser Lys Gly Phe Ile Ser His Ile Glu Thr Val Glu Val
145 150 155 160
Thr Pro Ser Pro Ala Ala Ser Pro Thr Gln Leu Thr Pro Leu Arg Ser
165 170 175
Asp Asp Ser Ala Leu Leu Thr Pro Ile Ile Thr Gln Ser Glu Val Ser
180 185 190
Gly Ser Asn Thr Pro Arg Gly Ala His Met Arg Arg Thr Ser Ile Val
195 200 205
Gln Glu Arg Phe Val Pro Asp Ser Glu Asp Gly Ala Asn Ala Asp Gly
210 215 220
Arg Phe Thr Thr Lys Ser His Ser Gly Arg Gly Ser Tyr Arg Lys Glu
225 230 235 240
Val Met Met Pro Ala Trp Gln Phe Phe Ser Leu Ile Arg Arg Cys Ile
245 250 255
Arg Ser Leu Ala
260

<210> 29823
<211> 137
<212> PRT
<213> A.fumigatus

<400> 29823
Leu Lys Ile Leu Gly Arg Arg Ile Ala Gln Leu Gly Tyr Thr Gly Leu
1 5 10 15
Lys Glu Glu His Phe Glu Tyr Ala Leu Gln Ser Ala Gln Gly Asp Ile
20 25 30
Glu Lys Ala Phe Asp Leu Leu Leu Ile Leu Glu Asp Ser Ile Glu Gly
35 40 45
Ile Ile Arg Pro Tyr Thr Pro Ser Thr Lys Leu Leu Gly Ala Val Asn
50 55 60

```
Arg Gln Gly Val Thr Cys Tyr Leu Asp Ala Leu Leu Phe Ala Met Phe
65                  70                  75                  80
Ala Arg Leu Asp Ser Phe Glu Ala Ile Leu Tyr Lys Ser Phe Asn Asp
                85                  90                  95
Glu Pro Arg Arg Lys Leu Ser Ile Leu Leu Arg Leu Trp Val Asn Met
            100                 105                 110
Leu Arg Ser Gly Lys Leu Ile Thr Thr Asp Ile Val Arg Phe Arg Leu
        115                 120                 125
Ser Cys Leu Phe Leu Asn Trp Lys Tyr
    130                 135
```

<210> 29824
<211> 236
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (34),(70)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29824

```
Asn Pro Asp Cys Ser Asn Gln Phe Arg Ser Pro Lys Tyr Asp Arg Gly
1               5                   10                  15
Pro Leu His Pro His Arg Pro Pro Pro Pro Ser Asp Pro Ser Ser Arg
            20                  25                  30
Leu Xaa Val Pro Gly Pro Phe Ser Leu Pro Arg Val Ser Gln Thr Trp
        35                  40                  45
Glu Ser Thr Ile Ala Pro Asp Ile Leu Thr Leu Cys Tyr Val His Thr
    50                  55                  60
Pro Pro Gly Phe Lys Xaa Pro Pro Lys Gly Ser Arg Leu Arg Glu Trp
65                  70                  75                  80
Asp Asp Ser Ser Pro Tyr His Lys Asn Arg Pro Leu Arg Gly Pro Arg
                85                  90                  95
Gly Gly Asp Val Leu Arg Leu Leu Arg Lys Pro Ile Thr Phe Asn Asn
            100                 105                 110
Ile Pro Gln Leu Glu Arg Ile Thr Ile His Ser Tyr Val Lys Gln Ala
        115                 120                 125
Ala Thr Glu Asn Ser Ser Trp Leu His Val Ala Gly Met Ala Val Gln
    130                 135                 140
Ala Ile Ser Asn Val Arg Val Gln Thr Phe Lys Ser Lys Ser Ser Val
145                 150                 155                 160
Ala Thr Trp Gly Ile Ala Pro Gly Arg Asp Thr Val Ala Val Lys Ala
                165                 170                 175
Glu Leu Arg Gly Glu Asp Met Leu His Phe Phe Gly Lys Leu Val Asp
            180                 185                 190
Val Val Leu Pro Arg Ile Lys Asp Trp Glu Gly Val Lys Gly Thr Ser
        195                 200                 205
Gly Asp Ser Ser Gly Asn Ile Thr Phe Gly Leu Glu Pro Glu Asn Val
    210                 215                 220
Ala Leu Phe Pro Glu Ile Glu Val Asn Tyr Asp Met
225                 230                 235
```

<210> 29825
<211> 140
<212> PRT

<213> A.fumigatus

<220>
<221> UNSURE
<222> (5),(114)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29825
Arg Pro Ser Pro Xaa Glu Glu Ser Glu Val Glu Glu Ala Pro Glu His
1 5 10 15
Leu Ser Asp Ala Glu Ala Ala Ala Leu Pro Leu Thr Gly Leu Thr Gly
20 25 30
Trp Arg Ala Leu Val Val Lys Ala Gly Glu Arg Asn Ser Gly Lys Gly
35 40 45
Ala Ala Val Leu Ile Thr Gly Ile Gly Gly Gly Val Ala Leu Ile Val
50 55 60
Leu Arg Phe Ala Val Ala Arg Gly Ala Asp Val Tyr Val Thr Ser Ser
65 70 75 80
Ser Glu Glu Lys Ile Gln Lys Ala Val Ala Leu Gly Ala Arg Gly Gly
85 90 95
Val Asn Tyr Lys Glu Glu Gly Trp Glu Lys Lys Leu Leu Gly Met Leu
100 105 110
Pro Xaa Gly Lys Gln Asn Phe Asp Ala Val Ile Asp Gly Ala Gly Gly
115 120 125
Asp Ser Val Glu Lys Ala Thr Lys Leu Leu Lys Val
130 135 140

<210> 29826
<211> 101
<212> PRT
<213> A.fumigatus

<400> 29826
Pro Arg Gln Ala Gly Gly Val Leu Ser Val Tyr Gly Met Thr Val Ser
1 5 10 15
Pro Lys Met Pro Phe Leu Met Gln Ala Val Leu Lys Asn Ile Asp Val
20 25 30
Arg Gly Ser Thr Met Gly Ser Arg Lys Glu Phe Lys Glu Met Val Asp
35 40 45
Phe Val Lys Pro Asn Lys Ile His Pro Val Ile Ser Arg Val Val Gln
50 55 60
Thr Asp Leu Gly Asp Ile Glu Gly Leu Asp Arg Leu Phe Gln Asp Met
65 70 75 80
Lys Glu Gly Lys Gln Phe Gly Lys Leu Val Ile Glu Phe Gly Lys Ser
85 90 95
Ser Gly Ser Lys Leu
100

<210> 29827
<211> 211
<212> PRT
<213> A.fumigatus

<400> 29827
Ala Lys Met Ala Gln Val Thr Val Gly Ser Val Ala Ala Glu Val Ala
1 5 10 15

```
Asp Asn Tyr Ala Leu Asp His Asp Ile Gln Ser Asp Ser Gly Leu Glu
            20                  25                  30
Ser Leu Asp Asn Asp Ser Ser Trp Asp Ser Asp Val Gln Asn Tyr Asp
        35                  40                  45
Trp Asp Ser Asp Trp Ser Asp Glu Asp Ala Thr Leu Ala Arg Pro Thr
    50                  55                  60
Lys Arg Ile Ala Val Asn Arg Asp Lys His Ala Asp Phe Ile Asp Leu
65                  70                  75                  80
Thr Asp Lys Pro Ser Leu Pro Ala Pro Gly Thr Met Ser Thr Pro Thr
                85                  90                  95
Thr Ala Ala Pro Ala Thr Leu Met Ala Ala Ala Pro Cys Gln Tyr Ser
            100                 105                 110
His Asp Ile Ala Ala Leu Ser Val Gln Ile Met Glu Leu Phe Pro Asp
        115                 120                 125
Ile Cys Arg Glu Tyr Leu Lys Gly Leu Leu Ser Arg Tyr Ala Asp Asn
    130                 135                 140
Met Ser Leu Thr Gly Ser Asn Val Ala Ser Gly Met Leu Leu Ala Met
145                 150                 155                 160
Lys Glu Met Val Val Glu Glu Ile Leu Ala Asn Pro Ser Tyr Pro Lys
                165                 170                 175
Arg Lys Gln Leu Lys Arg Lys Arg Lys Asp Thr Lys Asp Asp Asp Lys
            180                 185                 190
Asp Asn Thr Trp Thr Ser Ile Asn His Asn Gly Glu Pro Trp Tyr Gln
        195                 200                 205
Glu Ala Ala
    210
```

<210> 29828
<211> 227
<212> PRT
<213> A.fumigatus

<400> 29828

```
Glu Leu Ile Gln Asn Gln Lys Arg Gln Glu Glu Ala Glu Arg Arg Asn
1               5                   10                  15
Gln Glu Gln His Ala Arg Ala Gly Thr Leu Val Glu Cys Gln Cys Cys
            20                  25                  30
Tyr Ser Asp Val Pro Pro Asn Arg Thr Ile Thr Cys Glu Gly Glu Asn
        35                  40                  45
Val His Phe Phe Cys Phe Ser Cys Ile Arg Lys Ser Ala Glu Thr Gln
    50                  55                  60
Ile Gly Leu Met Lys Tyr Gln Leu Gln Cys Phe Asp Thr Ser Gly Cys
65                  70                  75                  80
Gln Ala Gly Phe Pro Arg Ser Glu Ile Lys Glu Val Leu Gly Ser Ser
                85                  90                  95
Ile Met Ala Lys Leu Asp Ala Leu Gln Gln Gln Asp Glu Ile Ser Arg
            100                 105                 110
Ala Asn Ile Glu Gly Leu Glu Ser Cys Pro Phe Cys Glu Phe Lys Ala
        115                 120                 125
Ile Cys Pro Pro Val Glu Glu Asp Arg Glu Phe Arg Cys Cys Asn Pro
    130                 135                 140
Ser Cys Glu Val Val Ser Cys Arg Leu Cys Lys Asp Val Thr His Val
145                 150                 155                 160
Pro Arg Thr Cys Glu Glu Ala Lys Lys Asp Arg Gly Ile Ser Glu Arg
                165                 170                 175
His Leu Val Glu Glu Ala Met Ser Glu Ala Leu Ile Arg Asn Cys Pro
```

```
            180                 185                 190
Arg Cys Lys Leu Lys Ile Val Lys Glu Phe Gly Cys Asn Lys Met Thr
        195                 200                 205
Cys Pro Ser Cys Arg Cys Cys Met Cys Tyr Leu Cys Lys Lys Asp Ile
    210                 215                 220
Thr Arg Glu
225
```

<210> 29829
<211> 63
<212> PRT
<213> A.fumigatus

<400> 29829

```
Thr Asp Thr Val Met Ser Arg Met Tyr Asn Gln Thr Gly Asn Leu Tyr
1               5                   10                  15
Lys Gly Ala Phe Asp Cys Leu Phe Lys Thr Ile Arg Lys Glu Gly Ile
            20                  25                  30
Leu Ala Ile Tyr Lys Gly Tyr Phe Ala His Leu Ala Arg Ile Leu Pro
        35                  40                  45
His Thr Val Ser Asn Ser Arg Ile Ser Arg Leu Cys Val Thr Ala
    50                  55                  60
```

<210> 29830
<211> 187
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (131)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29830

```
Tyr Ile Tyr Gln Ile Leu Leu Asn Gly Cys Arg Leu Gly Phe Tyr Glu
1               5                   10                  15
Pro Leu Arg Lys Gly Ile Thr Thr Ala Val Tyr Lys Asp Pro Gln Val
            20                  25                  30
Gln Ser Leu Gly Ile Asn Val Phe Ser Gly Ala Ala Ser Gly Ile Ile
        35                  40                  45
Gly Ala Ala Ala Gly Ser Pro Phe Phe Leu Val Lys Thr Arg Leu Gln
    50                  55                  60
Ser Tyr Ser Pro Phe Leu Pro Val Gly Thr Gln His Glu Tyr Arg Asn
65                  70                  75                  80
Ser Phe Asp Gly Leu Arg Lys Ile Tyr Met Ser Glu Gly Val Gly Gly
                85                  90                  95
Leu Tyr Arg Gly Val Gly Ala Ala Met Val Arg Thr Gly Phe Gly Ser
            100                 105                 110
Ser Val Gln Leu Pro Thr Tyr Phe Phe Ala Lys Arg Arg Leu Val Lys
        115                 120                 125
His Leu Xaa Met Glu Asp Gly Pro Gly Leu His Leu Ala Arg Asn Thr
    130                 135                 140
Val Ser Gly Phe Val Val Cys Cys Val Met His Pro Ser Pro Val Cys
145                 150                 155                 160
Ile Ile Gly His Cys Ser Ile Thr Arg Pro Ala Asn Phe Ile Asn Arg
                165                 170                 175
```

```
His Gly Tyr Val Gln Asp Val Gln Pro Asp Trp
            180                 185

<210> 29831
<211> 65
<212> PRT
<213> A.fumigatus

<400> 29831
Tyr Val Gln Lys Ala Gln Ala Ala Ser Gln Gln Asp Asp Pro Glu Val
1               5                  10                  15
Asn Ala Ser Asn Glu Tyr Thr Gln Arg Phe Glu Arg Ser Phe Arg Cys
            20                  25                  30
Asn Arg Ser Thr Met Gln Thr Thr Asn Ala Ala Leu Tyr Arg Asn Ser
        35                  40                  45
Thr Ile Pro Ile Thr Glu Ser Ile Glu Asp Ala Lys Gly Val Pro Leu
    50                  55                  60
Arg
65

<210> 29832
<211> 279
<212> PRT
<213> A.fumigatus

<400> 29832
Arg Pro Pro His Phe Ser Gln Phe Leu Asp Glu Met Ser Val Asn Gly
1               5                  10                  15
Val Pro Thr Pro Asn Leu Pro Gln Ser Gln Ser Gln Val Pro Gln Ser
            20                  25                  30
Gln Pro Gln Gln Gln Gln Gln Gln Gln Pro Pro Gln Gln Gln Gln Gln
        35                  40                  45
Gln Gln Gln Gln Asn Lys Pro Gln Ser Gln Pro Gln Pro Met Gly Gln
    50                  55                  60
Pro Pro Met Gln Ala Ser Ile Val Arg Asp Pro Thr Pro Asn His Ser
65                  70                  75                  80
Ile Pro Val Pro Gln Asn Pro Gln Val Gly Met Val Met Val Pro Asn
                85                  90                  95
Gln Pro Met Asp Val Ser Ala Met Gly Leu Asn Asn Ser Ala Trp Asn
            100                 105                 110
Thr Gly Ile Asp Met Ser Tyr Gly Asn Thr Pro Val Phe Ala Val Leu
        115                 120                 125
Glu Val Pro Glu Gly Pro Ala Leu Asp Thr Glu Met Leu Ser Gly Lys
    130                 135                 140
Ser Ser Thr Leu Phe Arg Thr Cys Leu Pro Glu Val Ser Ser Ala Lys
145                 150                 155                 160
Asp Glu Ile Pro Met Ile Glu Arg Pro Pro Asn Thr Lys Glu Glu Thr
                165                 170                 175
Asn Asp Ser Pro Val Gly Val Glu Asn Pro Asp Ile Gln Phe Asp Glu
            180                 185                 190
Ser Asp Pro Ala Phe Ala Leu Phe Ala Asp Ser Pro Ala Lys Ala Ser
        195                 200                 205
Ser Ser Asp Ser Pro Val Glu Phe Pro Cys Thr Ile Arg Ser Glu Lys
    210                 215                 220
Ser Ser Pro Ala Phe Glu Leu Val Val Glu Asn Glu Ser Lys Ala Thr
225                 230                 235                 240
```

```
Ala Asp Arg Phe Ile Val Leu Cys Asn Ser Met Glu Ala Ala Phe Gln
                245                 250                 255
Arg Val Ser Val Met Thr Ser His Leu Ser Cys Phe Pro Arg Ala Ala
            260                 265                 270
Pro Glu His Leu Arg Tyr Leu
        275
```

<210> 29833
<211> 240
<212> PRT
<213> A.fumigatus

<400> 29833

```
Leu Arg Ser Val Ile His Ser Phe Gly Glu Ser Phe Ser Thr Ala Thr
1               5                   10                  15
Leu Ala Ser Leu Leu Phe Ser Gly Arg Leu Phe Thr Lys Ala Phe Arg
            20                  25                  30
Leu Val Pro Ser Pro Ala Gly Ser Ser Cys Phe Ser Arg Ala Ala Ser
        35                  40                  45
Tyr Leu Lys Ser Arg His Arg Val Tyr Glu Gly Thr Ser Gly Pro Pro
    50                  55                  60
Lys Leu Ser Val Ser Arg Pro Phe Lys Ala Leu Arg Thr Arg Asp Tyr
65                  70                  75                  80
Arg Arg Asp Ile Asn Pro Glu Ala Tyr Leu Leu Arg Ala Pro Lys Leu
                85                  90                  95
Val Phe Arg Arg Gly Lys Thr Tyr Val Ile Tyr Asn Pro Ala Ser His
            100                 105                 110
Gln Asp Ser Gly Phe Asp Ser Thr Pro Thr Ser Pro Val Gly Asn Lys
        115                 120                 125
Pro Met Lys Phe Tyr Tyr Gln Val Leu Thr Thr Pro Thr Ala Asp Thr
    130                 135                 140
Pro Gly Thr Thr Val Val Leu His Phe Pro Glu Lys Arg Tyr Phe Phe
145                 150                 155                 160
Gly Gln Ile Ser Glu Gly Thr His Arg Ala Cys Thr Glu Arg Gly Val
                165                 170                 175
Lys Leu Ser Tyr Leu Thr Asp Ile Phe Leu Thr Gly Arg Thr Glu Trp
            180                 185                 190
Ala Asn Asn Arg Gly Leu Ile Gly Val Ile Leu Thr Leu Ala Asp Gly
        195                 200                 205
Leu Ala Thr Ala Ala Asn Ala Leu Glu Leu Thr Ala Arg Glu Lys Lys
    210                 215                 220
Ala Lys Gly Arg Gly Gly Ser Pro Gly Gln Thr Thr Gly Ser Pro Thr
225                 230                 235                 240
```

<210> 29834
<211> 132
<212> PRT
<213> A.fumigatus

<400> 29834

```
Leu Leu Ser Cys Leu Ala Val Leu Leu Thr Cys Tyr Asn Ser Glu Gly
1               5                   10                  15
Phe Asp Thr Val Val Gly Ser Lys Gly Gly Met Leu Ser Gly Gly Gln
            20                  25                  30
Lys Gln Arg Val Ala Ile Ala Arg Ala Leu Leu Arg Asp Pro Lys Val
        35                  40                  45
```

```
Leu Leu Leu Asp Glu Ala Thr Ser Ala Leu Asp Ser Glu Ser Glu Lys
    50                  55                  60
Val Val Gln Ala Ala Leu Asp Ala Ala Ala Arg Gly Arg Thr Thr Ile
65                  70                  75                  80
Ala Val Ala His Arg Leu Ser Thr Ile Gln Asn Ala Asp Ile Ile Tyr
                85                  90                  95
Val Phe Asp Gln Gly Lys Ile Val Glu Ser Gly Thr His His Glu Leu
            100                 105                 110
Ile Arg Asn Lys Gly Arg Tyr Tyr Glu Leu Val Asn Leu Gln Ser Leu
        115                 120                 125
Gly Lys Thr His
    130
```

<210> 29835
<211> 188
<212> PRT
<213> A.fumigatus

<400> 29835

```
Thr Leu Cys Phe Ser Glu Ile Leu Phe Gly Ala Gln Ser Ala Gly Thr
1               5                   10                  15
Val Phe Ser Phe Ala Pro Asp Met Gly Lys Ala Lys Asn Ala Ala Ala
            20                  25                  30
Gln Phe Lys Lys Leu Phe Asp Ser Lys Pro Thr Ile Asp Ile Trp Ser
        35                  40                  45
Asp Glu Gly Glu Lys Leu Glu Ser Met Glu Gly Glu Ile Glu Phe Arg
    50                  55                  60
Asp Val His Phe Arg Tyr Pro Thr Arg Pro Glu Gln Pro Val Leu Arg
65                  70                  75                  80
Gly Leu Asn Leu Ser Val Lys Pro Gly Gln Tyr Ile Ala Leu Val Gly
                85                  90                  95
Pro Ser Gly Cys Gly Lys Ser Thr Thr Ile Ala Leu Leu Glu Arg Phe
            100                 105                 110
Tyr Asp Ala Leu Ala Gly Gly Val Phe Val Asp Gly Lys Asp Ile Thr
        115                 120                 125
Lys Leu Asn Val Asn Ser Tyr Arg Ser Phe Leu Ser Leu Val Ser Gln
    130                 135                 140
Glu Pro Thr Leu Tyr Gln Gly Thr Ile Lys Glu Asn Ile Leu Leu Gly
145                 150                 155                 160
Val Asp Lys Asp Asp Val Ser Glu Glu Thr Leu Ile Lys Val Cys Lys
                165                 170                 175
Asp Ala Asn Ile Tyr Asp Phe Val Met Ser Leu Pro
            180                 185
```

<210> 29836
<211> 199
<212> PRT
<213> A.fumigatus

<400> 29836

```
Pro Ser Ser Pro Leu Ile Gly Cys Leu Leu Gly Ala Ile Phe Ala Leu
1               5                   10                  15
Ile Phe Gly Glu Ile Leu Gly Arg Arg Lys Met Val Ile Cys Gly Ala
            20                  25                  30
Ser Val Met Ile Val Gly Val Ile Ile Gln Val Thr Ser Phe Pro Gly
        35                  40                  45
```

```
Ser Leu Pro Leu Leu Gln Phe Ile Phe Gly Arg Val Ile Thr Gly Val
    50                  55                  60
Gly Asn Gly Met Asn Thr Ser Thr Ile Pro Thr Tyr Gln Ala Glu Cys
65                  70                  75                  80
Ser Lys Thr Ser Asn Arg Gly Leu Leu Ile Cys Ile Glu Gly Gly Ile
                85                  90                  95
Ile Ala Ile Gly Thr Met Ile Ala Tyr Trp Ile Asp Phe Gly Ala His
            100                 105                 110
Tyr Gly Pro Pro Asp Leu Val Trp Arg Phe Pro Ile Ala Phe Gln Ile
        115                 120                 125
Ile Phe Gly Ile Val Ile Ile Val Gly Met Leu Tyr Leu Pro Asp Ser
    130                 135                 140
Pro Arg Tyr Leu Ile Ala Gln Asn Arg Ile Ala Asp Gly Glu Lys Val
145                 150                 155                 160
Leu Ala Ala Leu Ala Gly Thr Glu Ile Ser Asp Arg His Thr Gln Leu
                165                 170                 175
Glu Lys Gln Leu Ile Val Asp Ser Val Arg Ala Tyr Val Pro Leu Leu
            180                 185                 190
Cys Thr Ser Tyr Ser His Ser
        195
```

<210> 29837
<211> 66
<212> PRT
<213> A.fumigatus

<400> 29837

```
Leu Phe Leu Trp Val Cys Leu Ala Gln Gly Leu Lys Asn Val Tyr Thr
1               5                   10                  15
Asn Ser Ser Leu Thr Val Phe Asp Ser Asn Asp Tyr Arg Phe Val Thr
            20                  25                  30
Met Ala Pro Pro Thr Phe Ala Gly Met Ser Gly Arg Lys Leu Ser Trp
        35                  40                  45
Thr Val Ser Thr Ile Ala Thr Met Gly Phe Leu Leu Phe Gly Tyr Asp
    50                  55                  60
Arg Lys
65
```

<210> 29838
<211> 116
<212> PRT
<213> A.fumigatus

<400> 29838

```
Thr Arg Ser Glu Arg Thr Phe Pro Tyr Phe Ala His His Ile Leu Ile
1               5                   10                  15
Ala Asp Val Arg Leu Arg Ser Gly Ala Gln Lys Ala Ser Phe Arg Asp
            20                  25                  30
Leu Phe Thr Gly Gly Pro Ser Gln His Phe Arg Arg Met Ile Val Gly
        35                  40                  45
Ser Ser Ser Gln Val Phe Gln Gln Ile Ser Gly Cys Asn Ala Val Ile
    50                  55                  60
Tyr Tyr Leu Pro Val Leu Leu Glu Asp Ser Ile Gly Gln Ser His Asp
65                  70                  75                  80
Phe Ala Leu Leu Ile Gly Gly Val Asn Met Ile Cys Tyr Ala Ile Phe
                85                  90                  95
```

```
Ala Thr Phe Ser Trp Phe Phe Pro Gln Arg Val Phe Thr Lys Gly Ala
            100                 105                 110
Ala Asp Arg Glu
        115

<210> 29839
<211> 140
<212> PRT
<213> A.fumigatus

<400> 29839
Trp Gly Val Met Ala Glu Ala Asn Gln Val Thr Thr Asp Met Thr Thr
1               5                  10                  15
Leu Lys Tyr Val Glu Pro Ala Pro Met Gly Ser Gly Glu Glu Pro Arg
            20                  25                  30
Pro Val Thr Thr Thr Asn Met Asp Tyr Asp Lys Gly Gln Leu Arg Gln
        35                  40                  45
Leu Met Lys Ser Gln Leu Met Gly Val Gly Met Met Gly Val Met His
    50                  55                  60
Leu Tyr Phe Lys Tyr Thr Asn Pro Leu Leu Ile Gln Ser Ile Ile Pro
65                  70                  75                  80
Leu Lys Ser Ala Leu Glu Ser Asn Leu Ile Lys Ile His Val Phe Gly
                85                  90                  95
Lys Pro Ala Thr Gly Asp Leu Gln Arg Pro Phe Lys Ala Ala Asn Ser
            100                 105                 110
Phe Leu Ser Gln Gly Gln Val Lys Thr Asp Lys Ala Ser Val Glu Asn
        115                 120                 125
Ala Glu Lys Asn Phe Arg Gly Gly Val Lys Glu Glu
    130                 135                 140

<210> 29840
<211> 75
<212> PRT
<213> A.fumigatus

<400> 29840
Pro Cys Leu Asp Leu Cys Arg Thr Asn Leu Ala Ile Ile Leu Val Met
1               5                  10                  15
Met Gln Leu Ala Lys Lys Val Pro Phe Asp Asn Pro Asp Val Leu Phe
            20                  25                  30
Leu Val Arg Cys Ile Tyr Leu Ala Ser Asn Val Ile Ile Leu Gly Leu
        35                  40                  45
Tyr Met Tyr Thr Gln Ser Lys Ile Asn Gln Lys Lys Gly Met His Leu
    50                  55                  60
Ser Ala Val Val Met Gly Ser Tyr Gly Gly Gly
65                  70                  75

<210> 29841
<211> 534
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (18),(37),(38)
<223> Identity of amino acid sequences at the above locations are unknown.
```

<400> 29841

```
Pro Leu Ile Arg Pro Gln His Pro Leu Leu Asp Arg Gly Ser Ala Ser
1               5                  10                  15
Pro Xaa Ala Pro Cys Ala Glu Pro Arg Pro Ala Arg Arg Gly Arg Gly
            20                  25                  30
Ala Thr Tyr Pro Xaa Xaa Arg Pro Arg Ala Ser Gln Pro Leu Asn Ser
        35                  40                  45
Asp Asp Ser Glu Arg Ala Ser Glu Asp Leu Ser Met Gly Gly Glu Leu
    50                  55                  60
Pro Thr His Ser Pro Leu Asp Gln Ser Gly Gly Leu Ala Ala Thr Lys
65                  70                  75                  80
Leu Ser Gly Pro Gly Arg Arg Thr Glu Leu Ser Gln Pro Thr Thr Ala
                85                  90                  95
Glu Asp Leu Val Asp Ser Asn Pro Trp Leu Gln Gln Val Met His Lys
            100                 105                 110
Ser Pro Gly Ser Phe Pro Pro Gly Pro Gly Leu Asp Ala Asn Thr Pro
        115                 120                 125
Pro Val Leu Gln Arg Phe Pro Glu Cys Trp Asp Ser Thr Asn Tyr Ser
    130                 135                 140
Pro Asp Val Ser Leu Glu Asp Gly Val Phe Leu Pro Gly Ser Asp Tyr
145                 150                 155                 160
Leu Glu Leu His Ser Thr Leu Arg Ser His Leu Met Gln Glu Ala Arg
                165                 170                 175
Ser Arg Tyr Pro Ser Arg Arg Asn Ser Thr Asp Ser Ala Gly Pro Ala
            180                 185                 190
Arg Ser Ser Leu Gly Arg Glu Gly Phe Thr Thr Val Pro Ile Ile Gln
        195                 200                 205
Leu Arg Asp Tyr Glu Asp Tyr Ser Leu Met Pro Asn Asn Gln Thr Ser
    210                 215                 220
Val Asp Leu Pro Lys Asp Val Glu Tyr Asp Leu Trp Lys Asn Trp Leu
225                 230                 235                 240
Glu Glu Ile Ala Pro Trp Leu Asp Lys Phe Asp Ser Gln Arg His Phe
                245                 250                 255
Gln Tyr Thr Leu Pro Val Met Ala Gln Ser His Glu His Leu Arg Tyr
            260                 265                 270
Ala Met Leu Ala Val Ser Ala Arg Gln Gln Glu Gln Lys Asn Lys Thr
        275                 280                 285
Leu Pro Ile Glu Arg Ser Leu Thr Leu Tyr His Lys Ala Ile Gln Leu
    290                 295                 300
Leu Leu Pro Gln Leu Pro Thr Arg Thr Thr Ala Val Ile Ala Ser Cys
305                 310                 315                 320
Val Val Leu Cys Val Leu Glu Met Leu Ser Cys Ala Pro Lys Ala Trp
                325                 330                 335
Arg Arg His Leu Asp Gly Cys Ala His Leu Met Gln Ala Val Gly Ile
            340                 345                 350
Asn Gly Phe Val Gly Gly Val Glu Gln Ala Leu Phe Trp Cys Phe Ala
        355                 360                 365
Arg Met Asp Val Cys Gly Gly Leu Ile Ser Ser Ile Lys Thr Leu Ile
    370                 375                 380
Pro Val Asn His Trp Ala Ser Met Ile Asp Leu Asp Thr Asp Ile Arg
385                 390                 395                 400
Leu Phe Gln Ser Thr Ser Thr Phe Glu Thr Cys Ala Asn Gln Ala Val
                405                 410                 415
Tyr Leu Cys Ala Gln Thr Leu Asp Leu Leu Ala Pro Ser His Leu Leu
            420                 425                 430
```

```
Gly Arg Ala Ala Ser Val Arg Cys Asp Pro Ser Asp Ile Ala Tyr Met
        435                 440                 445
Glu Arg Trp Leu Lys Leu Trp Arg Tyr Val Glu Asp Trp His Val Lys
    450                 455                 460
Arg Pro Lys Glu Met Lys Pro Ile Val Asn Leu Pro Ser Thr Asp Pro
465                 470                 475                 480
Cys Pro Thr Ile Leu Phe Ser Asn Ala Ala Ala Ile Ser Gly Asp Gln
                485                 490                 495
Leu Tyr His Thr Ala Ala Ile Leu Leu Leu Gln Ser Lys Pro Thr Asn
            500                 505                 510
Val Arg Leu Arg Thr Gln Ala Thr Leu Asp Pro Val Ala Cys Pro Pro
        515                 520                 525
Asn Leu Trp His Leu Pro
    530
```

<210> 29842
<211> 206
<212> PRT
<213> A.fumigatus

<400> 29842

```
Leu Thr Leu Phe Ala Ala Tyr His Phe Pro Phe Leu Cys Arg Gln Lys
1               5                   10                  15
Ala His Leu Leu Thr Arg Lys Lys Glu Tyr Val Thr Met Ser Gln Ser
            20                  25                  30
Thr Thr Arg Ala Ser Ser Ala Pro Arg Ala Ser Ala Ser Gly Leu Thr
        35                  40                  45
Arg Val Tyr Leu Leu Ala Tyr Asn Ala Ile Ser Phe Cys Leu Trp Ala
    50                  55                  60
Thr Cys Val Ile Arg Gly Ala Thr Leu Val Phe Ser Leu Ala Pro Asn
65                  70                  75                  80
Gly His Leu Pro Ala Ile Phe His His Val Tyr Ser Pro Leu Leu Thr
                85                  90                  95
Thr Thr Gln Thr Leu Ala Gly Leu Glu Ile Leu His Ser Leu Val Gly
            100                 105                 110
Ile Val Arg Ala Pro Val Met Thr Thr Ala Met Gln Val Ala Ser Arg
        115                 120                 125
Leu Leu Leu Val Trp Gly Val Met Tyr Leu Phe His Asp Arg Gly Asn
    130                 135                 140
Gly His Gly Gly Ile Val Gly Gly Asp Phe His Glu Ala Leu Pro Tyr
145                 150                 155                 160
Gly Pro Gly Ala Lys Val Gly Asp Tyr Ala Phe Leu Gly Cys Leu Gly
                165                 170                 175
Ala Trp Gly Val Thr Glu Cys Ile Arg Tyr Gly Phe Phe Ala Leu Gln
            180                 185                 190
Val Trp Gly Ser Gly Val Pro Ser Trp Trp Thr Trp Leu Arg
        195                 200                 205
```

<210> 29843
<211> 99
<212> PRT
<213> A.fumigatus

<400> 29843

```
Trp Cys Pro Glu Leu Val Asp Leu Val Glu Val Ile Ile Pro Ala Leu
1               5                   10                  15
```

```
Cys Lys Val Arg Met Leu Leu Ala Asp Asn Val Arg Tyr Asn Thr Phe
            20                  25                  30
Tyr Val Leu Tyr Pro Ile Gly Ile Ser Ser Glu Cys Ile Met Val Trp
        35                  40                  45
Lys Ala Leu Lys Pro Ala Ala Glu Trp Asn Pro Leu Tyr Trp Trp Phe
    50                  55                  60
Leu Val Val Val Leu Ile Ile Tyr Val Pro Gly Thr Ser Val Val Trp
65                  70                  75                  80
Gln Arg Ala Pro Pro Val Ala Asn Phe Leu Gln Ala His Thr Phe Ser
                85                  90                  95
Thr Arg Thr
```

<210> 29844
<211> 136
<212> PRT
<213> A.fumigatus

<400> 29844

```
Ala Arg Arg Pro Thr Leu Thr Ala Val Val Thr Leu Trp Gly Leu Leu
1               5                   10                  15
Thr Thr Leu Asn Cys Ala Pro Gln Asn Tyr Ala Gly Leu Ile Val Leu
            20                  25                  30
Arg Val Leu Leu Gly Cys Phe Glu Ser Ala Val Ala Pro Ala Tyr Val
        35                  40                  45
Ala Asn Pro Gly Asn Leu Asn Val Arg Val His Ser Asp Arg Tyr Gln
    50                  55                  60
Thr Asp Ser Asp Tyr Phe Lys Val Val Gln Glu Glu Trp Gln Gly Val
65                  70                  75                  80
Ser Leu Val Ala Gly Thr Leu Ala Asn Leu Arg Lys Thr Ala Gln Ala
                85                  90                  95
Asp Arg Phe Leu Val Phe Arg Tyr Trp Asn Cys His His His Arg Ser
            100                 105                 110
Ser Arg Cys Thr Arg Thr Pro Leu Leu Tyr Arg Trp Leu Leu Pro Val
        115                 120                 125
Leu Ala Asp His Val Pro His Leu
    130                 135
```

<210> 29845
<211> 177
<212> PRT
<213> A.fumigatus

<400> 29845

```
Asp Val Leu Lys Ala Gln Leu Leu Arg Arg Met Leu Pro Thr Pro Ala
1               5                   10                  15
Ile Ser Met Ser Glu Phe Ile Leu Thr Gly Ile Arg Leu Ile Leu Ile
            20                  25                  30
Thr Ser Arg Trp Tyr Lys Arg Asn Gly Lys Val Tyr Leu Ser Trp Arg
        35                  40                  45
Gly Pro Leu Leu Thr Phe Ala Lys Gln Pro Lys Arg Ile Gly Phe Trp
    50                  55                  60
Tyr Leu Gly Thr Gly Thr Ala Thr Ile Ile Gly Ala Leu Val Ala His
65                  70                  75                  80
Gly Leu Leu Phe Tyr Thr Gly Gly Cys Phe Arg Ser Trp Gln Ile Met
                85                  90                  95
```

```
Phe Leu Ile Phe Glu Leu Ile Thr Ile Ala Val Gly Ile Cys Phe Met
            100                 105                 110
Ile Phe Leu Pro Asp Asn Pro Met Ala Ser Arg Leu Ala His Glu Glu
        115                 120                 125
Lys Leu Phe Ala Ile Glu Ser Leu Arg Glu Asn Arg Thr Gly Ile Glu
    130                 135                 140
Asn Lys His Phe Lys Met Tyr Gln Phe Leu Gln Ile Phe Gln Gly Pro
145                 150                 155                 160
Pro Asp Leu Ile Ser Ser Pro Leu Ile Val Gly Ala Met Lys Leu Ser
                165                 170                 175
His
```

<210> 29846
<211> 191
<212> PRT
<213> A.fumigatus

<400> 29846

```
Tyr Arg His Val Tyr Gln Cys Gly Cys Thr Leu His His Arg Gln Ser
1               5                   10                  15
Pro Ile Ile His Leu Arg Lys Val Ile Asp Val Pro Ala Met Leu Ser
            20                  25                  30
Ala Thr Ala Leu Ile Thr Trp Ala Pro Lys Cys Ser Glu Ser His Phe
        35                  40                  45
Tyr Lys Lys Ser Ser Lys Asp Ile Val Pro Ser Pro Cys Phe Thr Thr
    50                  55                  60
Lys Ala Thr Thr Ile Gly Phe Leu Arg Thr Val Pro Glu Thr Gly Asp
65                  70                  75                  80
Leu Ser Met Asp Thr Glu Ala Lys Lys Leu Ser Ser Ala Ala Ser Thr
                85                  90                  95
Glu Ala Asp Ala Ala Leu Gly Phe Leu Ala Ser Glu Gly Thr Ala Ala
            100                 105                 110
Phe Thr Glu Ile Val Glu Glu Lys Leu Val Arg Lys Ile Asp Trp Thr
        115                 120                 125
Ile Val Pro Leu Met Trp Ala Ile Tyr Phe Leu Gln Tyr Gln Asp Lys
    130                 135                 140
Phe Leu Ser Asn Thr Asp Ser Trp Thr Val Leu Ile Pro Pro Ala Thr
145                 150                 155                 160
Tyr Pro Thr Pro Val Asn Tyr Ala Ser Val Met Gly Leu Leu Lys Asp
                165                 170                 175
Thr Gly Met Gln Thr Asp Gln Phe Ser Lys Leu Ala Leu Ala Phe
            180                 185                 190
```

<210> 29847
<211> 104
<212> PRT
<213> A.fumigatus

<400> 29847

```
Ser Ile Asp Arg Trp Asp Trp His Gln Tyr Leu Ser Phe Ser His Ser
1               5                   10                  15
Ser Val Gln Cys Ser Ala Cys Leu Leu Ser Pro Pro Thr His Ala Gly
            20                  25                  30
Lys Ser Asn Asp His Tyr His Tyr His Tyr Ser Arg Leu His Thr Ser
        35                  40                  45
```

```
Ser Phe Ala Phe Phe Ile Ser Leu Lys Asn His Thr Arg Gln Phe Ile
    50                  55                  60
Lys Ser Glu Arg Arg Leu Tyr Val Thr Val Gly Ser Glu Asp Asn Arg
65                  70                  75                  80
Leu Phe Ile Leu Asp His Arg Cys Gln Thr Tyr Met Glu His Thr Leu
                85                  90                  95
Leu Leu Pro His Thr Lys Arg Phe
            100
```

<210> 29848
<211> 296
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (235)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29848

```
Ile Asp Gly Ile Gly Ile Asn Thr Tyr Arg Ser Pro Thr His Gln Phe
1               5                   10                  15
Asn Ala Pro Pro Ala Phe Phe Leu Pro Leu Pro Met Gln Gly Asn Gln
            20                  25                  30
Met Thr Thr Thr Thr Thr Thr Ile Leu Asp Tyr Ile Leu Leu Leu Ser
        35                  40                  45
Leu Ser Ser Tyr Leu Leu Lys Thr Ile Leu Gly Asn Leu Ser Ser Leu
    50                  55                  60
Lys Glu Gly Phe Thr Ser Leu Trp Ala Leu Lys Ile Ile Gly Cys Leu
65                  70                  75                  80
Phe Leu Thr Ile Val Ala Arg Pro Ile Trp Asn Ile Leu Phe Ser Ser
                85                  90                  95
His Thr Pro Arg Asp Ser Lys Ser Pro Gln Ile Arg Thr Phe Leu Pro
            100                 105                 110
Leu Gly Ile Asp Tyr Ile Thr Arg Gly Ile Ile Tyr Ser Ala Gln Asn
        115                 120                 125
Lys Ser Leu Val Phe Trp Glu Glu Leu Phe Arg Lys Tyr His Pro Phe
    130                 135                 140
Gln Thr Leu Glu Val Arg Leu Gly Pro Gln Thr Val Ile Val Ser Arg
145                 150                 155                 160
Asp Pro Gln Val Val Lys Ala Leu Leu Thr Thr Gln Phe Gly Asp Phe
                165                 170                 175
Gly Lys Gly Glu Arg Phe His Thr Glu Trp Arg Glu Phe Leu Gly Asp
            180                 185                 190
Ala Ile Phe Thr Thr Asp Gly Asp Lys Trp His Ala Ser Arg Ala Leu
        195                 200                 205
Ile Arg Pro Met Phe Thr Pro Asp Arg Val Ser Asn Leu Ser Thr Phe
    210                 215                 220
Glu Arg His Val Gln Lys Leu Leu Arg Ile Xaa Glu Ser Pro Arg His
225                 230                 235                 240
Glu Arg Gln Pro Val Asn Val Leu Asp Leu Cys Leu Arg Leu Thr Met
                245                 250                 255
Asp Ile Ala Thr Asp Phe Leu Leu Gly Gln Ser Val Asp Ser Leu Ser
            260                 265                 270
Asn Pro Thr His Arg Phe Ser Ala Ala Phe Ala Asp Val Gln Arg Ile
        275                 280                 285
```

Gln Ser Trp Ile Thr Met Ala Gly
290 295

<210> 29849
<211> 204
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (2)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29849
Gly Xaa Trp Asn Leu Pro Val Met Ser Gly Ser Gln Ser Met Phe Trp
1 5 10 15
Ile Ser Ala Phe Asp Ser Pro Trp Thr Leu Pro Arg Thr Ser Cys Ser
20 25 30
Asp Arg Val Ser Thr Ala Cys Gln Thr Arg Leu Ile Asp Ser Leu Gln
35 40 45
His Leu Pro Thr Cys Ser Glu Tyr Lys Ala Gly Leu Pro Trp Arg Gly
50 55 60
Arg Phe Gln Thr Gly Ser Ile Ser Ser Pro Gln Lys Ile Ser Leu Leu
65 70 75 80
Thr Ile Ser Ile Phe Arg Pro Leu Gln Val Phe Leu Pro Lys Ala Lys
85 90 95
Tyr Tyr Glu Gly Leu Lys Thr Ile Asn Ser Phe Val Asp Pro Phe Ile
100 105 110
Thr Arg Thr Leu Ala Leu Gly Arg Arg Ser Phe Glu Glu Met Glu Gly
115 120 125
Ser Glu Glu Glu Tyr Asn Phe Leu Glu Gly Leu Ala Thr Phe Thr Gln
130 135 140
Asp Pro Lys Val Ile Arg Asp Gln Leu Ile Ser Val Leu Leu Ala Ala
145 150 155 160
Arg Asp Thr Thr Ala Ala Thr Leu Ala Arg Thr Leu Tyr Glu Pro Ser
165 170 175
Gly His Pro Asp Val Val Gln Arg Leu Arg Glu Glu Ile Leu Ile Arg
180 185 190
Pro Arg Gly Trp Lys Ser Arg Val Gly Glu Pro Val
195 200

<210> 29850
<211> 149
<212> PRT
<213> A.fumigatus

<400> 29850
Ser Phe Gln Pro Arg Gly Glu Asp Ser Pro Ile Met Met Asp Leu Gln
1 5 10 15
Lys Arg Pro Pro Gln Tyr Pro Ser Leu Phe Gly Thr Ser His Asp Pro
20 25 30
Arg Ala Ala Pro Gln Pro Pro Pro Thr Tyr Ser Val Pro Pro Pro Gln
35 40 45
Gln Val Tyr Tyr Asp Ser Met Lys Gln His Gly Ile Pro Ser Ser Gln
50 55 60
Pro Ala Asn Thr Met Ala Tyr Pro Tyr Ser Thr Pro Met Ser Ser Ala

```
65                  70                  75                  80
Pro Pro Thr Pro Ala Ser Ser Thr Pro Tyr Asn Met Ser Ala Ala Pro
                85                  90                  95
Arg Val Asp Asn Gln Ser Tyr Gln Val Pro Gln Lys Asp Tyr Glu Pro
            100                 105                 110
Ser Lys Arg His Gln Leu Glu Asp His Asn Lys Arg His Arg His Ser
        115                 120                 125
Arg Asn Asn Ser His Asp Gln Leu Ile Ser Arg Glu Gly Arg Gln Tyr
    130                 135                 140
Tyr Phe Val Ser Phe
145
```

<210> 29851
<211> 190
<212> PRT
<213> A.fumigatus

```
<400> 29851
Asp Gly Ser Thr Phe Asp Ala Gly Asp Leu Phe Ala Thr Leu Ile Ser
1               5                   10                  15
Leu Leu Arg Glu Tyr Glu Met Met Ser Trp Leu Ser Ser Asn Val Arg
            20                  25                  30
Lys Cys Ala Asp Lys Ser Pro Ser Val Ile Ser Asp Thr Ser Asn Ser
        35                  40                  45
Thr Phe Ser Leu Lys Asp Ser Thr Pro Lys Gly Asn Gly Glu Arg Val
    50                  55                  60
Val Thr Ile Leu Glu Asp Leu Phe Ala Thr Asp Ile Lys Pro Arg Gln
65                  70                  75                  80
Ala Ile Gly Leu Pro Gln Ser Tyr Ile Leu Thr Leu Gly Ile Arg Asp
                85                  90                  95
Val Leu Ser Trp Val Thr Arg Gln Gly Glu Val Ala Tyr Pro Asn Ala
            100                 105                 110
Leu Val Tyr Ile Gln Cys Asp Leu Ile Ala Lys Asn Asn Phe Asp Leu
        115                 120                 125
Ala Trp Asp Phe Leu Arg Phe Gln Ala Ala Thr Ser Trp Ser Thr Tyr
    130                 135                 140
Val Lys Gly Arg Leu Tyr Val Ala Met Ser Glu Phe Asp Thr Ala Ala
145                 150                 155                 160
Leu Tyr Phe Arg Lys Ala Ala Tyr Leu Leu Cys Lys Leu Tyr Leu Ala
                165                 170                 175
Val Tyr Phe Asn Pro Asn Arg Leu Thr Tyr Tyr Ser Met Arg
            180                 185                 190
```

<210> 29852
<211> 391
<212> PRT
<213> A.fumigatus

```
<400> 29852
Arg Ile Thr Ala Cys Gly Lys Pro Leu Gly Asn Leu His Glu Met Ser
1               5                   10                  15
Ser Thr Leu Leu Asp Ile Val Ser Val Asp Cys Phe His Asn Gly Leu
            20                  25                  30
Pro Lys Tyr Phe Gln His Ile Leu Ser Ile Phe Glu Gln Ala Arg Ser
        35                  40                  45
Phe Ser His Val Ala Asp Phe Ala Ser Leu Ala Leu Gln Ala Leu Ala
```

```
    50                  55                  60
Ser Glu Asn Arg Asp Glu Lys Asp Pro Glu Arg Ile Asn Met Arg Thr
65                  70                  75                  80
Asp Leu Leu Ser Arg Leu Phe Tyr Ala Ser Leu Lys Thr Cys Gln Phe
                85                  90                  95
Asp Leu Ala Tyr Ser Ala Met Ser Arg Tyr Glu Asp His Ala Leu Gln
            100                 105                 110
Arg Ser Ala Leu Ser Ser Leu Ile Thr Ala Ile Leu Asn Ala Ser Gly
        115                 120                 125
Pro Gly Leu Ser Gly Leu Gln Gln Ile Leu His Phe Pro Thr Ser Leu
    130                 135                 140
Leu Pro Asn Ile Ala Thr His Val Asp Asp Thr Leu Val Ser Leu Ala
145                 150                 155                 160
Arg Lys Gln Thr Ser Phe Asn Ser Leu Leu Glu Ala Gly Thr Lys Trp
                165                 170                 175
Ala Asp Thr Thr Pro Asp Tyr Gln Arg Ile Leu Gln Ala Tyr Arg Val
            180                 185                 190
Ala Arg Asn Asp Tyr Arg Gly Ala Ala Glu Ile Ala Tyr Arg Asn Val
        195                 200                 205
Gln Arg Leu Arg His Ala Arg Asp Ser Pro Ser His His Leu Val Leu
    210                 215                 220
Ala Lys Gly Arg Asp Ala Asp Asp Thr Arg Gln Thr Val Glu Glu Asp
225                 230                 235                 240
Asp Pro Glu Ser Lys Glu Ile Arg Asn Glu Leu Leu Ser Leu Ile Asn
                245                 250                 255
Leu Leu Gly Cys Val Asp Lys Ser Glu Ala Tyr Ile Leu Val Glu Lys
            260                 265                 270
Glu Asp Ser Thr Pro Val Ala Arg His His Gly Val Pro Ala Asp Asp
        275                 280                 285
Asp Gly Asn Val Phe Met Asp Asp Ala Asp Thr Ser Ser Leu Thr Pro
    290                 295                 300
Thr Gly Ser Arg Arg Ser Ile Ser Ser Ser Thr Ser Ala Ile Lys Pro
305                 310                 315                 320
His Thr Pro Arg Asp Ser Lys Ser Ser Val Ser Gly Ala Gly Ile Asn
                325                 330                 335
Asn His Arg Gln Arg Arg Val Ile Val Thr Leu Asp His Ile Arg Arg
            340                 345                 350
Glu Tyr Gln Ser Glu Leu Asp Arg Val Ser Arg Ile Glu Arg Gly Asp
        355                 360                 365
Trp Glu Phe Gly Leu Leu Asp Ala Pro Glu Ala Asp Asn Gly Leu Ser
    370                 375                 380
Ala Ala Glu Trp Ile Pro Gly
385                 390
```

<210> 29853
<211> 83
<212> PRT
<213> A.fumigatus

<400> 29853

```
Pro Ile Thr Arg Ala Thr Arg Leu Ser Arg Trp Tyr Gly Pro Val Leu
1               5                   10                  15
Leu His Met Asp Met Tyr Gly Ala Val Leu Arg Ser Gly Leu Ser Asn
            20                  25                  30
Met Glu Thr Val Trp Gly Cys Asn Tyr Gly Thr Gln Met Asp Ser Glu
        35                  40                  45
```

```
Val Cys Arg Leu Gly Pro Ser Thr Ala Gln Asp Leu Asn Asn Ser Ile
    50                  55                  60
Asn Pro Ser Pro Gln Ala Leu Asn Ile Gln Val Leu Leu Tyr Leu Asn
65                  70                  75                  80
Ile Pro Ala
```

<210> 29854
<211> 94
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (1)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29854

```
Xaa Gly Leu Thr Pro Pro Pro Pro Pro Pro Gly Gly Leu Glu Pro Val
1               5                   10                  15
Thr Ile Gly Leu Leu Phe Val Pro Leu Ile Leu Pro Ser Leu Val Ser
            20                  25                  30
Ser Asp Thr Phe Pro Ser Ser Gly Leu Trp Ser Ala Lys Gly Arg Leu
        35                  40                  45
Leu Pro Pro Pro Phe Ser Pro Ile Glu Ile Tyr Arg Asp Gly Asp Gln
    50                  55                  60
Gly Tyr Arg Leu Leu Val Ala Val Ala Leu Ala Thr Thr Ile Thr His
65                  70                  75                  80
Ser Phe Leu Thr Ser His Gly Ala Ser Glu Leu Phe Pro Phe
                85                  90
```

<210> 29855
<211> 240
<212> PRT
<213> A.fumigatus

<400> 29855

```
Arg Ile Ala Arg Val Leu Gly Pro Leu Trp Arg Arg Leu Ala Glu Lys
1               5                   10                  15
Leu Val Ser Leu Ala Pro Gly Glu Lys Leu Gln Ala Ala Gly Glu Leu
            20                  25                  30
His Ala Pro Pro Ile Pro Gly Leu Glu Lys Tyr Pro Lys Leu Thr Leu
        35                  40                  45
Arg Ala Leu Leu Met Asp Tyr Ile Asp Ile Arg Ala Ile Pro Arg Arg
    50                  55                  60
Ser Phe Phe Ser Ala Ile Ala His Tyr Thr Ser Asn Glu Met His Lys
65                  70                  75                  80
Glu Arg Leu Leu Glu Phe Thr Asn Pro Glu Tyr Leu Asp Glu Phe Trp
                85                  90                  95
Asp Tyr Thr Ser Arg Pro Arg Arg Ser Ile Leu Glu Val Leu His Glu
            100                 105                 110
Phe His Ser Val Lys Ile Pro Trp Gln His Val Thr Thr Val Phe Pro
        115                 120                 125
Val Phe Arg Gly Arg Gln Phe Ser Ile Ala Ser Gly Gly Glu Leu Lys
    130                 135                 140
Arg Thr Ser Gly Gly Gly Ala Lys Phe Glu Leu Leu Ile Ala Ile Val
```

```
145                 150                 155                 160
Lys Tyr Gln Thr Val Ile Lys Arg Ile Arg Glu Gly Val Cys Thr Arg
                165                 170                 175
Tyr Leu Ser Val Leu Arg Pro Gly Ser Thr Leu Lys Val Gln Leu Gln
            180                 185                 190
Arg Gly Gly Leu Ser Ser Ser Val Asn Gln Leu Val Gly Pro Thr Val
        195                 200                 205
Leu Ile Gly Pro Gly Thr Gly Val Ala Pro Leu Arg Ser Met Leu Trp
    210                 215                 220
Glu Lys Ala Ala Phe Val Lys Ala Tyr Arg Arg Arg Ala Ser Gly Cys
225                 230                 235                 240
```

<210> 29856
<211> 203
<212> PRT
<213> A.fumigatus

<400> 29856

```
Ser Ser Gly Ser Glu Lys Glu Cys Val Gln Asp Thr Cys Leu Cys Cys
1               5                   10                  15
Gly Gln Ala Val Pro Ser Lys Ser Asn Cys Ser Ala Gly Asp Ser Ala
            20                  25                  30
His Pro Ser Thr Asn Trp Leu Ala Arg Leu Cys Leu Ser Asp Leu Val
        35                  40                  45
Pro Ala Ser Arg His Cys Asp Gln Cys Ser Gly Arg Lys Leu Leu Leu
    50                  55                  60
Leu Lys Pro Thr Glu Glu Glu His Pro Asp Ala Asn Pro Pro Ile Gly
65                  70                  75                  80
Pro Thr Ile Leu Leu Tyr Gly Gly Arg Asn Arg Ala Ala Asp Phe Phe
                85                  90                  95
Phe Glu Glu Glu Trp Gln Glu Leu Ser Asp Leu Ile Gly Leu Gln Val
            100                 105                 110
Phe Thr Ala Phe Ser Arg Asp Gln Arg His Lys Ile Tyr Val Gln Asp
        115                 120                 125
Ile Ile Arg Arg Asn Phe Gly Leu Phe Phe Arg Leu Leu His Asp Met
    130                 135                 140
Asn Gly Ser Val Tyr Ile Cys Gly Ser Ser Gly Arg Met Pro Gln Ala
145                 150                 155                 160
Val Arg Glu Ala Leu Ile Glu Ala Phe Glu His Gly Gly Gln Ala Asp
                165                 170                 175
Gly Pro Gln Leu Ala Arg Arg Gly Ala Glu Glu Tyr Leu Ile Gly Met
            180                 185                 190
Glu Lys Ser Gly Arg Tyr Lys Gln Glu Thr Trp
        195                 200
```

<210> 29857
<211> 162
<212> PRT
<213> A.fumigatus

<400> 29857

```
Lys Thr Arg Ala Ala Pro Leu Val Phe Leu Ser Pro Leu Asn Ser Lys
1               5                   10                  15
Lys Arg Pro Leu Val Tyr Ala Trp Thr Thr Tyr Arg His Ile Arg Gly
            20                  25                  30
Leu Asn Ile Pro Gln Leu Glu Val Leu Ala Thr Leu Gln Ser Glu Leu
```

```
        35                  40                  45
Leu Leu Gly Leu Ala Gly Ser Ala Leu Lys Thr Gln Asp Asp Leu Leu
    50                  55                  60
Gly Gly Leu Ser Leu Leu Val Glu Asp Gly Leu Gly Leu Thr Thr Val
65                  70                  75                  80
Thr Ala Leu Leu Ala Val Val Thr Thr Leu Thr Leu Gly Glu Gln Gly
                85                  90                  95
Gly Leu Ile Asp Pro Ser Ser Val Pro Val Pro Thr His Leu Pro Trp
            100                 105                 110
Cys Val Gly Tyr Val His Leu Ala Ser Leu Val Leu Gly Asp Leu Val
        115                 120                 125
Leu Gly Val Leu Ala Ala Leu Leu Gly Leu Ala Val Arg Pro Ala Ser
    130                 135                 140
Phe Gly Asn Val His Leu Glu Arg Lys Ser Tyr Gln Gln Leu Ser Ala
145                 150                 155                 160
Thr Ile
```

<210> 29858
<211> 77
<212> PRT
<213> A.fumigatus

<400> 29858

```
Ala Ser Leu Phe Ala Gln Gly Lys Arg Arg Tyr Asp Arg Lys Gln Ser
1               5                   10                  15
Gly Tyr Gly Gly Gln Thr Lys Pro Val Phe His Lys Lys Ala Lys Thr
            20                  25                  30
Thr Lys Lys Ile Val Leu Arg Leu Glu Cys Thr Ala Cys Lys Thr Lys
        35                  40                  45
Lys Gln Leu Ala Leu Lys Arg Cys Lys His Phe Glu Leu Gly Tyr Val
    50                  55                  60
Glu Ser Ala Asn Val Ala Ile Arg Gly Pro Cys Ile Tyr
65                  70                  75
```

<210> 29859
<211> 91
<212> PRT
<213> A.fumigatus

<400> 29859

```
Thr Leu Pro Pro Val Glu Asp Arg Ile Thr Ile Ala Val Ala His Arg
1               5                   10                  15
Leu Ser Thr Ile Arg Asp Ala Asp Ile Ile Cys Val Phe Cys Glu Gly
            20                  25                  30
Arg Ile Val Glu Gly Gly Met Tyr Asp Glu Phe Val Lys Gln Ile Ser
        35                  40                  45
Met Val Gln Ala Asp Val Arg Arg Ser Glu Pro Arg Gln Glu His His
    50                  55                  60
Gly Leu Gly Pro Tyr Cys Gly Leu Gln Cys Val Thr Ser Glu Asp Gly
65                  70                  75                  80
Ser Gly Phe Asn Val Tyr Leu Ser Cys Ile Ile
                85                  90
```

<210> 29860
<211> 316

<212> PRT
<213> A.fumigatus

<400> 29860
Arg Lys Ala Leu Glu Phe Ile Asp Asn Ser Gln Ile Arg Glu Asp Pro
1 5 10 15
Leu Gly Val His His Val Tyr Arg Gln Pro Thr Arg Gly Ala Trp Pro
20 25 30
Phe Ser Thr Arg Asp Gln Ser Tyr Ala Val Ser Asp Thr Thr Ala Glu
35 40 45
Ala Val Lys Val Ile Val Leu Leu Gln Arg Ile Glu Gly Phe Pro Ser
50 55 60
Arg Ile Ser Asp Glu Arg Leu Gln Gln Ala Ile Asp Leu Ile Leu Gly
65 70 75 80
Met Glu Asn Ala Gly Gly Gly Phe Ser Ala Tyr Glu Pro Val Arg Gly
85 90 95
Pro Lys Phe Leu Glu Leu Leu Asn Ile Thr Glu Leu Tyr Glu Asn Val
100 105 110
Met Thr Asp Asn Leu Tyr Pro Glu Cys Thr Ser Ser Val Ile Met Cys
115 120 125
Leu Thr Thr Phe Ala Arg Glu Tyr Pro Thr Tyr Arg Pro Arg Asp Ile
130 135 140
Gln Ala Cys Leu Ser Arg Ser Val Asp Tyr Leu Leu Arg Ser Gln Tyr
145 150 155 160
Pro Asn Gly Gly Trp Phe Ala Ser Trp Gly Val Cys Phe Thr Tyr Ala
165 170 175
Thr Met Phe Ala Leu Gln Gly Leu Ala Cys Met Gly Trp Asn Glu Ser
180 185 190
Asn Cys Ala Ala Cys Gln Arg Ala Cys Ser Phe Leu Leu Gln His Gln
195 200 205
Asn Pro Asp Gly Gly Trp Gly Glu Ser Leu Asp Thr Val Arg Phe Lys
210 215 220
Gln Tyr Leu Pro His Pro Asp Gly Ser Gln Val Thr Asn Thr Ala Tyr
225 230 235 240
Ala Val Ile Gly Leu Leu Ala Ala Arg Cys Gly Asn His Glu Ala Ile
245 250 255
Arg Arg Gly Val Ala Tyr Leu Val Lys Glu Gln Gln Asp Thr Gly Glu
260 265 270
Trp Leu Pro Gly Pro Leu Glu Gly Val Phe Ala Pro Pro Gly Gly Met
275 280 285
Arg Tyr Pro Asn Tyr Lys Phe His Phe Thr Leu Met Ala Leu Gly Arg
290 295 300
Tyr Val Ala Ile His Gly Asn Glu Cys Leu Ala Ile
305 310 315

<210> 29861
<211> 198
<212> PRT
<213> A.fumigatus

<400> 29861
His Ala Arg Leu Val Val Val Ala Gln Gln Gln Thr Thr Ser Phe Asp
1 5 10 15
Lys Gly Lys Gln Ala Phe Ser Thr Ser Ser Thr Gly Val His Glu Cys
20 25 30
Phe Ser Leu Lys Thr Lys Gly Leu Met Leu Ile Ser Ser Phe Val Val

```
        35                  40                  45
Val Ala Ile Pro Arg Lys Gly Pro Val Met Gly Ala Arg Pro Ile Thr
    50                  55                  60
Ser Arg Lys Ser Ser Gly Leu Asp Tyr Asp Ala Glu Leu Ala Leu Pro
65                  70                  75                  80
Met Pro Lys Pro Arg His Leu Pro Val Glu Asp Asn Gly Glu Ser Val
                85                  90                  95
Asp Ala Cys Lys Ser Glu Val Met Ile Asn Pro Thr Met Ile Lys Lys
            100                 105                 110
Arg Ser Val Thr Glu Pro Ala Arg Pro Glu Asp Val Lys Ile Lys Ala
        115                 120                 125
Asp Asp Asn Ser Gln Lys Glu Lys Met Lys Ser Arg Val Ala Ala Leu
    130                 135                 140
Arg Ser Lys Leu Ser Leu Lys Glu Leu Ala Lys Glu Phe Arg Arg Asn
145                 150                 155                 160
Ser Ser Lys Asn Glu Pro Ala Ala Gly Asn Glu Arg Gly Gln Ile Ser
                165                 170                 175
Tyr Val Asp Thr Gln Asp Phe Asn Glu Glu Lys Leu Leu Val Pro Lys
            180                 185                 190
Pro Arg Asp Pro Gly Val
        195

<210> 29862
<211> 74
<212> PRT
<213> A.fumigatus

<400> 29862
Lys Glu Thr Ala Tyr Tyr Phe Cys Tyr Val Ala Met Ala Ser Gln Ser
1               5                   10                  15
Gly Asn Ala Trp Ala Gln Met Lys Ala Gln Glu Gln Lys Gln Gln Gln
            20                  25                  30
Glu Thr Ala Asn Thr Asn Phe Asp Lys Gly Lys Gln Ala Ser Ala Ser
        35                  40                  45
Ser Val Ser Ser Pro Gly Val His Glu Cys Phe Ser Leu Lys Thr Glu
    50                  55                  60
Asn Leu Gly Ala Asn Met Leu Val Trp Leu
65                  70

<210> 29863
<211> 63
<212> PRT
<213> A.fumigatus

<400> 29863
Phe Pro Leu Pro Ser Arg Phe Ser Leu Glu Asp His Leu Phe Pro Leu
1               5                   10                  15
Leu Leu Leu Ile Ile Lys Leu Leu Pro Leu Phe Arg Gln Tyr His Leu
            20                  25                  30
Leu Leu Ser Phe His Cys Leu Thr Glu Ser Ser Glu Phe Ile Val Leu
        35                  40                  45
Pro Ser Ala Tyr Leu Cys Leu His Leu Leu Pro Thr Thr Ser Pro
    50                  55                  60

<210> 29864
<211> 64
```

<212> PRT
<213> A.fumigatus

<400> 29864
Leu Thr Ser Leu Gln Ala Leu Cys Arg Ile Cys Glu Pro Ile Ala Phe
1 5 10 15
Met Ser Ile Phe Pro Tyr Val Tyr His Met Val Glu Ala Phe Lys Val
20 25 30
Thr Asp Asp Asp His Lys Ile Ala Leu Tyr Ala Gly Leu Ile Thr Ser
35 40 45
Ser Phe Thr Phe Ala Glu Phe Ser Ala Gly Met Phe Trp Gly Arg Leu
50 55 60

<210> 29865
<211> 250
<212> PRT
<213> A.fumigatus

<400> 29865
Ser Val Pro Arg Thr Asn Glu Thr Arg Thr Ile Glu Gly Thr Ala Arg
1 5 10 15
Asp Val Ser Leu Leu Met Asp Tyr Leu Pro Ala Tyr Val Phe Pro Gln
20 25 30
Gly Glu Arg Met Ile Ser Lys His Met Val Leu Gly Val Ser Leu Gly
35 40 45
Gly His Ala Ala Trp Ser Cys Leu Leu His Glu Pro Arg Val Lys Ala
50 55 60
Gly Val Val Ile Ile Gly Cys Pro Asp Tyr Val Asn Leu Met Val Asp
65 70 75 80
Arg Ala Arg Leu Ser Lys Leu Pro Ser Trp Val Asn Ser Asp Pro Pro
85 90 95
Gly Ser Arg Ile Leu Gly Ser Glu Ala Phe Pro Ser Ser Leu Leu Glu
100 105 110
Thr Ile Ser Lys Leu Asp Pro Ala Ser Ile Phe Leu Ser Tyr Val Asn
115 120 125
Ser Asn Ser Asp Ala Gly Pro Pro Arg Asn Asn Pro Leu Pro Glu Pro
130 135 140
Thr Glu Asn Glu Lys Gln Ala Leu Arg Pro Val Leu Arg Arg Cys Leu
145 150 155 160
Ala Gly Lys Lys Ile Leu Asn Leu Ser Gly Gly Ala Asp Lys Leu Val
165 170 175
Pro Tyr His Arg Gly Glu Val Phe Leu Thr Trp Leu Lys Lys Ala Ile
180 185 190
Ala Pro Asp Gly Trp Phe Ala Asp Gly Ala Ile Thr Phe Glu Asp Ile
195 200 205
Ile Asp Glu Lys Ala Gly His Glu Val Thr Pro Lys Met Val Asp Glu
210 215 220
Ala Val Arg Phe Ile Thr Glu Thr Leu Ala Ser Ser Asp Asp Ala Lys
225 230 235 240
Lys Ser Ala Tyr Val Arg Glu Ser Lys Ile
245 250

<210> 29866
<211> 76
<212> PRT
<213> A.fumigatus

<400> 29866
Leu Gly Tyr Phe Phe Tyr Tyr Ser Arg Gly His Val Ser Ala Gly Tyr
1 5 10 15
Gly Arg Val Gly Lys His Arg Lys His Pro Gly Gly Arg Gly Leu Ala
20 25 30
Gly Gly Gln His His His Arg Thr Asn Leu Asp Lys Phe His Pro Gly
35 40 45
Tyr Phe Gly Lys Val Gly Met Arg Tyr Phe His Lys Thr Asn Gln Gln
50 55 60
Phe Trp Lys Pro Thr Ile Asn Leu Asp Lys Val Arg
65 70 75

<210> 29867
<211> 89
<212> PRT
<213> A.fumigatus

<400> 29867
Phe Val Leu Val Met Asp Lys Val Thr Asp Trp Asp Val Phe Phe Leu
1 5 10 15
Gln Leu Trp Ser Leu Ile Pro Thr Glu Thr Arg Glu Ala Tyr Leu Ser
20 25 30
Gly Gln Lys Thr Asp Thr Ala Pro Val Ile Asp Leu Leu Ser Leu Gly
35 40 45
Tyr Ser Lys Val Leu Gly Lys Gly Arg Ile Pro Glu Ile Pro Ile Val
50 55 60
Val Arg Ala Arg Tyr Phe Ser Arg Asp Ala Glu Gln Lys Ile Lys Glu
65 70 75 80
Ala Gly Gly Val Val Glu Leu Val Ala
85

<210> 29868
<211> 153
<212> PRT
<213> A.fumigatus

<400> 29868
Phe Ser Ala Tyr Leu Leu Phe Ser Lys Thr Ile Leu Leu Ser Thr Arg
1 5 10 15
Ser Ile Ile Asp Ser Asp Ser Thr Glu Lys Lys Lys Ile Phe Lys Met
20 25 30
Pro Phe His Ser Arg Tyr His Val Asp Ile Pro Asn Ile His Leu Ala
35 40 45
Ser Leu Leu Leu Lys Ser Pro Thr His Pro Leu Ser Ser Thr His Arg
50 55 60
Cys Phe Ser Glu Ala Ala Arg Pro Asn Thr His Tyr Phe Thr Thr His
65 70 75 80
Asp Phe Arg Leu Trp Ser Gln Arg Phe Ala Ala Gly Leu Arg Lys Ala
85 90 95
Gly Leu Gln Pro Gly Asp Arg Val Leu Leu Phe Ser Gly Asn Asp Leu
100 105 110
Phe Phe Pro Val Glu Phe Met Gly Ile Ile Met Ala Gly Gly Ile Phe
115 120 125
Thr Gly Ala Asn Pro Thr Phe Val Ala Arg Glu Leu Ala Phe Gln Leu
130 135 140

```
Gln Asp Ser Gly Ala Leu Phe Leu Leu
145                 150

<210> 29869
<211> 418
<212> PRT
<213> A.fumigatus

<400> 29869
Met Ser Ile Phe Gly Thr Phe Gln Pro Arg Gly Glu Asp Ser Val Val
1               5                   10                  15
Gln Ser Cys Leu Glu Ala Asn Ile Lys Gly Val Pro Gln Glu Ala Ile
            20                  25                  30
Phe Glu Arg Ile Gln Gln Thr Arg Val Glu Phe Ala Gln Ala Leu Leu
        35                  40                  45
Gln Arg Leu Val Glu Ala Gly Ala Lys Gly Ala Glu Val Phe Gly Leu
    50                  55                  60
Leu Arg Val Val Trp Asp Ala Leu Arg Thr Arg Arg Ala Thr Tyr Glu
65                  70                  75                  80
Glu Ala Leu Val Asn Asp Asp Ala Glu Tyr Tyr Arg Ser Val Leu Asn
                85                  90                  95
Val Leu Phe Leu Ala Leu Gln Cys His Leu Asp Ser Asn Pro Arg Thr
            100                 105                 110
Thr Pro Asp Thr Ser Ser Arg Ile Ala Glu Ile Pro Ser Asp Leu Thr
        115                 120                 125
Leu Val Ile Glu Ile Val Lys Thr Val Val Ala His Gly Phe Arg Ser
    130                 135                 140
Leu Thr Thr Tyr Leu His Asp Gln Pro Asp Lys Cys Glu Pro Lys Asp
145                 150                 155                 160
Phe Ala Leu Leu Thr Ala Ile Leu Gln Thr Ser Leu Gln Ile Lys Asn
                165                 170                 175
Ala Asp Arg Leu Tyr Glu His Ile Val Tyr His Ile Glu Asp Asn Asn
            180                 185                 190
Thr Ala Arg His Ala Met Ser Leu Phe Ser Trp Ala Asp Gln Leu Ala
        195                 200                 205
Val Ser Gly Asp Pro Val Tyr Gly Glu Leu Ser Ile Leu Phe Leu Val
    210                 215                 220
Lys Leu Ser Thr Leu Pro Met Leu Ala Glu His Leu Ala Val Glu Ala
225                 230                 235                 240
Val Leu Thr Arg Leu Ser Thr Cys Arg Leu Thr Asn Ile Leu Gln Gln
                245                 250                 255
Pro Arg Gly Phe Gly Pro Phe Asp Ala Val Pro Arg Leu Tyr Thr Ile
            260                 265                 270
Trp Thr Ala Gly Phe Leu Pro Leu Cys Leu Asn Leu Leu Tyr His Val
        275                 280                 285
Leu Arg Thr Ala Pro Glu Val Ala Ala Phe Leu Asn Gln Phe Glu Gly
    290                 295                 300
Gln Leu Lys Arg Ala Ala Glu Ser Phe Val Ala Asp Arg Ser Gly Ser
305                 310                 315                 320
Pro Ser Ile Arg Ile Cys Leu Ser Met Ala Ser Glu Ala Tyr Ser Leu
                325                 330                 335
Ala Leu Ile Ser Phe Ile Leu Asn Arg Phe Arg Glu Ala Gly Pro Ser
            340                 345                 350
Ala Gly Val Asp Ala Gln Ser Ile Gln Asp Leu Lys Trp Asp Lys Thr
        355                 360                 365
Gln Val Lys Glu Asp Leu Gly Glu Leu Leu Glu Arg Arg Gln Ser Leu
```

```
    370                 375                 380
Arg Ala Arg Met Val Asp Thr Ser Glu Lys Glu Val Glu Leu Ala Arg
385                 390                 395                 400
Gln Lys Pro Val Lys Phe Cys Leu Gly Arg Arg Glu Pro Ser Gly Gly
                405                 410                 415
Glu Asn
```

<210> 29870
<211> 107
<212> PRT
<213> A.fumigatus

<400> 29870

```
Ser Glu Cys Thr Cys Arg Arg Ala Tyr Phe Leu Val Thr Thr Ser Ser
1               5                  10                  15
Asp Ser Ile Ser Gly Pro Val Asn Asp Thr Ala Thr His Arg Lys Pro
            20                  25                  30
Thr Glu Ile Ala Lys Gly Ala Gly Arg Leu Ser Cys Arg Asp Arg Ser
        35                  40                  45
Ser Lys Ser Ala Ser Ser Ser Ala Thr Ala Lys Ala Val Lys Asp Ala
    50                  55                  60
Phe Thr Arg Cys Trp Ser Ala Tyr Lys Ser Arg Ala Trp Met Ala Asp
65                  70                  75                  80
Glu Val Thr Pro Leu Ser Gly Thr Thr Arg Asn Gly Phe Gly Gly Trp
                85                  90                  95
Gly Ala Thr Leu Val Asp Ser Leu Asp Ala Leu
            100                 105
```

<210> 29871
<211> 102
<212> PRT
<213> A.fumigatus

<400> 29871

```
Ile Met Lys Leu Arg Glu Glu Phe Glu Glu Ala Val Ser Ala Val Val
1               5                  10                  15
His Ile Asn Phe Glu Thr Thr Ser Leu Ser His Phe Tyr Thr Phe Glu
            20                  25                  30
Thr Asn Ile Arg Asn Leu Gly Gly Leu Leu Ala Ala Tyr Asp Leu Asp
        35                  40                  45
His Asp Lys His Leu Leu Asn Lys Ala Val Glu Val Gly Glu Met Leu
    50                  55                  60
Tyr Ala Thr Phe Asp Thr Pro Asn Arg Met Pro Ile Thr Arg Trp Gly
65                  70                  75                  80
Phe His Leu Ile Ser Leu Asp Glu Tyr Val Phe Thr Thr Glu Ala His
                85                  90                  95
Pro Leu Lys Arg Ala Met
            100
```

<210> 29872
<211> 95
<212> PRT
<213> A.fumigatus

<220>

<221> UNSURE
<222> (7),(14),(15),(16)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29872
Val Gly Gly Leu His Leu Xaa Ser Arg Pro Ser Leu Tyr Xaa Xaa Xaa
1 5 10 15
Pro Ala Asp Phe Leu Phe Asn Cys Thr Ser Leu Trp Thr Pro Val Ala
20 25 30
Tyr Ala Val Asp Pro Pro Ala Met Pro Asp Arg Glu Asp Leu Leu Val
35 40 45
Arg Asp Pro Lys Thr Gly Val Ala His Pro Thr Ala Arg Ser Lys Lys
50 55 60
Ile Ala Phe Gly Gly Gln Ala Ala Trp Phe Glu Leu Glu Tyr Thr Val
65 70 75 80
Ala Thr Ala Ala Thr Ile Leu Val Phe Val Tyr Ser Phe Phe Phe
85 90 95

<210> 29873
<211> 86
<212> PRT
<213> A.fumigatus

<400> 29873
Arg Arg Gly Thr Asp Trp Asp Val Ile Arg Lys Cys Ile Cys Ser Gly
1 5 10 15
Phe Tyr His Gln Ala Ala Lys Val Lys Gly Ile Gly Glu Phe Ile Asn
20 25 30
Leu Arg Thr Ser Val Ser Met Gln Leu His Pro Thr Ser Ala Leu Tyr
35 40 45
Gly Leu Gly Tyr Val Pro Glu Tyr Val Val Tyr His Glu Leu Ile Leu
50 55 60
Thr Ser Lys Glu Tyr Met Ser Thr Val Thr Ala Val Asp Pro His Val
65 70 75 80
Ser Arg Thr Ile Phe Ile
85

<210> 29874
<211> 125
<212> PRT
<213> A.fumigatus

<400> 29874
Trp Leu Ala Glu Leu Gly Gly Val Phe Tyr Ser Val Lys Glu Lys Gly
1 5 10 15
Tyr Ser Gln Arg Glu Arg Arg Val Thr Glu Gln Glu Phe Asn Arg Arg
20 25 30
Met Glu Ile Glu Thr Gln Met Ala Ala Asp Arg Glu Arg Ala Ala Ala
35 40 45
Glu Lys Leu Arg Glu Gln Glu Arg Asn Asp Pro Ser Arg Arg Lys Lys
50 55 60
Glu Val Glu Ala Gly Ser Val Val Arg Arg Pro Ala Val Thr Gly Ala
65 70 75 80
Arg Arg Ile Gly Gly Val Thr Ala Ser Ser Thr Thr Arg Asn Gly Thr
85 90 95
Asn Gly Ala Ser Gly Gly Gly Thr Val Val Lys Lys Pro Gln Ile Lys

```
            100                 105                 110
Arg Arg Pro Gly Arg Ala Phe Tyr Asp His Val Gln Ala
        115                 120                 125

<210> 29875
<211> 88
<212> PRT
<213> A.fumigatus

<400> 29875
Thr Ser Met Pro Pro Lys Arg Ile Gln Thr Pro Ser Ser Ser Ser Leu
1               5                   10                  15
Ser Ser Gly Pro Ala Val Leu Ser Ser Asn Ser Ser Val Tyr Gln Ile
            20                  25                  30
Ala His His Val Trp Gln Gln Tyr Leu Thr Thr Thr Pro Gln Arg Thr
        35                  40                  45
Met Met Leu Asp Ala Phe Met Val Phe Leu Leu Phe Val Gly Ala Val
    50                  55                  60
Gln Phe Leu Tyr Cys Val Leu Ala Gly Asn Tyr Val Arg Pro Val Pro
65                  70                  75                  80
Arg Ser Val Gly Ser Ile Thr Asn
                85

<210> 29876
<211> 62
<212> PRT
<213> A.fumigatus

<400> 29876
Pro Phe Asn Ala Phe Leu Ser Gly Phe Cys Ala Ala Val Gly Gln Phe
1               5                   10                  15
Val Leu Thr Ala Ser Leu Arg Met Gln Thr Ser Ser Glu Leu Lys Gly
            20                  25                  30
Val Asn Ser Lys Pro Ser Ser Lys Gly Lys Asn Ala Arg Phe Ala Ala
        35                  40                  45
Val Glu Gly Gly Glu Gln Gln Gly Ala Val Ser His Glu Arg
    50                  55                  60

<210> 29877
<211> 74
<212> PRT
<213> A.fumigatus

<400> 29877
Leu Ser Thr Thr Met Arg Leu Leu Pro Leu Val Leu Leu Pro Leu Thr
1               5                   10                  15
Ala Gln Ala Ile Asn Ile Val Ser Ser Asn Asp Asp Gly Trp Ala Glu
            20                  25                  30
Ile Asn Ile Arg Gln Phe Tyr Lys Ala Leu Thr Ala Ala Gly His Ser
        35                  40                  45
Val Val Val Ser Ala Pro Ala Glu Asn Gln Ser Gly Lys Gly Ser Pro
    50                  55                  60
Val Ser Pro His Pro Gln Leu Asn Arg Ser
65                  70

<210> 29878
```

<211> 242
<212> PRT
<213> A.fumigatus

<400> 29878
Ser Gln Leu Thr Asn Ser Gly Ser Ser Asp Lys Thr Pro Thr Thr Arg
1 5 10 15
Thr Lys Pro Cys Glu Phe Asn Ser Cys Pro Ser Gly Ser Pro Ala Thr
20 25 30
Gly Phe Asn Ala Ser Asp Pro Arg Leu Asn Tyr Val Asn Ser Tyr Pro
35 40 45
Val Thr Ser Met Lys Tyr Gly Ile Ser Thr Ala Ala Pro Pro Phe Phe
50 55 60
Asn Asp Ala Pro Pro Ala Leu Ala Val Ser Gly Pro Asn Val Gly Ser
65 70 75 80
Asn Leu Gly Leu Ala Val Tyr Phe Ser Gly Thr Val Gly Ala Ala His
85 90 95
Tyr Ala Ala Glu Ala Gly Ile Pro Ala Ile Ala Phe Ser Gly Ser Ser
100 105 110
Gly Ser Pro Thr Ala Trp Asn Ala Ala Val Pro Ala Tyr Ser Arg Val
115 120 125
Tyr Ala Gln Leu Ala Thr Lys Ile Thr Asn Gln Ile Val Ala Ser Gly
130 135 140
Thr Pro Tyr Leu Pro Asp Gln Val Trp Leu Asn Val Asn Phe Pro Glu
145 150 155 160
Val Ser Ser Glu Cys Ala Ala Ala Asp Asp Phe Lys Phe Val Leu Ser
165 170 175
Arg Ile Phe Thr Gly Ile Phe Ser Ala Asp Asp Val Glu Thr Cys Gly
180 185 190
Ser Ser Arg Leu Pro Thr Glu Ser Thr Val Val Gly Thr Asp Gly Cys
195 200 205
Tyr Val Ser Ile Ser Val Gly Trp Ser Asp Lys Thr Asp Ala Ala Ala
210 215 220
Asp Val Gln Ala Ile Val Leu Asp Lys Leu Gly Asp Leu Leu Val Cys
225 230 235 240
Leu Pro

<210> 29879
<211> 243
<212> PRT
<213> A.fumigatus

<400> 29879
Ala Tyr Arg Gly Ser Ser Asn Leu Asn Gln Leu Pro Ser Gly Thr Phe
1 5 10 15
Cys Ala Val His Cys Ser Glu Ala Val Pro Val Thr Asn Pro Ser Leu
20 25 30
Gln Val Ile Thr Met Ala Gly Val Gly Ser Asn Leu Lys Ala His Gln
35 40 45
Tyr Glu Pro Ser Gln Thr Ser Glu Val Gly Ser Glu Thr Arg Ser Ala
50 55 60
Thr Thr Ile Glu Tyr Arg Arg His Pro Ile Tyr Tyr Pro Ser Glu Trp
65 70 75 80
Leu Leu Glu Ser Ile Ser Ser Leu Met Ala Leu Gly Leu Leu Leu Gly
85 90 95

```
Ile Ala Ile Ile Phe Trp Tyr Met Asp Asn Lys Pro Leu Ser Ala Trp
            100                 105                 110
Arg Gly Pro Ile Ser Leu Asn Ala Thr Ile Ser Ile Leu Thr Thr Ala
        115                 120                 125
Cys Thr Ala Met Leu Met His Gly Val Ser Thr Phe Ile Gly Gln Ser
    130                 135                 140
Lys Trp Leu His Phe Lys Asn Arg Pro Arg Lys Leu Ala Asp Leu Glu
145                 150                 155                 160
Thr Phe Asp Gly Ala Ser Arg Gly Val Trp Gly Ser Ile Leu Leu Leu
                165                 170                 175
Thr Thr Ile Lys Trp Asn Leu Ala Thr Ile Gly Ala Phe Ile Thr Ile
            180                 185                 190
Leu Arg Leu Ala Phe Ser Pro Phe Thr Gln Gln Val Val Leu Ile Glu
        195                 200                 205
Gln His Glu Ile Ile Ser Pro Ser Asp Thr Ala Ala Phe Gly Tyr Ala
    210                 215                 220
His Asn Tyr Ser Arg Asn Val Leu Ser Gly Leu Ala Asn Ala Gly Val
225                 230                 235                 240
Gly Lys Pro
```

<210> 29880
<211> 186
<212> PRT
<213> A.fumigatus

```
<400> 29880
Asn Ser Leu Gln Leu Phe Phe Leu Asp Ser Gly Thr Ala Pro Val Val
1               5                   10                  15
Thr Glu Leu Ser Glu Thr Ser Lys Ala Gly Ser Asp Ser Glu Glu Asp
            20                  25                  30
Thr Glu Ala Glu Glu Thr His Arg Ala Val Trp His Asp Ser Asp Asp
        35                  40                  45
Glu Arg Leu Thr Ile Ser Leu Ala Ser His Gln Arg Leu Arg Lys Leu
    50                  55                  60
Arg Val Thr Glu Ala Glu Asp Val Ile Ser Gly Lys Glu Tyr Ile Lys
65                  70                  75                  80
Arg Leu Arg Arg Gln Phe Glu Gln Leu His Pro Val Pro Asp Trp Ala
                85                  90                  95
Lys Pro Glu Leu Asn Lys Lys Arg Thr Asp Ser Asp Ser Glu Leu Asp
            100                 105                 110
Ser Asp Met Asp Thr Asp Asp Glu Asn Glu Arg Leu Ser Thr Gln Pro
        115                 120                 125
Leu Ala Lys Leu Leu Gln Gly Ala Thr Asp Leu Thr Thr Leu Gly Glu
    130                 135                 140
Ser Thr Gly Ala Gly Gly Lys Arg Lys Leu Arg Gln Glu Val Ile Asp
145                 150                 155                 160
Ile His Arg Leu Lys Asp Val Gly Lys Asp Gln Pro Val Ser Phe Cys
                165                 170                 175
Ala Ser Gly Asn Ile Ser Trp Phe Trp Tyr
            180                 185
```

<210> 29881
<211> 325
<212> PRT
<213> A.fumigatus

<400> 29881
Gly Cys Trp Gln Gly Ser Ala Ser Lys Phe Leu Arg Gln Arg Gln Tyr
1 5 10 15
Phe Met Val Leu Val Leu Met Phe Leu Leu Gln Ser Ser Ile Asp Ser
20 25 30
Leu Met Phe His Pro His Tyr Pro Leu Leu Leu Ser Ser Gly Pro Ala
35 40 45
Ala Thr Leu Phe Ile His His Ile Ser Pro Ser Ala Glu Ala Pro Asn
50 55 60
Pro Leu Leu Thr Ser Leu His Ile Arg Arg Thr Pro Ile His Thr Ser
65 70 75 80
Ala Phe Ala Pro Pro Thr Gly Asn Lys Ile Phe Ala Ser Gly Arg Arg
85 90 95
Arg Tyr Phe His Ile Trp Asp Leu Asp Thr Gly Lys Val Glu Lys Val
100 105 110
Asn Gly Thr Ala Asp Arg Lys Glu Glu Gln Lys Ser Met Glu Arg Phe
115 120 125
Lys Leu Ser Pro Cys Gly Arg Tyr Val Gly Leu Val Gly Ser Ser Arg
130 135 140
Lys Gly Gly Gly Ile Ile Asn Val Leu His Ser Glu Thr Ala Gln Trp
145 150 155 160
Ile Ala Gln Val Arg Val Asp Gly Arg Gly Gly Val Ala Asp Phe Ala
165 170 175
Trp Trp Ser Asp Gly Glu Gly Met Thr Val Ala Ser Lys Asn Gly Glu
180 185 190
Val Ser Glu Trp Asp Gly Arg Leu Asn Arg Val Val Ala Arg Trp Met
195 200 205
Asp Ala Gly Ala Val Gly Thr Thr Thr Leu Ser Leu Gly Gly Arg Ser
210 215 220
Gly Arg Thr Gln Leu Gly Gly Asp Arg Trp Val Ala Ile Gly Ser Ser
225 230 235 240
Ser Gly Val Val Asn Val Tyr Asp Arg Arg Glu Trp Ala Ala Ala Tyr
245 250 255
Ala Ala Gln Pro Ala Ser Ser Glu Val Ser Pro Ile Pro Arg Asn Pro
260 265 270
Glu Pro Val Arg Ala Leu Asp Gln Leu Thr Thr Pro Ile Ser His Leu
275 280 285
Val Phe Ala Pro Asp Gly Gln Phe Leu Val Met Ala Ser Arg Trp Lys
290 295 300
Arg Asp Ala Leu Arg Leu Gly Lys Ser Leu Val Leu Ser Leu Leu Met
305 310 315 320
Val Thr Phe Phe Tyr
325

<210> 29882
<211> 272
<212> PRT
<213> A.fumigatus

<400> 29882
Arg Tyr Tyr Ile Thr Ala Leu Gln Gln Val Pro Ser Met Cys Glu Val
1 5 10 15
Arg Ser Ile Glu Asn Ile Glu Ala Met Ala Leu Leu Val Val Tyr His
20 25 30
Leu Arg Ser Ala Ser Ser His Gly Leu Trp Tyr Ile Ile Gly Leu Ala

```
        35                  40                  45
Met Arg Thr Ala Ile Asp Leu Gly Leu His Arg Lys Ala Asn Glu Ile
    50                  55                  60
Asn Leu Asp Pro Trp Thr Ala Gln Met Arg Arg Arg Leu Phe Trp Thr
65                  70                  75                  80
Ile Tyr Tyr Leu Glu Arg Val Ile Ser Met Ser Leu Gly Arg Pro Phe
                85                  90                  95
Ser Ile Ala Asp Arg Gln Ile Asp Leu Pro Leu Pro Val Asp Val Asp
            100                 105                 110
Asp Asp Val Gln Asp Pro Ala Ile Leu Thr Ala Pro Pro Arg Thr Asp
        115                 120                 125
Arg Ile Thr Ser Leu Thr Phe Ala Ile Tyr Leu Phe Glu Leu Arg Arg
    130                 135                 140
Ile Asp Ser Arg Ile Gln His Lys Ile Tyr Arg Ala Asp Arg Pro Leu
145                 150                 155                 160
His Thr Leu Arg Ser Lys Met Asp Arg Leu Phe Ile Glu Leu Glu Glu
                165                 170                 175
Trp Lys Arg Ser Ala Leu Gln Arg Phe Ser Gly Ser Asp Leu Asp Tyr
            180                 185                 190
Pro Met Leu His Tyr Asn Arg Ala Leu Arg Leu Leu Ile Gln Pro Phe
        195                 200                 205
Leu Pro Ser Leu Pro Leu Ser Asp Pro Tyr Tyr His Ile Cys Leu Arg
    210                 215                 220
Ala Ala Gly Asp Ile Cys Gln Thr His Gln Arg Ala Pro Pro Asp Pro
225                 230                 235                 240
Arg Ile Met Ala Asn Pro Phe Pro Pro Cys Ser Lys Thr Val Phe Leu
                245                 250                 255
Gly Pro Val Ser Thr Pro Phe Gly Tyr Pro Leu Leu Glu Arg Pro Pro
            260                 265                 270

<210> 29883
<211> 60
<212> PRT
<213> A.fumigatus

<400> 29883
Gly Val Val Gln Glu Asn Val Ala Lys Ala Ile Ser Arg Gly Ile Leu
1               5                   10                  15
Ile Val Pro Thr Leu Phe Gln Gln Leu Phe Ser Pro Gln Arg Leu Met
            20                  25                  30
Leu Thr Asp Glu Leu Leu Tyr Tyr Glu Lys Leu Tyr Ile Trp His Thr
        35                  40                  45
Leu Leu Phe Thr Asn Asp Thr Ala Leu Leu Phe Leu
    50                  55                  60

<210> 29884
<211> 67
<212> PRT
<213> A.fumigatus

<400> 29884
Leu Ser Ile Asn Leu Ala Pro Ser Tyr Ser Glu Asp Ser Gln Pro Leu
1               5                   10                  15
Asn Thr His Thr Tyr Arg Thr Asn Ile Glu Met Thr Ile Lys Glu Thr
            20                  25                  30
Gln Asp Leu Phe Arg Pro Gly Thr Ser His Gln Met Met Leu Ile Leu
```

```
        35                  40                  45
Ile Val Leu Ile Glu Asn Ala Gln Thr Leu Tyr Tyr Phe Leu Trp Met
    50                  55                  60
Asp Asp Gly
65
```

<210> 29885
<211> 65
<212> PRT
<213> A.fumigatus

<400> 29885

```
Ala Gly Val Pro Ser Ser Cys Arg Phe Cys Pro Thr Asn Phe Phe Phe
1               5                   10                  15
Phe Phe Phe Phe Phe Phe Phe Phe Phe Ala Arg Ile Cys His Lys Ala
            20                  25                  30
Ser Arg Val Ser Pro Tyr Arg Ile Thr Lys His Ser Phe Ser Ile Tyr
        35                  40                  45
Phe Ser Gly Asn Leu Val Leu Asn Trp Lys Ile Lys Tyr Ser Val Ser
    50                  55                  60
Pro
65
```

<210> 29886
<211> 79
<212> PRT
<213> A.fumigatus

<400> 29886

```
His Ile Lys Thr Ser Leu Trp Val Ser Gly Asn Gln Ala Tyr Pro Ala
1               5                   10                  15
Gln Cys Arg Ser Leu Tyr Val Leu Thr Gln Ala Arg Leu Ala Ser His
            20                  25                  30
Ser Gln Ser Lys Ala Leu Leu Thr Asp Val Ser Ser Ser Ile Ala Leu
        35                  40                  45
Ala Val Ala Tyr Lys Asp Ser Asp Ile Arg Asn Val Ala Ala Ile Val
    50                  55                  60
Leu Gly Thr Pro Gly Thr Pro Tyr Gln Phe Gly Leu Phe Glu Val
65                  70                  75
```

<210> 29887
<211> 61
<212> PRT
<213> A.fumigatus

<400> 29887

```
Phe Ser Ile Gly Phe Gly Lys Gly Arg Thr Ala Asp Arg Leu Ile Thr
1               5                   10                  15
Ile Cys Gly Glu Cys Gln Met Ala Asp Ile Val Ser Asp Tyr Pro Ala
            20                  25                  30
Thr Pro Pro Ile Val Gln Ile Thr Thr Thr Asn Ala Gly Arg Cys Arg
        35                  40                  45
Phe Gly Pro Asn Leu Tyr Ala Gly Gly Lys Val Cys Leu
    50                  55                  60
```

<210> 29888

<211> 60
<212> PRT
<213> A.fumigatus

<400> 29888
Asn Asn Ile Ser His Leu Thr Leu Thr Ala Asp Cys Asn Gln Ala Ile
1 5 10 15
Ser Gly Pro Thr Phe Ala Lys Thr Asp Ala Glu Leu Ala Gly Ser Gln
20 25 30
Pro Met Gly Leu Ile Leu Ser Val Asn Glu Phe Lys Pro Gln Arg Asp
35 40 45
Arg Thr Asp Lys Glu Ser Pro Gly Phe Pro Thr Gln
50 55 60

<210> 29889
<211> 64
<212> PRT
<213> A.fumigatus

<400> 29889
Trp Pro Leu Asp Lys Arg Pro Pro Tyr Tyr Ala Ser Gln Gly Asp Arg
1 5 10 15
Phe Ser Asp Ile Leu His Met Leu Leu Lys Met Arg Ser Leu Pro Pro
20 25 30
Lys Ala Ala Pro Gly Pro Asp Gly Ile Leu Lys Ala Met Asp Gly Ser
35 40 45
Asp Glu Asn Ala Ala Arg Trp Phe Asp Met Ile Lys Ile Thr Arg Lys
50 55 60

<210> 29890
<211> 308
<212> PRT
<213> A.fumigatus

<400> 29890
Thr Pro Asp Pro Thr Ser Asn Ala Arg Gln Ser Gln Leu Ser Met Ile
1 5 10 15
Ala Ala Ser Ala Ser Glu Met Val Pro Gln Gly Ile Pro Met Asp His
20 25 30
Asp Pro Asn Ala Leu Met Pro Asp Gly Leu Pro Lys Leu Gly Ser Ser
35 40 45
Pro Trp Asn Gln Gln Leu Ser Ser His Glu Gln Leu Leu Phe Asp Ser
50 55 60
Leu Gln Glu His Asp Pro Thr Leu Thr Ala Ala Thr Gln Arg Ala Ala
65 70 75 80
Ser Phe Pro Arg Pro Ile Ala Met Asn Pro Asn Ser Gln Thr Lys Gly
85 90 95
Phe Val Asn Glu Phe Gly Asn Ala Thr Lys Pro Thr Lys Pro Lys Val
100 105 110
Arg Gly Arg Phe Ser Ala Ala Arg Arg Arg Glu Val Gln Glu Val Arg
115 120 125
Lys Arg Gly Ala Cys Ile Arg Cys Arg Met Leu Lys Lys Pro Cys Ser
130 135 140
Gly Asp Ser Pro Cys Thr Thr Cys Ala Ser Val Glu Ser Ala Arg Leu
145 150 155 160
Trp Lys His Pro Cys Ile Arg Thr Arg Ile Ala Glu Glu Phe Glu Leu

```
                165                 170                 175
Tyr Asn Ala Asn Leu His Ala Thr Leu Ala Tyr His Asp Val Ser Ser
            180                 185                 190
Ile Lys Asn Gln Val Lys Phe Glu His Tyr Ala Gly Arg Ile Glu Val
        195                 200                 205
Thr His Phe Glu Glu Ser Met Val Tyr Ile Thr Phe Ser Gly Leu His
    210                 215                 220
Gly His Lys Pro Ser Met Ser Thr Leu Asp Pro Gln Leu Gln Gly Leu
225                 230                 235                 240
Gly Asp Asp Pro Gln Phe Gln Gly Pro Leu His Glu Leu Tyr Leu Leu
                245                 250                 255
Asp Ser Asp Ala Asp Asp Leu Pro Gly Lys Ile Glu Met Tyr Ile Lys
            260                 265                 270
Lys Thr Ala Pro Phe Phe Tyr Ala Arg Glu Thr Ser Glu Ile Ile Lys
        275                 280                 285
His Thr Leu Leu Leu Ala Ser Glu Leu Ser Gln Gln Lys Lys Val Ser
    290                 295                 300
Ile Ser Ser Val
305
```

Sequence Listing

<210> 29891
<211> 83
<212> PRT
<213> A.fumigatus

<400> 29891

```
Arg Thr Asp Gly Arg Val Ala Pro Arg Ser Gly Leu Ala Ser Lys His
1               5                   10                  15
Phe Ile Asp Thr Gly Ala Gly Val Ile Asp Ala Asp Tyr Arg Gly Glu
            20                  25                  30
Val Lys Val Leu Leu Phe Asn Phe Ser Asp Val Asp Phe Thr Val Lys
        35                  40                  45
Val Gly Asp Arg Ile Ala Gln Leu Val Leu Glu Arg Val Arg Leu Phe
    50                  55                  60
Leu Cys Val Ile Leu Gly Val Leu Met Leu Thr Val Ser Arg Ser Ile
65                  70                  75                  80
Arg Pro Thr
```

<210> 29892
<211> 297
<212> PRT
<213> A.fumigatus

<400> 29892

```
Arg Gln Leu Pro Asn Asn Thr Arg Val Gly Ser Arg Phe Arg Asp Pro
1               5                   10                  15
Cys Ser Pro Ala Ser Ser Arg Ile Gly Val Glu Lys Pro Glu Glu Pro
            20                  25                  30
Gly Asp Arg Asn Ser Pro Gly Asn Glu Lys Ala Gly His Ala Pro Gly
        35                  40                  45
Gln Leu Gln Ser Cys Gly Pro Arg Gln Asn Ser Pro Ile Gly Ser Asn
    50                  55                  60
Pro Ile Ser Leu Ala Arg Ala Trp Thr Cys Gly Ala Ser Glu Leu Gly
65                  70                  75                  80
Leu Leu Lys Leu Cys Leu Arg Leu Arg Ser Ser Ala Lys Leu Ala Asn
```

```
                85                  90                  95
Met Pro Ser Gln Leu Asn Ser Ala Val Arg Val His Arg Gln Thr Arg
            100                 105                 110
Leu Thr Asn Thr Cys Ile Phe Leu Leu Gly Gln Leu Ala Thr Leu Leu
        115                 120                 125
Asp Lys Tyr Thr Ala Ile Ser Leu Ser Ser Ile His Leu Thr Ile Ser
    130                 135                 140
Thr Gln Val Met Thr Lys Glu Thr Thr Pro Pro Pro Gln Gln Ser Lys
145                 150                 155                 160
Ala Pro Thr His Glu Pro Pro Ser Leu Pro Ala Ser Pro Leu Ala Lys
                165                 170                 175
Arg Thr Lys Pro Asp Ser Asn Asn Thr Ala Asn Ser Asn Lys Met Thr
            180                 185                 190
Thr Gly Thr Ala Pro Ala Val Thr Ser Ile Ser Gln Pro Leu Pro Pro
        195                 200                 205
Leu Leu Val Lys Lys Leu Thr Glu Ser Ala Gln Ala Pro Thr Arg Gly
    210                 215                 220
Ser Ala Phe Ala Ala Ser Tyr Asp Leu Tyr Ser Ala Lys Glu Thr Val
225                 230                 235                 240
Ile Pro Ala Lys Gly Lys Ala Leu Val Asp Thr Gly Leu Ala Ile Ala
                245                 250                 255
Val Pro Glu Gly Thr Cys Met Pro Pro Ser Ser Pro Tyr Phe Leu Trp
            260                 265                 270
Ser Val Tyr Ala Asn Gln Leu Thr Asn Arg Arg Pro Arg Cys Pro Pro
        275                 280                 285
Glu Trp Ser Cys Leu Glu Ala Leu His
    290                 295
```

<210> 29893
<211> 104
<212> PRT
<213> A.fumigatus

<400> 29893

```
Leu Gln Gln Phe Gly Phe Gly Gln Ser Asn Pro Thr Tyr Leu Ile Thr
1               5                   10                  15
Gly Ser Asp Lys Gln Gln Tyr Val Leu Arg Lys Lys Pro Pro Gly Lys
            20                  25                  30
Leu Leu Ser Lys Thr Ala His Gln Val Glu Arg Glu Tyr Lys Ile Ile
        35                  40                  45
His Ala Leu Glu Lys Thr Asp Val Pro Val Pro Lys Ala Tyr Cys Leu
    50                  55                  60
Cys Glu Asp Ser Asn Val Ile Gly Thr Pro Phe Tyr Ile Met Glu Phe
65                  70                  75                  80
Leu Asp Gly Arg Ile Phe Thr Asp Pro Ala Ile Pro Gly Val Ser Ala
                85                  90                  95
Glu Glu Arg Thr Ala Leu Tyr Val
            100
```

<210> 29894
<211> 245
<212> PRT
<213> A.fumigatus

<400> 29894

```
Pro Ser Ala Leu Gly Gln Thr Asp Thr Lys Cys Arg Arg Trp Arg Asp
```

```
1               5                   10                  15
Ala Val Arg Thr Leu Ala Lys Phe His Arg Val Val Pro Lys Ser Val
            20                  25                  30
Gly Leu Glu Arg Phe Gly Lys Pro Ser Gly Tyr Tyr Asp Arg Gln Ile
        35                  40                  45
Ala Thr Phe Thr Ala Val Ser Asn Ala Gln Ala Gln Ala Val Asp Val
    50                  55                  60
Glu Thr Lys Lys Pro Val Gly Glu Leu Pro His Phe Met Asp Met Val
65                  70                  75                  80
Arg Phe Phe Ser Asn Lys Ala Thr Gln Pro Leu Asp Arg Gly Thr Leu
                85                  90                  95
Val His Gly Asp Tyr Lys Ile Asp Asn Met Ile Phe His Lys Thr Glu
            100                 105                 110
Pro Arg Val Ile Gly Ile Leu Asp Trp Glu Met Ala Thr Val Gly His
        115                 120                 125
Pro Leu Ser Asp Phe Cys Asn Leu Thr Ser Pro Tyr Phe Leu Asp Gly
    130                 135                 140
Thr Asp His Lys Thr Glu Gln Phe Gln Pro Gly Val Val Pro Gly Leu
145                 150                 155                 160
Pro Arg Arg Glu Asp Cys Leu Arg Trp Tyr Arg Glu Val Ala Gly Trp
                165                 170                 175
Asp Pro Thr Pro Asp Phe Ser Trp Gly Asp Ala Phe Phe Ser Trp Arg
            180                 185                 190
Ser Ser Val Ile Met Gln Gly Ile Ala Ala Arg Tyr Ala Leu Arg Gln
        195                 200                 205
Ala Ser Ser Ala Arg Ala Gln Glu Tyr Ala Gln Lys Thr Gly Pro Phe
    210                 215                 220
Ala Leu Glu Ala Trp Glu Arg Val Lys Lys Val Gln Glu Gln Val Arg
225                 230                 235                 240
Gln Lys Gly Lys Leu
                245
```

<210> 29895
<211> 63
<212> PRT
<213> A.fumigatus

<400> 29895

```
Ile Phe Arg Arg Arg Ser Ser Ile Tyr Leu Ser Ile Ile Pro Leu Ser
1               5                   10                  15
Gly Ser Tyr Pro Tyr Val Phe Phe Asp Thr Ala Tyr Gln Ala Ser Ala
            20                  25                  30
Asn Ala Tyr Trp Cys Thr Thr Gln Cys Val Leu Gly His Leu Glu Asn
        35                  40                  45
Leu Thr Cys Tyr Tyr Phe Lys Cys Arg Pro Leu Phe Ser Asp Phe
    50                  55                  60
```

<210> 29896
<211> 645
<212> PRT
<213> A.fumigatus

<400> 29896

```
Glu Lys Leu Arg Cys Val Cys Val Ser Cys Asn Leu Lys Arg Arg Asn
1               5                   10                  15
Leu Leu Ile Ile Ser Cys His Pro Leu Ser Ile Gly Thr Ile Ser Ser
```

```
            20                  25                  30
Ser Asp Leu Ala Asp Phe Asp Thr Leu Pro Asn Asp Gly Gln Ala Asp
        35                  40                  45
Asn Ser Ser Arg Ile Pro Ser Ser Gln Ser Pro Ser Val Ala Ala Leu
    50                  55                  60
Pro Ser Asp Arg Pro Arg Lys Pro Ser Val Thr Arg Arg Ile Ser Ser
65                  70                  75                  80
Arg Arg Gln Val Pro His Lys Gly Gln Glu Phe Ser Thr Asp Asp Asp
                85                  90                  95
Val Gln Glu Val Glu Glu Asp Ile Ala Met Gln Gln Gln Gly Ser Asn
            100                 105                 110
Pro Gln Pro Ser Pro Arg Leu Arg Pro Leu Arg Lys Gln Ser Ser Thr
        115                 120                 125
Leu Arg Arg Arg Leu Asn Ala Arg Pro Ser Pro Leu Ala Arg Ala Asp
    130                 135                 140
Ser Asp Asn Asp Ser Gly Glu Glu Ser Leu Leu Pro Glu Ser Cys Met
145                 150                 155                 160
Glu Ala Ile Gly Thr Arg Pro Pro Ser Gln Gln Ser Glu Ala Ser Ser
                165                 170                 175
His His Gly Ile Asn His Gly Asp Gly Asp Asn Asp Glu Thr Ser Asp
            180                 185                 190
Ala Glu Ser Phe Thr Leu Lys Asp Arg Gln Gln Ala Ile Asn Glu Thr
        195                 200                 205
His Pro Phe Gly Ile Arg Leu Trp Lys Pro Ala Leu Tyr Lys Lys Ser
    210                 215                 220
Arg Ser Val Glu Lys Met Leu Arg Glu Ile Phe Ile Arg Leu Leu Ala
225                 230                 235                 240
Ala Glu Trp Glu Ile Tyr Ser Ser Trp Pro Ile Cys Ser Gly Leu Leu
                245                 250                 255
Ser Leu Gly Gly Gly Ser Leu Leu Leu Leu Ser Ser Val Pro Ser His
            260                 265                 270
Val Ser Tyr Leu His Ile Leu Leu Ala Gln Trp Ser Thr Glu Lys Ser
        275                 280                 285
Ser Gly Asp Phe His Gly Thr Ser Ser Ile His Ser Gly Leu Leu Phe
    290                 295                 300
Val Trp Arg Pro Thr Asn Thr Met Arg Arg Lys Met Arg Val Lys Ala
305                 310                 315                 320
Ala Ala Leu Ala Ser Met Ser Asn Gly Arg Thr Val Ile Ser Ser Thr
                325                 330                 335
Ala Gly Phe Ser Leu Ala Pro Val Ala Ala Gly Leu Ser Trp Val Gly
            340                 345                 350
Val Ala Ile Ala Ile Asp Ser Val Ser Glu Gln Asp Ser Leu Leu Gly
        355                 360                 365
Arg Thr Gln Arg Ile Ser Pro Arg Glu Ser Asn Leu His Ser Lys Arg
    370                 375                 380
Arg Leu Phe Gly Arg Gly Glu Trp Thr Leu Gly Arg Val Val Phe Phe
385                 390                 395                 400
Val Phe Phe Tyr Phe Leu Ile Gly Pro Leu Met Leu Phe Val Ser Met
                405                 410                 415
Val Cys Trp Leu Leu Val Phe Trp Ile Pro Met Gly Arg Val Thr Leu
            420                 425                 430
Ile Leu Phe Asp His Leu Arg Arg His Pro Leu Ala Leu Ser Phe His
        435                 440                 445
Ser Asp Thr Ser Tyr Thr Arg Leu Ser Pro Gly Ser Pro Ser Ser Ile
    450                 455                 460
Leu Leu Cys Thr Tyr Arg Ala Ala Gly Leu Ser Tyr Trp Lys Tyr Thr
```

```
465                 470                 475                 480
Val Asp Gly Thr Asn Ile Phe Leu Ile Asn Leu Leu Gly Val Val Leu
                485                 490                 495
Phe Val Ile Ile Asp Tyr Phe Leu Leu Ala Glu Thr Leu Gly Leu His
            500                 505                 510
Asn Trp Met Thr His Pro Gly Phe Val Phe Thr Leu Ala Leu Val Ser
        515                 520                 525
Ile Ile Pro Leu Ala Tyr Phe Ile Gly Gln Ala Val Ala Ser Ile Ser
    530                 535                 540
Ala Gln Ser Ser Met Gly Leu Gly Ala Ala Val Asn Ala Phe Phe Ser
545                 550                 555                 560
Thr Val Val Glu Val Tyr Leu Tyr Cys Val Ala Leu Thr Glu Gly Lys
                565                 570                 575
Gly Gln Leu Val Glu Gly Ser Ile Ile Gly Ser Ile Phe Ala Gly Ile
            580                 585                 590
Leu Phe Leu Pro Gly Leu Ser Met Cys Phe Gly Ala Ile Arg Arg Lys
        595                 600                 605
Thr Gln Arg Phe Asn Val Lys Ser Ala Gly Val Thr Ser Thr Met Leu
    610                 615                 620
Met Phe Ala Val Ile Ala Ala Phe Gly Pro Val Phe Thr Thr Gly Ala
625                 630                 635                 640
Glu Gly Ser Ala Leu
                645
```

<210> 29897
<211> 168
<212> PRT
<213> A.fumigatus

<400> 29897

```
Asp Glu Arg Cys Gly Glu Leu His Pro Glu Arg Ser Ser Thr Gly His
1               5                   10                  15
Gln Arg Asn Ala Pro Ile Trp His Gln Thr Met Glu Ala Gly Ser Leu
            20                  25                  30
Gln Glu Glu Pro Phe Arg Gly Glu Asp Ala Glu Gly Asp Ile His Ser
        35                  40                  45
Ser Pro Gly Gly Arg Val Gly Asn Ile Leu Phe Leu Ala Asn Leu Leu
    50                  55                  60
Trp Thr Ala Phe Phe Gly Trp Trp Leu Ala Leu Ala Ala Leu Phe Gly
65                  70                  75                  80
Ala Ile Ala Cys Phe Ile Phe Ala Tyr Ser Pro Ser Ala Val Glu Tyr
                85                  90                  95
Gly Lys Val Phe Trp Gly Leu Ser Trp Tyr Leu Leu Tyr Pro Phe Gly
            100                 105                 110
Ser Phe Val Arg Leu Glu Thr Asp Glu His Tyr Ala Glu Glu Asp Glu
        115                 120                 125
Gly Glu Gly Arg Ser Ile Ser Glu Tyr Glu Gln Trp Gln Asn Gly Asp
    130                 135                 140
Leu Glu His Gly Arg Leu Phe Phe Gly Pro Arg Ser Ser Arg Ser Leu
145                 150                 155                 160
Val Gly Arg Arg Arg Asn Ser His
                165
```

<210> 29898
<211> 250
<212> PRT

<213> A.fumigatus

<400> 29898

```
Leu Val Arg Ile Pro Asn Gln Phe Leu Val Pro Leu Asn Leu Pro Val
1               5                  10                  15
Val Thr Ser Tyr Arg Arg Ile Asp Ala Pro Gln Leu Glu Arg Leu Ala
            20                  25                  30
Ala Gly Asp His Val Arg Phe Glu Leu Gly Gly Tyr Pro Asp Asn Met
        35                  40                  45
Phe Phe Val Glu Leu Pro Thr Phe Asp Ala Phe Val Glu Ser Ala Gln
    50                  55                  60
Gln Gly Val Val Thr Phe Arg Cys Ile Ser Tyr Pro Pro Ala Phe Cys
65                  70                  75                  80
Ala Ser Ala Arg Trp Arg Met Arg His Cys Gly Ser Phe Val Thr Cys
                85                  90                  95
Gln Ala Met Leu Asp Ala Leu Val Ala Leu Val Glu Lys Lys Gln Asn
            100                 105                 110
Gly Cys Val Leu Tyr Pro Leu Leu Val Glu Asn Lys Ser Pro Pro Glu
        115                 120                 125
Tyr Leu Pro Leu Gly Pro Ala Tyr Asp Phe Arg Glu Asp Leu Asn Glu
    130                 135                 140
Cys Gln Asn Arg Ala Val Ala Ala Ala Leu Thr Ser Arg Leu Ser Cys
145                 150                 155                 160
Ile Trp Gly Pro Pro Gly Thr Gly Lys Thr Gln Thr Val Val Ala Ile
                165                 170                 175
Leu Gln Glu Leu Leu Gln Arg Arg Pro Glu Glu Arg Ile Leu Val Thr
            180                 185                 190
Ala Pro Thr His Asn Ala Val Asp Asn Ile Leu Lys Arg Tyr Leu Cys
        195                 200                 205
Val Ala Gly Ser Thr Gly Ala Ile Pro Leu Arg Val Ser Thr Asn Val
    210                 215                 220
Ser Val Ser Ser Ile Leu Gly Asn Ser Phe Glu Tyr Ser His Ser Asn
225                 230                 235                 240
Ala Ser Ala Ser Ala Asn Ser Phe Val Asn
                245                 250
```

<210> 29899
<211> 275
<212> PRT
<213> A.fumigatus

<400> 29899

```
Ile Arg Lys Val Ser Ser Asp Leu Met Gln Tyr Ala Cys Asp Ala Met
1               5                  10                  15
Asp Arg Arg Glu Phe Asn Phe Asp Pro Ala Ala Arg Arg Arg Ala Leu
            20                  25                  30
Glu Arg Ile Gln Gln Ser Arg Leu Ile Phe Thr Thr Cys Ala Gly Ala
        35                  40                  45
Gly Leu Gly Leu Leu Arg Asn Glu Gln Phe His Thr Val Val Ile Asp
    50                  55                  60
Glu Ser Ser Gln Gln Thr Glu Pro Met Ser Leu Ile Pro Leu Val Lys
65                  70                  75                  80
Gly Ser Arg Gln Ala Ile Leu Val Gly Asp His Val Gln Leu Arg Ala
                85                  90                  95
Thr Val Arg Asn His Ala Lys Ala Met Gly Leu Glu Val Ser Leu Phe
            100                 105                 110
```

```
Glu Arg Leu Tyr Met Gly Gly Asp Thr Ala Asn Asp Ala Leu Ser Lys
        115                 120                 125
Val Met Leu Asp Ile Gln Tyr Arg Met His Pro Gln Ile Cys Glu Phe
    130                 135                 140
Pro Ser Ala Glu Phe Tyr Asn Gly Arg Leu Gln Ala Ala Ala Ser Cys
145                 150                 155                 160
Gln Asn Asn Pro Leu Pro Pro Ser Asn Phe Pro Trp Pro Ser Leu Pro
                165                 170                 175
Ser Ala Gly Gly Gly Gln Val Arg Cys Val Phe Val Pro Cys Leu Leu
            180                 185                 190
Glu Glu Asp Ile Gly His Arg Ser Lys Ala Asn Ala Gly Gln Ala Gln
        195                 200                 205
Leu Cys Gln Arg Ile Tyr Gln Leu Leu Thr Asp Ser Arg Ser Ser Thr
    210                 215                 220
Gly Ala Ala Thr Met Pro Ile Ala Ile Leu Thr Pro Tyr Thr Arg Gln
225                 230                 235                 240
Val Lys Asn Pro Ser Ser Leu Leu Phe Pro Thr Ser Cys Phe Lys Phe
                245                 250                 255
Pro Pro Phe Gln Arg Val Ser Lys Gly Gln Glu Asn Lys Met Phe Ile
            260                 265                 270
Thr Leu Cys
        275
```

<210> 29900
<211> 399
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (381)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29900

```
Glu Arg Asn Ile Leu Leu Gly Leu Ala Leu Gly Glu Tyr Leu Ser Thr
1                   5                   10                  15
Val His Gln Thr Ser Phe Ser Val Leu Thr Thr Val Asp Glu Val Gly
            20                  25                  30
Val Val Glu Ser Glu Leu Asn Ser Thr Val Asp Asn Val Val Asn Gly
        35                  40                  45
Phe Asp Thr Gln His Glu Gly Val Val Leu Val Ala Asn Leu Val Ala
    50                  55                  60
Pro Ala Thr Glu Ala Ala Thr Arg Pro Asn Val Leu Val Leu Gln Leu
65                  70                  75                  80
Gly Gln Asp Leu Ser Glu Ser Thr Leu Thr Leu Gln Cys Gly Gly Gly
                85                  90                  95
Val Ala Met Val Glu Ala Ala Val Val Gly Gly Asp Asn Leu Ile Gly
            100                 105                 110
Gly Leu Gln His Leu Gly Ile Asp Gln Thr Leu Asp Ala Val Gly Gln
        115                 120                 125
Asp Ser Leu Leu Val Asp Arg Leu His Arg Gly Phe Gly Asp Leu Gln
    130                 135                 140
His Asp Arg Pro Ile Arg Ala Leu Leu Gly Leu Ser Ala Leu Arg Pro
145                 150                 155                 160
Gly Ala Ile Gly Lys Leu His Gly Gly Lys Leu Leu Arg Gly Leu Arg
                165                 170                 175
```

```
Leu Val Val Arg Gly Val Val Gly Glu Asp Gly Gly Thr Val Glu Arg
            180                 185                 190
Ala Val Val Leu Gly Glu Val Glu Leu Asn Ser Pro Tyr Val Ser Thr
        195                 200                 205
Lys Asn Gly Asp Cys Arg Thr Glu Thr Gly Pro Val Val Leu Thr Tyr
    210                 215                 220
Pro Ala Leu Val Thr Asp Ser Leu Gly Ala Gly Ala Thr Asn Thr Asn
225                 230                 235                 240
Thr Asp Asp Val Gly Gly Arg Val Glu Gln Leu Leu Gly Glu Thr Asn
                245                 250                 255
Glu Leu Leu Val Val His Gly Leu Gly Gln Glu Ile Asn Ser His Gly
            260                 265                 270
Gly Asp Lys Leu Leu Val Ala Asp Gly Gly Ala Val Leu Gln Arg His
        275                 280                 285
Arg Leu Val Val Gly Ile Asp Leu Gly Asn Leu Thr Leu Leu Thr Glu
    290                 295                 300
Ala Gly Leu Leu Leu Arg Glu Ser Val Gly His Gly Asn Pro Asp Thr
305                 310                 315                 320
Thr Ser Thr Ala Thr Gly Gly Glu Ala Glu Cys Ser Val Arg Thr Pro
                325                 330                 335
Val Thr Ser Gly Leu Ala Glu Asp Asn Val Gly Arg His Gly Leu Glu
            340                 345                 350
Ile Gly Ser Ser Asn Thr Leu Thr Glu Pro Gly Ala Leu His Leu Ile
        355                 360                 365
Tyr Ile Ser Leu Phe Val Pro Gln Val Asn Arg Gly Xaa Thr Pro Pro
    370                 375                 380
Gly Asn Trp Gly Pro Pro Pro Pro Asp Phe Gln Thr Tyr Leu Gly
385                 390                 395
```

<210> 29901
<211> 406
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (31)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 29901
Gly Pro Thr Thr Ser Arg Ser Gly Leu Cys Pro Leu Ser Lys Val Arg
1               5                   10                  15
Leu Lys Ile Gly Gly Gly Gly Ala Pro Ile Ser Gly Arg Ser Xaa Ala
            20                  25                  30
Pro Val His Leu Arg Asn Lys Gln Ala Asp Val Asn Gln Met Gln Cys
        35                  40                  45
Ala Trp Leu Gly Glu Arg Val Ala Ala Pro Asn Leu Lys Ala Val Thr
    50                  55                  60
Thr Asn Val Ile Leu Gly Lys Thr Ala Gly Asn Trp Gly Pro Asn Ala
65                  70                  75                  80
Thr Phe Arg Phe Pro Ala Arg Gly Gly Thr Gly Gly Ile Trp Ile Ala
                85                  90                  95
Val Ala Asn Thr Leu Pro Lys Glu Lys Thr Arg Phe Gly Glu Lys Gly
            100                 105                 110
Lys Val Thr Lys Val Asn Ala Asn Asn Lys Thr Val Thr Leu Gln Asp
        115                 120                 125
```

```
Gly Thr Thr Ile Gly Tyr Lys Lys Leu Val Ser Thr Met Ala Val Asp
    130                 135                 140
Phe Leu Ala Glu Ala Met Asn Asp Gln Glu Leu Val Gly Leu Thr Lys
145                 150                 155                 160
Gln Leu Phe Tyr Ser Ser Thr His Val Ile Gly Val Gly Val Arg Gly
                165                 170                 175
Ser Arg Pro Glu Arg Ile Gly Asp Lys Cys Trp Val Ser Gln Tyr Tyr
            180                 185                 190
Arg Pro Ser Phe Arg Ser Ala Val Ser Val Phe Cys Ala Asn Val Trp
        195                 200                 205
Ala Ile Gln Leu Tyr Phe Pro Glu Asp Asn Cys Pro Phe Tyr Arg Ala
    210                 215                 220
Thr Ile Phe Ser Asn Tyr Ser Pro Tyr Asn Gln Pro Glu Ala Ser Lys
225                 230                 235                 240
Lys Leu Pro Thr Met Gln Leu Ala Asp Gly Ser Arg Pro Gln Ser Thr
                245                 250                 255
Glu Ala Lys Glu Gly Pro Tyr Trp Ser Ile Met Leu Glu Val Ser Glu
            260                 265                 270
Ser Ser Met Lys Pro Val Asn Gln Glu Thr Ile Leu Ala Asp Cys Ile
        275                 280                 285
Gln Gly Leu Val Asn Thr Glu Met Leu Lys Pro Thr Asp Glu Ile Val
    290                 295                 300
Ser Thr Tyr His Arg Arg Phe Asp His Gly Tyr Pro Thr Pro Thr Leu
305                 310                 315                 320
Glu Arg Glu Gly Ala Leu Thr Gln Ile Leu Pro Lys Leu Gln Asp Lys
                325                 330                 335
Asp Ile Trp Ser Arg Gly Arg Phe Gly Ser Trp Arg Tyr Glu Val Gly
            340                 345                 350
Asn Gln Asp His Ser Phe Met Leu Gly Val Glu Ala Val Asp Asn Ile
        355                 360                 365
Val Asn Gly Ala Val Glu Leu Thr Leu Asn Tyr Pro Asp Phe Val Asn
    370                 375                 380
Gly Arg Gln Asn Thr Glu Arg Arg Leu Val Asp Gly Ala Gln Val Phe
385                 390                 395                 400
Ala Lys Ser Lys Ala Gln
                405
```

<210> 29902
<211> 88
<212> PRT
<213> A.fumigatus

<400> 29902

```
Leu Pro Asn Tyr Cys Phe Ser Val Thr Arg Ile Trp Gln Pro Phe Gly
1               5                   10                  15
Arg Phe Trp Val Ile Ser Trp Cys Pro Glu Arg Arg Arg Thr Lys Ile
            20                  25                  30
His Arg Ile Ala Ile Leu Gly Gln Pro Gly Gln Phe Arg Thr Gln Leu
        35                  40                  45
Asp Leu Phe Ala Phe Ser Gly Arg Val Arg Glu Leu His Lys Pro Lys
    50                  55                  60
Ala Lys Ala Gly Lys Thr Leu Phe Ala Val Asn Tyr Tyr Leu Pro Tyr
65                  70                  75                  80
Pro Leu Arg Gln Ala Asn His Glu
                85
```

<210> 29903
<211> 384
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (183)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29903
Pro Ser Asp Gln Ile Thr Thr Arg Thr Ala Gln Leu Leu Gln His Asn
1 5 10 15
Pro Gly Glu Pro Thr Ala Gly Ala Leu Asn Leu Leu Phe Ile Met Ala
20 25 30
Ala Pro Asn Met Pro Ile Arg Leu Ser Val His Thr Gly Thr Gln Asp
35 40 45
Gly Lys His Pro Gln Leu Pro Lys Gly Ser Gln Pro Thr Pro Pro Ile
50 55 60
Thr Pro Thr Ile Ser His Gly Arg Ser Ser Pro Gly Val Asp Thr Pro
65 70 75 80
Ser Arg Ser Ile Ser Pro Val Pro Phe Ser Gly Gly Gln Leu His Asp
85 90 95
Ala Val Pro Ser Asp His Gln Asn Val Thr Ala Pro His Lys Phe Ser
100 105 110
Asp Glu Leu Glu Phe His Tyr Asp Ser Lys Gly Arg Lys Leu Glu Phe
115 120 125
Gly Arg Gly Val Trp Ser Val Val Tyr Met Ala Ser Ser Arg Ala Pro
130 135 140
Ser Ile Pro Ala Ala Leu Ser Pro Pro Ser Ser Pro Ala Ser Gly Ser
145 150 155 160
Arg Val Val Ala Val Lys Met Pro Gly Arg Arg Asp Ala Pro Pro Val
165 170 175
Leu Asp Ala Glu Ala Leu Xaa Leu Thr Arg Leu Ser Met Val Ala Gly
180 185 190
Cys Ala Asp His Ile Val Pro Phe His Gly Tyr Ile Ala Asp Ser His
195 200 205
Ala Ile Val Met Gly Ala Val Pro Leu Ala Leu Ser Ala Tyr Ile Glu
210 215 220
Glu Lys Ala Ser Ala Ala Lys Lys His Met Ser Thr Ser Thr Met Phe
225 230 235 240
Asp Pro Val Gln Gly Met Ala Glu Trp His Gly Leu Ala Asn Lys Leu
245 250 255
Val Ala Gly Leu Asp Trp Leu His Asn Gly Ala Arg Met Val His Gly
260 265 270
Asp Ile Lys Pro Asn Asn Phe Leu Leu Arg Pro Arg Pro Ile Ala Asn
275 280 285
Asp Leu Asp Ser Asp Glu Phe Pro Phe Glu Ala Ala Leu Arg Arg Leu
290 295 300
Phe Leu Cys Ala Pro His Arg Arg Leu His Leu Pro Gln Thr Met Ala
305 310 315 320
Thr Ala Leu Lys Ala Leu Met Pro Pro Phe Thr Ala Pro Glu Thr Leu
325 330 335
Val His Leu Gly Ala Gln Val Pro Trp Asn Phe Val Pro Asn Ser Asn
340 345 350
Arg Gln Lys Ser Ser Ser Pro Pro Asn Gly Ile Leu Leu Pro Asn Leu

```
        355                 360                 365
Arg Met Gly Arg Phe Pro Tyr Ser Tyr Pro Gly Pro Pro Ala Lys Leu
    370                 375                 380

<210> 29904
<211> 346
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5),(8)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29904
Gly Pro Val Asp Xaa Asp Gln Xaa Met Ala Ala Arg Val Leu Lys Gly
1               5                  10                  15
Leu Gln Gly Arg Thr Asp Glu Trp Gly Tyr Arg Ile Pro Phe Ala Ile
            20                  25                  30
Gln Trp Val Trp Pro Val Pro Ile Phe Ile Gly Val Phe Phe Ala Pro
        35                  40                  45
Glu Ser Pro Trp Trp Leu Ile Arg Arg Asp Arg Arg Asp Asp Ala Val
    50                  55                  60
Lys Ala Leu Asn Arg Leu Ala Arg Thr Gly His Pro Asp Phe Asn Ala
65                  70                  75                  80
Asp Glu Thr Ala Ser Met Ile Val Tyr Thr Asn Thr Leu Glu Lys Gln
                85                  90                  95
Val Glu Thr Gly Thr Ser Tyr Val Asp Cys Phe Arg Gly Cys Asp Leu
            100                 105                 110
Arg Arg Thr Glu Ile Ser Cys Leu Val Trp Ala Ala Gln Ser Leu Cys
        115                 120                 125
Gly Gly Gly Leu Met Gly Tyr Ser Thr Phe Phe Tyr Arg Arg Ala Gly
    130                 135                 140
Leu Ala Val Ser Gln Ser Phe Thr Met Ser Leu Val Gln Tyr Ala Ile
145                 150                 155                 160
Gly Val Val Gly Thr Phe Leu Ser Trp Val Met Met Thr Tyr Phe Gly
                165                 170                 175
Arg Arg Thr Leu Tyr Val Gly Gly Leu Ala Leu Leu Ala Ile Val Leu
            180                 185                 190
Phe Val Ile Gly Phe Ile Ser Ile Pro His Ser Thr Pro Ala Leu Ser
        195                 200                 205
Trp Ala Thr Gly Ser Met Leu Leu Val Tyr Thr Phe Ile Tyr Asp Ser
    210                 215                 220
Thr Ile Gly Pro Val Cys Phe Ser Leu Val Ser Glu Ile Pro Ser Ser
225                 230                 235                 240
Arg Leu Arg Thr Lys Thr Val Val Leu Ala Arg Asn Leu Tyr Asn Val
                245                 250                 255
Ile Asn Leu Val Ser Gly Ile Ile Ile Pro Tyr Met Leu Asn Val Asp
            260                 265                 270
Ala Trp Asn Trp Arg Gly Lys Ser Gly Phe Phe Trp Gly Ser Phe Cys
        275                 280                 285
Thr Cys Cys Leu Ile Trp Ala Phe Phe Arg Ile Pro Glu Pro Lys Gly
    290                 295                 300
Arg Ser Tyr Ala Glu Leu Asp Ile Leu Phe Glu Arg Arg Val Arg Thr
305                 310                 315                 320
Arg Glu Phe Ala Thr Ala Glu Thr Gly Leu Val Glu Gly Arg Ser Asp
```

```
                325                 330                 335
Tyr Lys Val Asp Pro Leu Ala Val Arg Val
            340                 345

<210> 29905
<211> 228
<212> PRT
<213> A.fumigatus

<400> 29905
Val Gly Leu Pro His Pro Leu Arg His Pro Val Gly Val Ala Arg Pro
1               5                   10                  15
His Leu His Arg Arg Leu Leu Arg Pro Arg Glu Pro Leu Val Ala His
            20                  25                  30
Pro Pro Arg Pro Pro Gly Arg Arg Arg Gln Ser Ala Gln Pro Ala Gly
        35                  40                  45
Gln Asn Arg Thr Ser Gly Leu Gln Arg Arg Arg Asp Arg Val Asp Asp
    50                  55                  60
Arg Leu His Gln His Ala Gly Lys Thr Gly Arg Asp Arg His Ile Leu
65                  70                  75                  80
Arg Gly Leu Leu Pro Arg Met Arg Pro Ala Pro His Arg Asp Leu Leu
                85                  90                  95
Ser Arg Leu Gly Arg Pro Glu Ser Leu Arg Arg Arg Ala His Gly Leu
            100                 105                 110
Leu Asp Leu Leu Leu Ser Ala Cys Trp Pro Arg Arg Leu Pro Val Leu
        115                 120                 125
His His Val Ala Arg Pro Val Arg His Arg Arg Gly Gly Asn Leu Ser
    130                 135                 140
Leu Leu Gly Tyr Asp Asp Leu Leu Arg Ser Ser His Ala Ile Cys Arg
145                 150                 155                 160
Trp Thr Gly Thr Ala Gly His Arg Ser Leu Arg His Arg Leu Tyr Leu
                165                 170                 175
His Pro Ser Leu His Pro Gly Pro Leu Leu Gly His Arg Val His Ala
            180                 185                 190
Pro Arg Leu His Leu His Leu Arg Phe Asn His Arg Pro Gly Leu Leu
        195                 200                 205
Leu Ser Arg Leu Arg Asn Pro Leu Ile Pro Thr Pro His Gln Asp Cys
    210                 215                 220
Gly Ala Ser Pro
225

<210> 29906
<211> 124
<212> PRT
<213> A.fumigatus

<400> 29906
Arg Ser Gln Arg Leu Phe Val Leu Glu Ser Arg His Cys Arg Thr Val
1               5                   10                  15
Ala Met Ser His Leu Asp Asn Pro Gly Thr Leu Leu Lys Glu Ile Leu
            20                  25                  30
Val Arg Ile Pro Leu Ile Leu Lys Thr Ala Leu Leu His Ala Leu His
        35                  40                  45
Met Ser Pro Gly Ser Gly Lys Gln Asp Leu Arg Thr Glu Leu Thr Val
    50                  55                  60
Ala Ile Ile Arg Ser Phe Ile Asn Phe Lys Leu Pro Val Ser Lys Gln
```

65 70 75 80
Gln Lys Gly Ser Met Arg Asp Pro Gly Ile Lys Gly Pro Met Trp Val
85 90 95
Ser Lys Val Thr Phe Pro Arg Pro Glu Asn Asp Val Gln Asp Ala Val
100 105 110
Ile Lys Ala Ser Ser Pro Arg Gly Gly Asp Gln Arg
115 120

<210> 29907
<211> 104
<212> PRT
<213> A.fumigatus

<400> 29907
Ile Asp Cys Leu Pro Thr Thr Ile Val Pro Ser Thr Cys Leu Thr Trp
1 5 10 15
Val Ser Ser Ile Ile Val Ala Pro Ser Thr Ala Leu Glu Phe Ser Val
20 25 30
Pro Gln Ser His Ile Ser Thr Leu Ser Phe Phe His Ser Ser Phe Ala
35 40 45
Leu Met Gly Ala Leu Ile Ser Tyr Thr Tyr Ala Pro Ser Phe Phe Ala
50 55 60
Leu Phe Leu Ser Phe Phe Cys Gln Tyr Val Phe His Ile Leu Arg His
65 70 75 80
Ala Thr Gly Asp Tyr Leu Ile Phe Ser Ser Pro Arg Pro Val Pro Ile
85 90 95
Ile Leu Tyr Ser Val Gln Ala Val
100

<210> 29908
<211> 149
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222>
(3),(13),(16),(20),(21),(24),(28),(31),(32),(39),(42),(43),(46),(49),(50),(51),
(52),(53),(54),(55),(56),(57),(58),(59),(60),(61),(62),(63),(64),(65),(66),(67)
,(68),(69),(70),(71),(72),(73),(74),(75),(76),(77),(78),(79),(80)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29908
Gly Gly Xaa Gly Gly Gly Gly Gly Gly Gly Gly Gly Xaa Gly Gly Xaa
1 5 10 15
Gly Gly Gly Xaa Xaa Gly Arg Xaa Gly Gly Gly Xaa Gly Gly Xaa Xaa
20 25 30
Gly Gly Gly Gly Gly Gly Xaa Gly Gly Xaa Xaa Gly Gly Xaa Gly Ala
35 40 45
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
50 55 60
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
65 70 75 80
Pro His Pro Pro Tyr Leu Ala Leu Thr Tyr Pro Ser Ala Val Pro Val
85 90 95
Ser His Ser Thr Ile Thr His Met Arg Ser Lys Arg Pro Pro Gln Glu

```
            100                 105                 110
Leu Ser Pro Glu His Ile Phe Leu Ala His Arg Leu Ile Gly Leu Asn
        115                 120                 125
Val Leu Val Lys Val Glu Ser Thr Asp Phe Trp Leu Gln Leu Asn Gln
    130                 135                 140
Ser Gly Lys Gln Pro
145
```

<210> 29909
<211> 65
<212> PRT
<213> A.fumigatus

<400> 29909

```
Pro Ser Val Val Asp Asp Val Gln Val Ala Pro Gly Lys Asn Ala Cys
1               5                   10                  15
Gln His Ala Glu Arg Ser Trp Thr Asp Gly Gly Asn Pro Pro Leu Arg
            20                  25                  30
Leu Ala Ile Gly Ala Leu Phe Ser Tyr Lys Cys Ser Asp Pro Gln Ser
        35                  40                  45
Leu Tyr Gly Val Lys Leu Tyr Ile Arg Pro Gly Leu His Leu Ser Arg
    50                  55                  60
Gly
65
```

<210> 29910
<211> 72
<212> PRT
<213> A.fumigatus

<400> 29910

```
Ile Trp Gly Ala Asp Ser Lys Phe Ala Ala Ser Pro Ala Asn Gly Gly
1               5                   10                  15
Met Gly Asn Gln Lys Ile Ser Pro Ile Pro Ser Gln Ser Trp Pro Asp
            20                  25                  30
Ser Pro Glu His His Gln Val Ser Val Pro Val Phe Ala Thr Ala Leu
        35                  40                  45
Val Thr Gln Asn Arg Gln Asn Val Glu Ile Thr Ala Ile Pro Ser Ile
    50                  55                  60
Gln Gly Met Glu Leu Gln Arg Gln
65                  70
```

<210> 29911
<211> 342
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (314)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29911

```
Gln Val Trp Gln Thr Phe Lys Ser Ala Leu Thr Gly Arg Ala Asn Tyr
1               5                   10                  15
Cys Phe Phe Pro Trp Gly Tyr Arg Leu Lys Asp Pro Tyr Ile Gly Phe
```

```
            20                  25                  30
Asn Glu Leu Glu Ala Arg Trp Val Asn Glu Lys Ser Trp Thr Tyr Lys
        35                  40                  45
Thr Val Phe Gln Lys Pro Ala Ala Pro Ala Gly Ser Cys Ile Val Leu
    50                  55                  60
Ala Phe Asp Gly Leu Asp Thr Phe Ala Lys Val Lys Leu Asp Gly Asn
65                  70                  75                  80
Val Ile Leu Glu Asn Asp Asn Met Phe Leu Ala Arg Arg Val Asp Val
                85                  90                  95
Thr Lys Ala Leu Glu Ala Glu Gly Asp His Val Leu Glu Ile Asp Phe
            100                 105                 110
Asp Cys Ala Phe Leu Arg Ala Lys Glu Leu Arg Lys Gln Asp Pro Arg
        115                 120                 125
His Asn Trp Ala Ser Phe Asn Gly Asp Pro Ser Arg Leu Ser Val Arg
    130                 135                 140
Lys Ala Gln Tyr His Trp Gly Trp Asp Trp Gly Pro Val Leu Met Thr
145                 150                 155                 160
Ala Gly Ile Trp Arg Glu Val Arg Leu Glu Val Tyr Ser Ala Arg Val
                165                 170                 175
Ala Asp Leu Trp Thr Glu Val Gln Leu Ala Ser Asp His Gln Ser Ala
            180                 185                 190
Gln Val Thr Ala Phe Val Glu Val Glu Ser Val His Ser Gly Ser His
        195                 200                 205
Arg Ala Cys Phe Thr Leu Ser Leu His Gly Gln Glu Ile Thr Arg Glu
    210                 215                 220
Glu Ile Gly Val Thr Glu Asn Gly Thr Ala Lys Ala Thr Phe Asp Val
225                 230                 235                 240
Lys Glu Pro Ser Leu Trp Trp Pro His Gly Tyr Gly Asp Ala Thr Leu
                245                 250                 255
Tyr Glu Val Ser Val Ser Leu Val Lys Glu Gln Glu Glu Leu His Arg
            260                 265                 270
Val Ser Lys Lys Phe Gly Ile Arg Thr Ala Glu Val Ile Gln Arg Pro
        275                 280                 285
Asp Lys His Gly Lys Ser Phe Phe Phe Arg Val Asn Gly Val Asp Ile
    290                 295                 300
Phe Cys Gly Gly Ser Cys Trp Ile Pro Xaa Asp Asn Leu Leu Pro Ser
305                 310                 315                 320
Ile Thr Ala Glu Arg Tyr Pro Gln Trp Ile Glu Leu Met Val His Gly
                325                 330                 335
Arg Gln Val Met Ile Lys
            340
```

<210> 29912
<211> 219
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (123)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29912

```
Tyr Pro Cys Leu Thr Arg Ser Arg Thr Arg Met Asn Gly Ala Thr Gln
1               5                   10                  15
Thr Phe Arg Arg Pro Ser Val Ala Thr Asn Pro Ser Gln Thr Arg Asp
```

```
            20                  25                  30
Leu Pro Gln Thr Thr Ser Ala Thr His Pro Thr Val Gly Ala Tyr Thr
        35                  40                  45
Pro Pro His Met Asn Ser Asn Gln Ser Gly Ala Ile Arg Asn Gly Ala
    50                  55                  60
Gly Glu Asn Arg Tyr Ser Lys Glu Gln Leu Leu Ser Leu Tyr Lys Ala
65                  70                  75                  80
Gln Arg Glu Ser Gly Thr Leu Gly Lys Asn Val Ala Asp Tyr Phe Ile
                85                  90                  95
Ala Asp Trp Glu Pro His Val Glu Thr Pro Pro Thr Asn Gly Ala Trp
            100                 105                 110
Gly Lys Arg Glu Asp Ser Lys Asp Asn Pro Xaa Gly Pro Glu Ile Cys
        115                 120                 125
Trp Asp His Gly Gly Gln Val Glu Pro Leu Gly Leu Val Asp Met Thr
    130                 135                 140
Gly Asp Glu Lys Glu Val Gly Phe Val Phe Val Cys Pro Leu Gly Ser
145                 150                 155                 160
Glu His Leu Lys Ile Ala Leu Leu Ile His Val Gly Thr Cys Arg Ala
                165                 170                 175
Glu Ser Cys Ser Tyr Phe Pro Pro Arg Ser Thr Leu Arg Ser Ser Leu
            180                 185                 190
Pro Arg Pro Ala Pro Pro Arg Lys Ile Pro Val Leu Pro Leu Glu Asp
        195                 200                 205
Ala Ser His Pro Phe Arg Ile Pro Arg Ala Thr
    210                 215

<210> 29913
<211> 147
<212> PRT
<213> A.fumigatus

<400> 29913
Leu Phe Ser Ala Ser Val Asn Ser Pro Leu Lys Pro Pro Pro Thr Ser
1               5                   10                  15
Ala Thr Lys Glu Asn Thr Gly Ala Ala Thr Gly Gly Arg Lys Ser Ser
            20                  25                  30
Ile Ser Tyr Pro Gln Ser His Met Asn Asn Tyr Asn Thr Ser Ser Pro
        35                  40                  45
Ser Ser Ala Arg Pro Gly Pro Arg Arg Arg Glu Thr Gly Glu Ser Val
    50                  55                  60
Ser Asn Ala Met Ser Pro Thr Thr Ser Gly Ser Arg Phe Phe Arg Asp
65                  70                  75                  80
Glu Pro Thr Thr Phe Thr Pro Pro Pro Ser Leu Leu Arg Arg Lys Thr
                85                  90                  95
Asp Phe Arg Glu Thr Thr Ser Ile Ser Lys Trp Asp Gln Lys Asp Lys
            100                 105                 110
Glu Ala Pro Ala Arg Asp Gly Gly Ser Gly Glu Val Ala Ser Pro Phe
        115                 120                 125
Gly Ser Val Gln Arg Ser Ala Thr Leu Met Ile Thr Pro Gly Ser Arg
    130                 135                 140
Arg Asn Arg
145

<210> 29914
<211> 65
<212> PRT
```

<213> A.fumigatus

<400> 29914
Ala Gln Met Glu Leu Val Lys Leu Ile Leu Ile Ser Ser Trp Ser Leu
1 5 10 15
Thr Gln Val Ala Asn Asn Glu Val Thr Gly Ser Ser Phe Thr Asp Ser
20 25 30
Thr Leu Met Ile Lys Met Ser Ile Val Asp Leu Gln Asn Val Leu Ile
35 40 45
Glu Thr Cys Lys Thr Asp Thr Gly Tyr Lys Arg Tyr Leu Leu Ser Thr
50 55 60
Phe
65

<210> 29915
<211> 116
<212> PRT
<213> A.fumigatus

<400> 29915
Pro Pro Met Arg Leu Phe Thr Asp Phe Val Thr Lys Val Ile Gly Pro
1 5 10 15
Val Asn Thr Met Leu Ser Lys Ile Tyr Pro Asp Thr Tyr Lys Asn Ser
20 25 30
Pro Ala Ser Arg Asn Val Ser Ser Ile Val Phe Ala Gly Thr Val Leu
35 40 45
Gly Gln Leu Ile Phe Gly Tyr Val Ser Asp His Trp Ser Arg Lys Trp
50 55 60
Ala Leu Met Val Ser Thr Val Ile Leu Ile Ile Phe Ser Ala Leu Ser
65 70 75 80
Ala Gly Ser Tyr Gly Ala His Gly Ser Gln Ala Gly Leu Phe Ala Ala
85 90 95
Leu Thr Ala Tyr Arg Phe Leu Tyr Cys Arg Pro Gly Pro Gly Arg Tyr
100 105 110
Arg Asp Gly Val
115

<210> 29916
<211> 108
<212> PRT
<213> A.fumigatus

<400> 29916
Thr His Asn Leu Leu Ala Ala Ala Cys Arg His Thr Val Leu Ile Val
1 5 10 15
Ser Leu Pro Thr Gly Ser Gly Leu His Lys Ser Leu Pro Phe Arg Asp
20 25 30
Ser Asp Trp Trp Cys Trp His Ser Gly Lys Leu Pro Ile Ser Ser Ser
35 40 45
Leu Pro His Val Asp Val Trp Ala Ala Asp Leu Leu Gln Val Glu Ser
50 55 60
Leu Leu Ile Tyr Pro Ala Pro Ser Gly Glu Ile Pro Ser Ser Cys Gly
65 70 75 80
Leu Lys Thr Ile Asn Tyr Ile Gly Asn Thr Gln Asp Gln Arg Gln Ala
85 90 95
Leu Lys Asn Leu Trp Trp Arg Gln Tyr Trp Pro Ala

100 105

<210> 29917
<211> 65
<212> PRT
<213> A.fumigatus

<400> 29917
Leu Thr Leu Leu Ile Gly Cys Phe Val Phe Ile His His Arg Cys Pro
1 5 10 15
Ser Ser Pro Ser Ser Gly Phe Ser Leu Gln Cys Leu Val Ile Pro Val
20 25 30
Thr Gln Thr Asp Asp Ile Leu Ser Ser Ala Asp Gln Thr Asn Ala His
35 40 45
Gln Ser Ala Thr Asp Gly Val Leu Tyr Arg Ala Ser Val Gln Trp Arg
50 55 60
Ser
65

<210> 29918
<211> 171
<212> PRT
<213> A.fumigatus

<400> 29918
Asp Glu Arg Ile Gly Ser Ile Val Trp His Ser Phe Leu Pro Ser Pro
1 5 10 15
Glu Asn Pro Ala Thr Ile Cys Ser Ile Asn Leu Gln Lys Met His Ser
20 25 30
Ala Phe Ile Val Leu Ala Ala Leu Ala Ala Ala Val Phe Val Glu Gly
35 40 45
Thr Asp Val Gln Val Phe Gln Ala Gly Pro Thr Thr Leu Pro Leu His
50 55 60
Ala Val Lys Ala Ser Val Val Asn Ala Asn Ala Val Ala Thr Thr Leu
65 70 75 80
Ala Ile Lys Cys Glu Gly Asn Val Cys Thr Pro Gly Asp His Cys Gly
85 90 95
Leu Cys Ser Pro Phe Thr Ile Thr Gln Gly Pro Ser Thr Tyr Ser Val
100 105 110
Ser Ala Val Tyr Ser Ala Ser Val Gly Gly Val Glu Glu Thr His Thr
115 120 125
Val Val Gln Asp Cys Asp Ile Thr Ser Ser Thr Glu Leu Gly His Val
130 135 140
His Thr Val Arg Gln Ser Gly Ser Leu Gly Thr Trp Lys Lys Asp Arg
145 150 155 160
His Leu Val Leu Gly Asp Gly Tyr Leu Pro Leu
165 170

<210> 29919
<211> 599
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (590)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29919

```
His Phe Ala Ser Ser Phe Arg His Leu Tyr Ser Leu Ile Cys Val Leu
1               5                  10                  15
Gly Gln Gln Gly Asn Ser Ala Arg Ser Pro Pro Pro Val Phe Ala Ser
            20                  25                  30
Ser Leu Gln Gln Leu Ser Ala Val Ser Thr Pro Val Leu Thr Leu Pro
        35                  40                  45
Ala Ala Ala Ser His Asp Ala His Asp Asp Asn Val Ile Phe Leu Arg
    50                  55                  60
Ser Arg Val Arg Ser Pro His Arg Ser Ser Ser Ser Ser Arg Gln Arg
65                  70                  75                  80
Arg Arg Arg His Gln Ile Leu Ser Glu Phe Glu Ser Asp Pro Met Glu
                85                  90                  95
Leu Asp Glu Ser Thr Gly Val Arg Met Ser Val Glu Ile Ser Arg His
            100                 105                 110
Pro Ile Gly Arg Arg Pro Arg Glu Glu Pro Thr Asn Met Pro Asn Tyr
        115                 120                 125
Glu Gly Arg Val Ser Asn Ile Arg Ser Leu Tyr Gly Trp Ala Pro Cys
    130                 135                 140
Ser Asp Glu Asp Asp Glu Asp Asp Leu Val Tyr Glu Pro Leu Gln Asp
145                 150                 155                 160
Pro Asn Ser Ala Ser Ser Trp Phe Gly Arg Leu Ser Asp Arg Asn Ala
                165                 170                 175
Thr Ser Arg Arg His Ala Arg Arg Asp Val Thr Gly Arg Ser Pro Leu
            180                 185                 190
Pro Ile Pro Val Glu Pro Ser Glu Arg Ser Arg His Arg Met Asp Asp
        195                 200                 205
Thr Thr Leu Ala Thr Ala Glu Ala Leu Leu Gln Ser Val Arg Arg Gln
    210                 215                 220
Pro Arg Leu Ser Arg Thr Arg Thr Leu His Asn Tyr Leu Leu Asp Arg
225                 230                 235                 240
Glu Arg Thr Ser Gln Asp Ser Glu Asp Gly Arg Glu Arg Ala Thr Gln
                245                 250                 255
Ser Ser Thr Ser Arg Ala Tyr Arg Phe Ile Pro Ser Ser Arg Gly Glu
            260                 265                 270
Ser Ser Arg Ile Ser Thr His Gly Asp Val Arg Ala Arg Ala Asn Ala
        275                 280                 285
His Arg Gln Leu His Met Asp His Pro Pro Ser Pro Arg Leu Lys Glu
    290                 295                 300
Ile Ile Thr Tyr Leu Asp Arg Leu Arg Tyr Ser Thr Ser Phe Glu Glu
305                 310                 315                 320
Ser Leu Ser Ser Ala Ala Ala Gly Gly Phe Ala Gln Leu Asp Phe Ser
                325                 330                 335
Trp Asp Glu Asp Asp Phe Ile Leu Asp Thr Thr Ser Ile Ala Pro Pro
            340                 345                 350
Pro Pro Cys Ser Trp Leu Arg Pro Gly Met Val Phe Lys Gly Ser Gln
        355                 360                 365
Met Ala Ala Cys Thr Pro Ser Ser Ile Phe Ala His Val Gly Pro Thr
    370                 375                 380
Phe His Pro Ala Thr Glu Pro Val Ile Val Asn Gly Ser Asp Asn Gly
385                 390                 395                 400
Arg Ile Ser Val Tyr Thr Thr Ser Gly Arg Arg Tyr Leu Ala Asn Asn
                405                 410                 415
Asn Ile Pro Ser Phe Gly Ile Gly Lys Asp Glu Asn Trp Pro Val Lys
```

```
            420                 425                 430
Val Thr Ile His Asn Ile Asn Tyr Gln Glu Met Thr Leu Ser Gly Thr
        435                 440                 445
Met Glu Ala Tyr Asn Ile Pro Asp Lys Thr Ser Pro Ser His Asp Ala
    450                 455                 460
His Ile Val Thr Phe Leu Glu Gly Glu Ile Ile Asp Phe Asn Thr His
465                 470                 475                 480
Thr Leu Glu Thr Lys Asn Phe Lys Ser Asp Ala Glu Thr Asp Ser Thr
                485                 490                 495
Tyr Trp Arg Glu Leu Gln Pro Phe Lys His Leu Thr Asp Asp Glu Met
            500                 505                 510
Thr Arg Asn Leu Val Ser Arg Lys Trp Ile Thr Glu Glu Leu Ser Lys
        515                 520                 525
Arg Trp Ile Leu Met Arg Trp Lys Gly Val Tyr Leu Ile Phe Gln His
    530                 535                 540
Leu Ser Asn Leu Phe Met Val Cys Ala Asp Asp Gly Thr Glu Arg Cys
545                 550                 555                 560
Phe Ile Thr Pro Thr Asp Ala Arg Gln Gly Leu Thr Ile Ser Gly Phe
                565                 570                 575
Tyr Tyr Ile Ser Leu Arg Gly His Ile Gly His Met Ser Xaa Ser Gln
            580                 585                 590
Arg Trp Arg Ser Thr Leu Val
        595
```

<210> 29920
<211> 90
<212> PRT
<213> A.fumigatus

<400> 29920

```
Lys His Thr Phe Arg Leu Ser Leu Thr Trp Asp Arg Arg Ser Phe Gly
1               5                   10                  15
Gly Gly Cys Arg Pro Lys His Ser Leu Pro Leu Pro Ser His Lys His
            20                  25                  30
Val Phe Trp Phe His Ile Asn Ser Ala Lys Leu Lys Tyr Phe Trp Val
        35                  40                  45
Ile Asn Ile Gly Gly Gly Ala Thr Val Pro Asn Asp Asn Ile Asp Thr
    50                  55                  60
Cys Ile Ile Val Tyr Gln Gln Tyr Val Asn Asp Ser Arg Ser Ile Tyr
65                  70                  75                  80
Gln Ser Gly Glu Val Phe Ser Gln Trp Ser
                85                  90
```

<210> 29921
<211> 118
<212> PRT
<213> A.fumigatus

<400> 29921

```
Met Met Pro His Gln Ser Gln Gly Ala Cys Met Ala Ile Glu Glu Pro
1               5                   10                  15
Pro Ala Leu Gly Ile Leu Ser Arg Pro Pro Pro Pro His Pro Pro Ala
            20                  25                  30
Pro Pro Arg Ala Ala Pro Pro Pro Thr Pro Pro His Tyr Pro Pro Pro
        35                  40                  45
Pro Pro Pro His Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Arg
```

```
    50                  55                  60
Pro Pro Pro Leu Gly Thr Pro Arg Phe Thr Gly Pro Pro Pro Pro Pro
65                  70                  75                  80
Pro Pro Pro Pro Pro Pro Leu Lys Gln Pro Pro Ile Ser Gln Lys Thr
                85                  90                  95
Lys Ala Ala Ser Pro Pro Pro Pro Arg Pro Pro Thr Pro Arg Pro Pro
            100                 105                 110
Pro Pro Pro Pro Gln Leu
        115
```

<210> 29922
<211> 212
<212> PRT
<213> A.fumigatus

<400> 29922

```
Ala Thr Asn Ala Thr Ala Asp Ser Ala Pro Ser Leu Arg Pro Ala His
1               5                   10                  15
Arg Thr Ala Val Arg Arg Gly Gly His Asp Glu Arg Met Lys Tyr Lys
            20                  25                  30
Thr Ser Ser Leu Asp Leu Trp Asn Glu Ser Phe Ile Thr Arg Asn Lys
        35                  40                  45
Thr Ser Asn Met Arg Leu Pro Gln Ala Asp Ala Asp Ser Ala Ser Asn
    50                  55                  60
Met Arg Ser Thr Ala Thr Gly Trp Arg Arg Leu Ser Val Gly Val Val
65                  70                  75                  80
Gly Gly Gly Ile Gly Gly Leu Ala Ala Ser Ile Ala Leu Arg Arg Ala
                85                  90                  95
Gly His Glu Val Thr Ile Tyr Glu Arg His Asp Phe Ala Gly Glu Val
            100                 105                 110
Gly Ala Ser Ile Ser Cys Ala Ala Asn Gly Thr Arg Trp Leu His Glu
        115                 120                 125
Trp Lys Val Asp Ile Ala Lys Gly Asp Pro Val Val Leu Arg Lys Leu
    130                 135                 140
Ile Asn Arg Asp Trp Lys Thr Gly Glu Pro Val Ser Val Tyr Asp Leu
145                 150                 155                 160
Ala Gly Tyr Glu Glu Arg Trp Gly Tyr Val Tyr Tyr Met Phe His Arg
                165                 170                 175
Gln Tyr Met His Ala Met Leu Lys Asp Cys Ala Met Gln Glu Glu Gly
            180                 185                 190
Glu Gly Thr Pro Val Lys Leu Leu Val Asn His Gln Val Gly Leu Leu
        195                 200                 205
Ala His Thr Gln
    210
```

<210> 29923
<211> 166
<212> PRT
<213> A.fumigatus

<400> 29923

```
Glu Gln Cys Lys Asp Ile Asn Leu Glu Thr Gly Leu Ile Thr Phe Ala
1               5                   10                  15
Asn Gly Lys Thr Ala Gln His Asp Leu Ile Val Gly Ala Asp Gly Ile
            20                  25                  30
Gly Ser Ala Val Arg Gly Ile Ile Gly Leu Lys Pro Glu Lys Lys Pro
```

```
        35                  40                  45
Ala Asp Ser Ser Cys Leu His Ala Asn Val Arg Thr Glu Asp Ala Val
    50                  55                  60
Arg Leu Gly Leu Val Asp Tyr Ser Gln His Ser Ala Leu Glu Tyr Trp
65                  70                  75                  80
Gly Gly Gln Asp Asn Ser Trp Asp Lys Ile Val Leu Ser Pro Cys Asn
                85                  90                  95
Gly Gly Ser Leu Leu Ser Tyr Tyr Cys Phe Phe Pro Arg Glu Lys Gly
            100                 105                 110
Asp Phe Thr Asn His Thr Trp Gly Gly Thr Asp Arg Pro Val Glu Glu
        115                 120                 125
Leu Leu Ala Pro Tyr Pro Glu Leu Asp Lys Gln Val Arg Ala His Leu
    130                 135                 140
Pro His Trp Ala Gly Asp Pro Ala Val Ala Ala Val Gly Ala Ser Ala
145                 150                 155                 160
Val Pro Val Ser Gly Pro
                165
```

<210> 29924
<211> 159
<212> PRT
<213> A.fumigatus

<400> 29924

```
Arg Gly Gly Ser Trp Gly Gly Gly Gly Gly Gly Gly Arg Gly Gly Val
1               5                   10                  15
Gly Gly Gly Trp Gly Gly Val Val Gly Gly Gly Gly Arg Gly Gly Ser
            20                  25                  30
Ala Gly Gly Gly Arg Gly Val Gly Gly Gly Arg Pro Gly Glu Asp Ala
        35                  40                  45
Gln Gly Arg Gly Phe Phe Asp Ser His Ala Gly Ala Leu Ala Leu Val
    50                  55                  60
Arg His His Leu Gln Pro Ile Ser Gly Gly Arg Arg Gly Gly Lys Trp
65                  70                  75                  80
Glu Pro Lys Val Pro Asp Asp Gln His Arg Pro Ala Asp Thr Pro Cys
                85                  90                  95
Tyr Gly Pro Asp Thr Gly Thr Ala Asp Ala Pro Thr Ala Ala Thr Ala
            100                 105                 110
Gly Ser Pro Ala Gln Trp Gly Arg Cys Ala Arg Thr Cys Leu Ser Ser
        115                 120                 125
Ser Gly Tyr Gly Ala Ser Ser Ser Ser Thr Gly Arg Ser Val Pro Pro
    130                 135                 140
His Val Trp Phe Val Lys Ser Pro Phe Ser Arg Gly Lys Lys Gln
145                 150                 155
```

<210> 29925
<211> 125
<212> PRT
<213> A.fumigatus

<400> 29925

```
Trp Gly Gly Val Gly Gly Gly Ala Ala Arg Gly Gly Ala Gly Gly Trp
1               5                   10                  15
Gly Gly Gly Gly Arg Glu Arg Met Pro Arg Ala Gly Gly Ser Ser Ile
            20                  25                  30
Ala Met Gln Ala Pro Trp Leu Trp Cys Gly Ile Ile Tyr Ser Gln Ser
```

```
        35                  40                  45
Ala Glu Gly Gly Gly Gly Gly Asn Gly Asn Gln Arg Tyr Arg Met Thr
    50                  55                  60
Ser Ile Ala Gln Gln Thr His His Val Thr Asp Gln Ile Arg Val Arg
65                  70                  75                  80
Leu Met His Pro Gln Pro Pro Arg Pro Asp Leu Leu Pro Asn Gly Ala
                85                  90                  95
Gly Ala Pro Glu Pro Ala Cys Pro Ala Arg Asp Thr Ala Pro Ala Ala
            100                 105                 110
Pro Gln Pro Ala Gly Pro Cys Arg Pro Thr Cys Gly Ser
        115                 120                 125
```

<210> 29926
<211> 203
<212> PRT
<213> A.fumigatus

<400> 29926

```
Ala Pro Asp Trp Asn Arg Arg Ile Leu Glu Leu Ile Thr Ile Leu Glu
1               5                   10                  15
Asn Ser Asp Thr Arg Lys Gln Val Asn Gln Gly Trp Gly Ala Gln Thr
            20                  25                  30
Gly Asp Lys Ala Gly Asp Lys Ala Trp Asp Asp Glu Arg Ala Ala Glu
        35                  40                  45
Asn Leu Ala Gln Asn Glu Ser Glu Pro Gln Thr Pro Ala Asn Glu Glu
    50                  55                  60
Pro Ala Glu Pro Ala Glu Lys Thr Lys Thr Tyr Ala Glu Tyr Leu Ala
65                  70                  75                  80
Glu Lys Ala Ala Gln Gly Asp Leu Ala Ala Lys Pro Ile Arg Ala Pro
                85                  90                  95
Asn Glu Gly Ser Asn Leu Asp Lys Lys Trp Ala Asn Ala Lys Glu Leu
            100                 105                 110
Lys Arg Thr Pro Glu Glu Glu Glu Ala Tyr Ile Lys Gly Lys Glu Glu
        115                 120                 125
Lys Ala Lys Arg Glu Lys Gln Arg Lys Glu Lys Asn Val Leu Glu Val
    130                 135                 140
Asp Met Arg Phe Val Glu Ser Pro Arg Gly Gly Ser Ala Gly Arg Gly
145                 150                 155                 160
Arg Gly Gly Arg Gly Gly Arg Gly Gly Arg Gly Gly Arg Gly Asn Gly
                165                 170                 175
Ala Pro Arg Gly Glu Gln Gln Gln Arg Gly Ala Pro Pro Val Thr Val
            180                 185                 190
Asp Glu Lys Asn Phe Pro Ser Leu Gly Ala Lys
        195                 200
```

<210> 29927
<211> 72
<212> PRT
<213> A.fumigatus

<400> 29927

```
Pro Leu Asn Arg Gln Asn Pro Val Val Met Ser Asn Ala Asp Lys Val
1               5                   10                  15
Phe Gly Tyr Ile Val Gln Ala Leu Glu Ala Glu Thr Leu Gln Gly Gln
            20                  25                  30
Thr Ala Gly Arg Val Ala Asn Ser Ala Lys Gln Leu Val Ala Ala Thr
```

```
        35                  40                  45
Gly Leu Asn Ala Glu Gln Ile Leu Ala Gly Val Ser Pro Asp Asn Gln
    50                  55                  60
Ala Ala Val Arg Ser Tyr Phe Gln
65                  70
```

<210> 29928
<211> 303
<212> PRT
<213> A.fumigatus

<400> 29928

```
Ala Ile Asn Glu Ala Pro Arg Leu Leu Gln Thr Thr Phe Arg Arg His
1               5                   10                  15
Pro Thr Leu Ala Thr Leu Ala Thr Gly Pro Asp Gln Arg Val Asp Val
            20                  25                  30
His Ala Pro Thr Ile Pro Ile Ile Ser Ile Pro Thr Ser Leu Ser Thr
        35                  40                  45
Gly Glu Tyr Ser Asp Phe Ala Gly Ala Thr Asp Asp Thr Thr Arg Arg
    50                  55                  60
Lys His Ser Phe Gln Ala Pro Thr Arg Gly Pro Gln Leu Val Ile Leu
65                  70                  75                  80
Asp Pro Asp Leu Ala Thr Thr Thr Pro Pro Ser Ile Trp Leu Ser Thr
                85                  90                  95
Gly Ile Arg Ala Val Asp His Cys Val Glu Thr Leu Cys Ala Thr Thr
            100                 105                 110
Gly Lys Ser Glu Thr Thr Asp Ala His Ala Met His Ala Leu Glu Leu
        115                 120                 125
Leu Val Pro Gly Leu Leu Arg Cys Arg His Asp Pro Ala Gly His Asp
    130                 135                 140
Arg Asp Ala Arg Leu Gln Cys Gln Arg Gly Ala Val Asn Ala Met Ala
145                 150                 155                 160
Thr Leu Thr Gly Gly Ser Ser Val Glu Leu Gly Ala Ser His Gly Ile
                165                 170                 175
Gly His Gln Leu Gly Pro Leu Gly Val Gly His Gly Glu Thr Ser Cys
            180                 185                 190
Ile Leu Leu Pro Ala Val Cys Lys Phe Asn Ala Arg His Gly Ala Asn
        195                 200                 205
Arg Glu Gln Gln Glu Arg Ala Arg Asp Phe Leu Val Arg Asn Ala Glu
    210                 215                 220
Val Ala Arg Val Leu Arg Asp Arg Gly Val Asp Ala Ser Leu Ala Asp
225                 230                 235                 240
Leu Gly Asp Val Leu Asp Ala Val Ile Arg Glu Leu Gly Met Pro Arg
                245                 250                 255
Ser Leu Lys Glu Val Gly Val Gly Arg Asp Ala Leu Asp Glu Leu Ala
            260                 265                 270
Ala Asn Ser Leu His Asp Arg Trp Cys Lys Thr Asn Pro Val Pro Leu
        275                 280                 285
Thr Glu Lys Lys Gln Val Leu Glu Ile Leu Glu Met Ala Val Glu
    290                 295                 300
```

<210> 29929
<211> 93
<212> PRT
<213> A.fumigatus

<400> 29929
Ser Asn Pro Arg His Lys Met Leu Pro Glu Ala Pro Lys Asn Lys Ser
1 5 10 15
Leu Tyr Glu Glu Ala Val Glu Ala Phe Ser Phe Leu Lys Glu Arg Leu
20 25 30
Pro Glu Thr Leu Gln His Pro Arg Val Ala Val Ile Cys Gly Ser Gly
35 40 45
Leu Gly Gly Leu Ala Asn Thr Ile His Asp Glu Pro Arg Ala Glu Phe
50 55 60
Glu Tyr Ser Ser Ile Pro His Phe Pro Cys Leu Thr Gly Lys Asn Glu
65 70 75 80
Ala Leu Lys Leu Asn Ile Asn Leu Leu Ile Ser Asp Leu
85 90

<210> 29930
<211> 79
<212> PRT
<213> A.fumigatus

<400> 29930
Lys Leu Gln His Ile Phe Pro Ala Gly Phe Ala Gly Thr His Pro Leu
1 5 10 15
Arg Gly Pro Asn Thr Glu Glu Phe Gly Pro Arg Phe Pro Pro Leu Ser
20 25 30
Asp Ala Tyr Asp Leu Glu Leu Arg Arg His Ala His Gln Ala Trp Lys
35 40 45
Ala Val Ile Ser Glu Asn Ser Thr Arg Arg Leu His Glu Gly Val Tyr
50 55 60
Ala Phe Val Ala Gly Pro Arg Phe Val Thr Ile Ser Pro Gly Pro
65 70 75

<210> 29931
<211> 120
<212> PRT
<213> A.fumigatus

<400> 29931
Leu Phe Leu Gln Asp His Glu Phe Val Cys Asn His Thr Leu Ile Ile
1 5 10 15
His Ser Tyr Glu Thr Arg Ala Glu Cys Arg Met Leu Arg Gln Val Gly
20 25 30
Ala Asp Leu Val Gly Met Ser Thr Val Pro Glu Ile Ile Val Ala Arg
35 40 45
His Cys Gly Ile Arg Val Leu Ala Phe Ser Leu Val Thr Asn Lys Ala
50 55 60
Val Leu Ser Pro Val Pro Arg Gly Asp Asp His Leu Leu Gln Ala Lys
65 70 75 80
Asp Val Lys Glu Leu Asp Ser Ile Leu Gln Glu Gly Lys Ala Asn His
85 90 95
Glu Glu Val Leu Glu Ala Gly Arg Thr Ala Ala Ile Asp Met Gln Val
100 105 110
Ser Ala Leu Arg Ser Leu Ser Val
115 120

<210> 29932
<211> 127

<212> PRT
<213> A.fumigatus

<400> 29932
Leu Thr Ile Leu Ser Gln Pro Pro Lys Leu Ser Lys Ser Ala Lys Glu
1 5 10 15
Asp Leu Ile Val Ser His Leu Arg Ser Thr Arg Thr Cys His Thr Leu
20 25 30
Lys Asp Leu Glu Lys Met Leu Pro Ser Val Ala Ser Ile Asn Gly Met
35 40 45
Gln Val Lys Glu Tyr Ile Gln Asn Leu Thr Asp Glu Gly Lys Ile Arg
50 55 60
Val Glu Lys Ile Gly Ser Gly Asn Trp Tyr Trp Cys Phe Gly Gly Asp
65 70 75 80
Glu Lys Arg Glu Lys Gln Ala Arg Leu Asn Gln Leu Glu Lys Glu Val
85 90 95
Lys Met Leu Gln Ala Ser Tyr Asp Glu Ala Glu Ala Ser Leu Ala Asp
100 105 110
Lys Arg Gly Leu His His Gly Gly Gly Arg Ile Arg Ala Lys Ile
115 120 125

<210> 29933
<211> 86
<212> PRT
<213> A.fumigatus

<400> 29933
Lys Gln Pro Ala Asp Thr Ala Arg Ile Ser Glu Thr Asp Ser Leu Ser
1 5 10 15
Trp Lys Ser Ser Glu Asp Phe Pro Arg Cys Ser Pro Thr Gly Asp Pro
20 25 30
His His Asp Arg Thr Met Ser Tyr Gly Lys Ser Leu Ala Leu Ser Gln
35 40 45
Asn Ser Phe Val Gln Pro Pro Asp Gln Asp Asp Gly Ala Arg Asp Thr
50 55 60
Gln Gly Glu Pro Val Leu Arg Arg Gln Lys Arg Gln Ala Thr Val Tyr
65 70 75 80
Asp Ala Val Ala Gly Trp
85

<210> 29934
<211> 67
<212> PRT
<213> A.fumigatus

<400> 29934
Ser Ile Gln Gln Arg Leu Gly Thr Ser Thr Thr His Gln Thr Thr Thr
1 5 10 15
Asn Ala Pro Phe Lys Pro Ile Leu Thr Arg Asn His Gln Pro His Thr
20 25 30
Ala His His Pro Phe Ser Leu Arg Phe Phe Asp His Leu Ser Thr Ser
35 40 45
Val Asn Ala Gln Leu Pro Ser His Thr Val His Tyr Thr Arg Arg Asp
50 55 60
Leu Pro Leu
65

<210> 29935
<211> 408
<212> PRT
<213> A.fumigatus

<400> 29935

```
Thr His Ser Ser Pro Ser Ile Arg Ile Lys Arg Val Tyr Glu Leu Thr
1               5                  10                  15
Ala Gly Arg Leu Leu Ile Leu Leu Arg Gly Thr Asp Ser Ile Thr Thr
            20                  25                  30
Asn Pro Leu Gln Lys Arg Ser Ser Ser Thr Ala Ser Met Ser Arg Pro
        35                  40                  45
Ala Ser Val Ala Glu Asp Ile Ser Gln Gly Tyr Gln Asp Glu Ala Gly
    50                  55                  60
Thr Asp Asp Glu Asn Asp Val Pro Val Asn Lys Lys Thr Ser Phe Asn
65                  70                  75                  80
Gly Arg Leu Asn Gln Tyr Phe His Ala Ser Lys Asn Val Ala Pro Thr
                85                  90                  95
Gly Glu Ser Leu Ser Lys Val Ala Ser Ala Pro Asp Leu Pro Thr Ala
            100                 105                 110
Thr Ile Lys Arg Lys Pro Glu Ser Asp Ser Glu Pro Pro Ser Asp Pro
        115                 120                 125
Ser Ser Asn Ala Ser Ala Leu Gln Leu Pro Ile Lys Arg Pro Arg Thr
    130                 135                 140
Leu Arg Ser Ser Arg Ser Ser Pro Val Ile Thr Asn Leu Thr Pro Arg
145                 150                 155                 160
Ile Thr Arg Ser Arg Ser Ala Ser Ser Thr Thr Ser Leu Pro Pro Ser
                165                 170                 175
Thr Pro Asn Ser Pro Leu Thr Pro Ser Thr Thr Pro Asp Glu Ile Ser
            180                 185                 190
Arg Ser Arg Ser Arg Arg Arg Gln Pro Ser Thr Pro Ala Thr Ser Ser
        195                 200                 205
Ile Cys Leu Leu Arg Asp Thr Ile Pro Pro Asn Leu Thr Leu Leu Leu
    210                 215                 220
Val Gly Val Asn Pro Gly Ile Met Thr Gly Thr Thr Gly Phe Ala Tyr
225                 230                 235                 240
Ala His Pro Ser Asn Leu Phe Trp Lys Leu Leu His Trp Ser Gly Ile
                245                 250                 255
Thr Pro Ile Arg His Pro Pro Ser Asp Thr Tyr Arg Leu Pro Glu Leu
            260                 265                 270
Tyr Asn Ile Gly Asn Thr Asn Ile Val Glu Arg Pro Thr Arg Asp Ala
        275                 280                 285
Ser Met Leu Ser Lys Ala Glu Met Asn Ala Gly Val Pro Val Leu Glu
    290                 295                 300
Ala Lys Val Ala Lys Gln Arg Pro Glu Ala Val Cys Leu Val Gly Lys
305                 310                 315                 320
Ser Ile Trp Glu Ala Val Trp Arg Val Arg Lys Gly Arg Pro Ile Arg
                325                 330                 335
Lys Glu Glu Phe Arg Tyr Gly Trp Gln Asp Glu Thr Glu Asn Met Gly
            340                 345                 350
Arg Cys Asp Gly Pro Asp Gly Trp Glu Gly Ala Arg Val Phe Val Ala
        355                 360                 365
Thr Thr Thr Ser Gly Leu Ala Ala Gly Met Ser Ile Ala Glu Lys Gln
    370                 375                 380
Ala Val Trp Asn Glu Leu Gly Arg Trp Val Ile Gln Arg Arg Glu Ala
```

385 390 395 400
Leu Ala Gly Lys Arg Pro Ser Gln
405

<210> 29936
<211> 544
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (512)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29936
Lys Arg Lys Lys Lys His Val Leu Phe Leu Pro Thr Trp Cys Asn Thr
1 5 10 15
Glu Leu Leu Arg Tyr Pro Arg Glu Ile Ala Arg Lys Ile Pro Ala Asn
20 25 30
Arg Phe Asn Ile Asp Ala Phe Tyr His Pro Asp Gly Asp His His Gly
35 40 45
Thr Thr Asn Val Gln Glu Ser Tyr Phe Leu Asp Glu Asp Val Arg Ala
50 55 60
Phe Asp Ala Ala Phe Phe Tyr Ile Ser Pro Thr Glu Ala Ala Ala Met
65 70 75 80
Asp Pro Gln Gln Arg Leu Leu Leu Glu Thr Val Tyr Glu Ser Leu Asp
85 90 95
Ala Ala Gly Leu Arg Met Asp Ala Leu Gln Gly Ser Met Thr Gly Val
100 105 110
Phe Cys Gly Ala Leu Arg Asn Asp Tyr Ser Gln Ile Gln Thr Met Asp
115 120 125
Pro Gln Ala Leu Pro Ala Tyr Met Val Thr Gly Asn Ser Pro Ser Ile
130 135 140
Met Ala Asn Arg Ile Ser Tyr Tyr Phe Asp Trp Arg Gly Pro Ser Met
145 150 155 160
Thr Val Asp Thr Gly Cys Ser Ser Ser Leu Leu Ala Val His Leu Gly
165 170 175
Val Glu Ala Leu Gln Asn Asp Asp Cys Ser Leu Ala Val Ala Val Gly
180 185 190
Ser Asn Leu Ile Leu Ser Pro Asn Ala Tyr Ile Ala Asp Ser Lys Thr
195 200 205
Arg Met Leu Ser Pro Thr Gly Arg Ser Arg Met Trp Asp Ser Gln Ala
210 215 220
Asp Gly Tyr Ala Arg Gly Glu Gly Val Ala Ser Val Val Leu Lys Arg
225 230 235 240
Leu Arg Asp Ala Ile Val Asp Gly Asp Pro Ile Glu Cys Val Ile Arg
245 250 255
Ala Ser Gly Ala Asn Ser Asp Gly Arg Thr Met Gly Ile Thr Met Pro
260 265 270
Asn Ala Gln Ala Gln Gln Ala Leu Ile Leu Gln Thr Tyr Ala Arg Ala
275 280 285
Gly Leu Ser Pro Gln Glu Arg Pro Thr Asp Arg Cys Gln Tyr Phe Glu
290 295 300
Ala His Gly Thr Gly Thr Gln Ala Gly Asp Pro Gln Glu Ala Ala Ala
305 310 315 320
Ile His Ala Ser Phe Phe Gly Pro Glu Ser Val Ala Asp Pro Leu Asp

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                325                 330                 335
Arg Leu Phe Val Gly Ser Ile Lys Thr Val Val Gly His Thr Glu Ala
            340                 345                 350
Thr Ala Gly Leu Ala Gly Leu Ile Lys Ala Ser Leu Ser Leu Gln His
        355                 360                 365
Gly Met Ile Val Pro Asn Leu Leu Met Gln Gln Leu Asn Pro Lys Ile
    370                 375                 380
Glu Ala Phe Ala Ala His Leu Cys Val Pro Thr Glu Cys Val Pro Trp
385                 390                 395                 400
Pro Ala Val Pro Glu Gly Cys Pro Arg Arg Ala Ser Val Asn Ser Phe
                405                 410                 415
Gly Phe Gly Gly Ala Asn Val His Val Val Leu Glu Ser Tyr Thr Ala
            420                 425                 430
Arg Gln Ile Thr Pro Ser His Asn Leu Pro Ser Ser Leu Pro Phe Val
        435                 440                 445
Phe Ser Ala Ala Ser Glu Arg Thr Leu Thr Ser Val Leu Glu Ser Tyr
    450                 455                 460
Ala Thr Phe Leu Arg Glu His Ala Ala Val Ser Leu Pro Ser Leu Ala
465                 470                 475                 480
Val Ser Met Trp Thr Arg Arg Ser Ala His Arg His Arg Leu Thr Leu
                485                 490                 495
Ile Ala Arg Ser Val Glu Glu Leu Gln Asp His Ile Asp Lys Glu Xaa
            500                 505                 510
Ser Arg Arg Ala Thr Gly Thr Pro Ser Ser Ile Val Ser Arg Pro Ser
        515                 520                 525
Ser Arg Pro Arg Arg Val Val Leu His His Gly Ala Gly Arg Thr Ala
    530                 535                 540
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<220>
<221> UNSURE
<222> (97)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 29937

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Trp Met Val Met Gln Pro Ser Thr Leu Ile Val Leu Cys Gln Gln Ile
1               5                   10                  15
Ala Val Pro Thr Asn Leu Leu Asn Gln Arg Gly Leu Met Ala Ser Ala
            20                  25                  30
Ala Ala Phe Ala Thr Gln Thr Glu Thr Arg Lys Ala Leu Thr Gly Trp
        35                  40                  45
Leu Phe Gln Asp Leu Lys Gly Asp Leu Thr Pro Asn Ala Leu Lys Asn
    50                  55                  60
Pro Gly Cys Thr Val His Gly Thr Thr Ser Tyr Ile Thr Pro Asn Gln
65                  70                  75                  80
Ala Glu His Ser Arg Gly Asp His Ile Leu Phe Ala Ala Leu Leu Leu
                85                  90                  95
Xaa Lys Ala Pro Lys Ser Cys Tyr Lys Leu Gln Leu Leu
            100                 105
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